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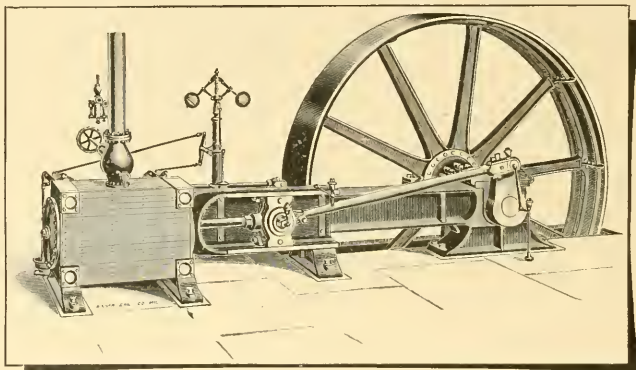
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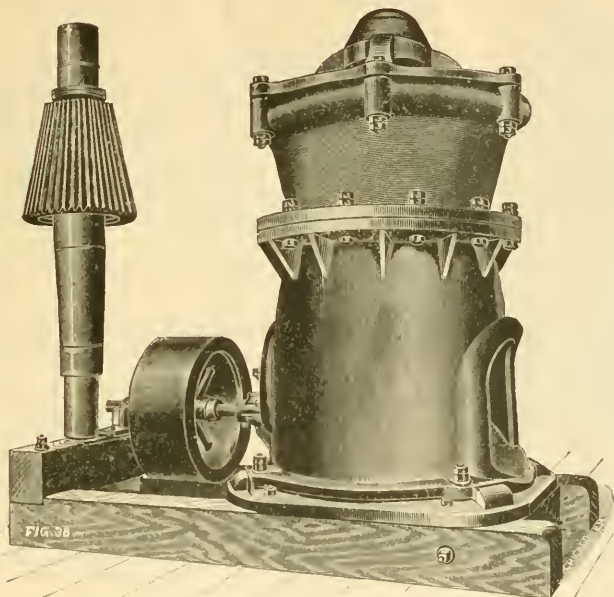
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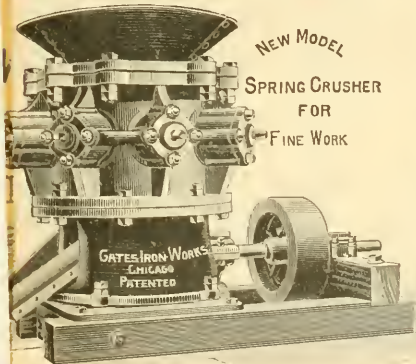
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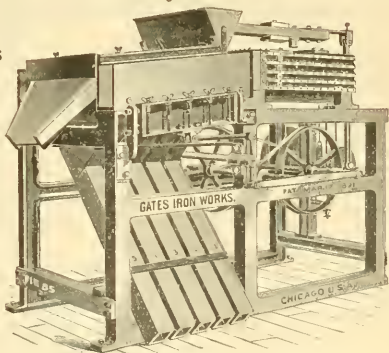
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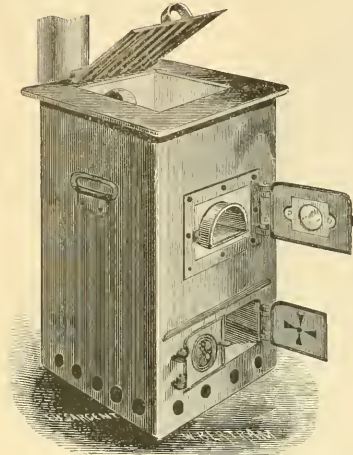
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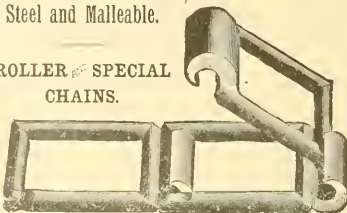
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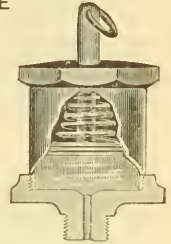
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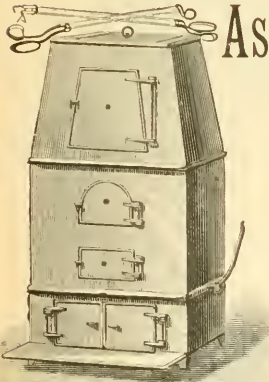
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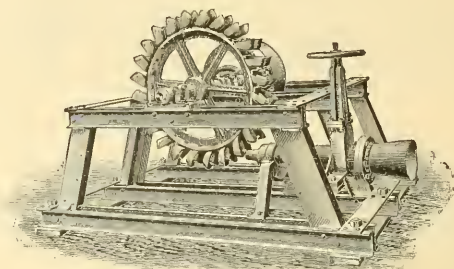
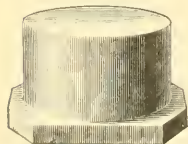
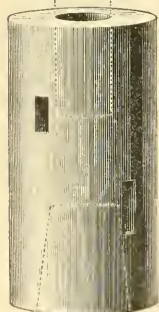
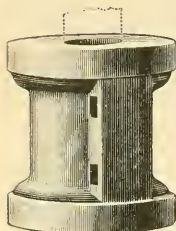
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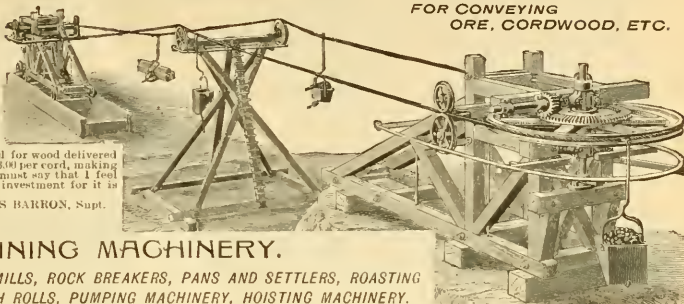
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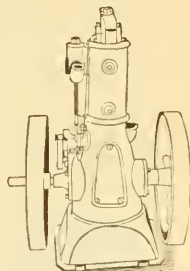
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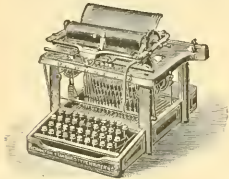
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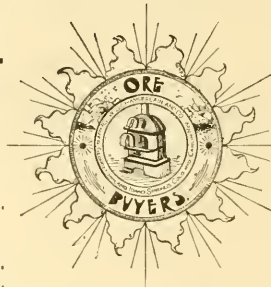
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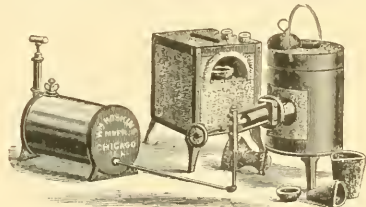
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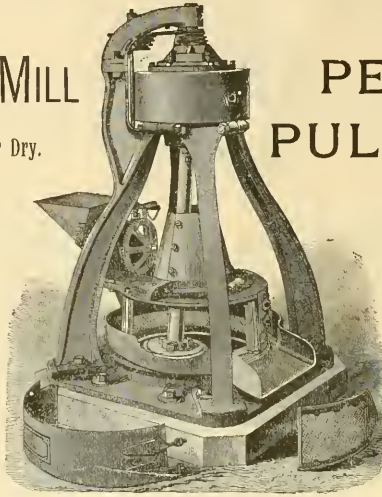
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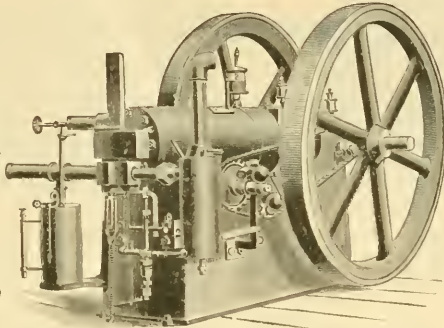
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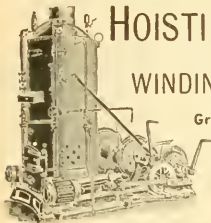
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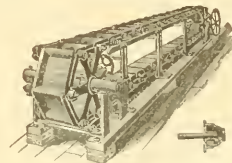
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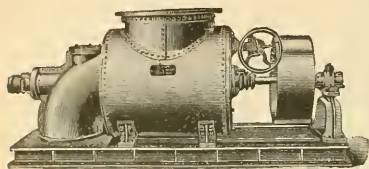
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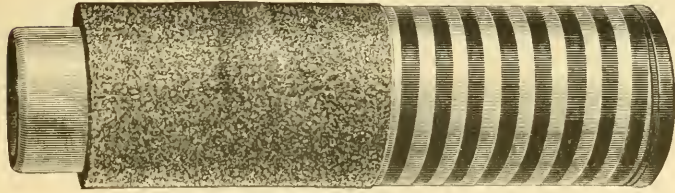
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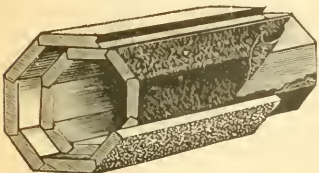
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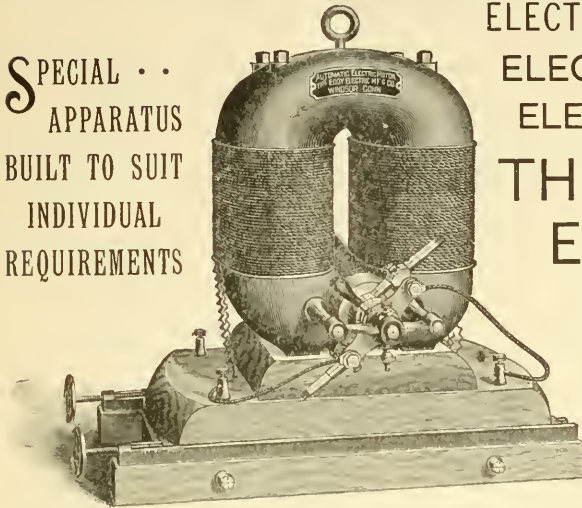
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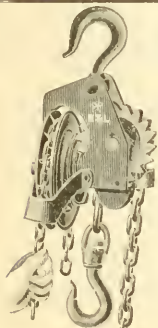
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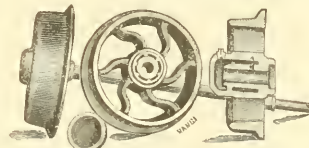
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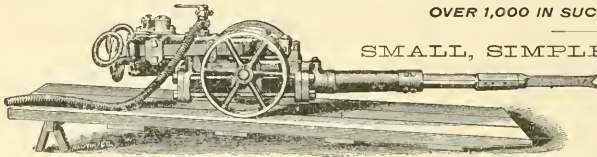
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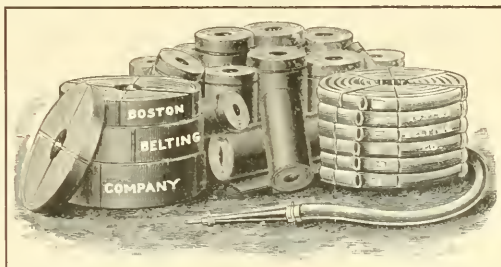
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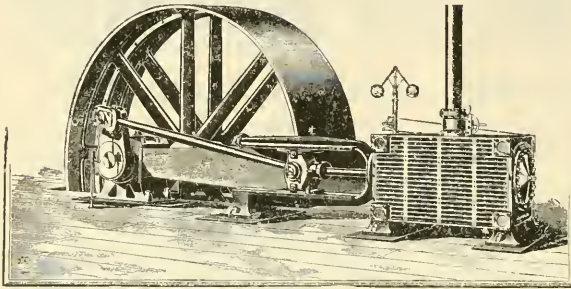
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The task of compiling the work has been much greater and more costly than anticipated, having required the labor of a large office and field force for twelve months, instead of six, as at first contemplated; and we feel confident that the detailed information herein given will be duly appreciated by our patrons, and especially so by those who have ever undertaken to secure simply a list of names of mining companies and operators.

Great care has been taken to secure accuracy in the compilation, and no pains or expense has been spared to obtain details from all mining companies and operators, blast furnaces, smelters and reduction-works, repeated efforts having been made to that end.

As no name appears in the regular lists unless we have direct information in regard to same on file in our office, supplementary lists are given of those whom we have good reason to believe exist at points named, but who have neglected to furnish the detailed information desired. We have found a large number of alleged mining companies existing solely on paper, having no claim to the name, so far as owning or developing mining properties is concerned, and we have endeavored to leave all such out of the lists, as it is the intention to list only those actively engaged in mining or in a fair way to become so in the near future. As with mining companies, so with blast furnaces, smelters and the other lists given, we have sought to list only companies or individuals actively engaged in the various industries.

The lists of mining engineers, assayers, etc., and of attorneys, contain only the names of persons who have been recommended to us as being reliable and capable in their professions.

The laws have received more than ordinary attention, and will, no doubt, prove one of the most valuable features of the book. The mining codes of the United States, Canada, British Columbia and Mexico are given in full, that of Mexico having been translated from the original Spanish by a member of the DIRECTORY staff, while the digests of the statutes of the states and territories of the United States and the Canadian provinces have been prepared expressly for the work by resident attorneys of known ability.

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Ry. St. Elmo 776 (9 m.)				
"	"	Forest Hill Mining & Milling Co. W. W. Wall, pres.; Laurence Winsheimer, secy.; C. A. Fredericks, treas.; E. A. Ackerson, mgr. and supt. Cap. stk. \$1,000,000. St. Crispin, gold. Shaft, 5,000 tons; free water; 60 stamps.		
"	"	Gee Zee Mining Co., St. Louis, Mo., 506 Olive st. Solon N. Sapp, pres.; W. F. Hawley, secy.; L. E. Roberts, treas. Cap. stk. \$2,000,000. Gee Zee, silver, lead. Shaft; refractory; horse. James I. Perkins, supt.		
"	"	Gold Cup Mining Co., Denver, Colo., Equitable Bldg. A. E. Reynolds, pres.; C. F. McKenny, secy.; A. Sneedaker, mgr. Cap. stk. \$5,000,000. Gold Cup, gold, silver. Shaft; refractory; steam and compressed air.		

The above shows sample from the Colorado list of gold and silver mines. In the first column is shown location of mine, which is Tin Cup, Gunnison county. "Ry. St. Elmo 776" shows that the shipping station is St. Elmo, on railway or water-route 776, which, by reference to the Index of Railways and Water-Routes, on page 33, is found to be the Union Pacific railway. While there may be other railways or water-routes at points named than those indicated, only the ones on which the shipping is done is here given. The "(9 m.)" indicates distance of mine from shipping point, "m." being abbreviation for miles. In the second column is given the name of the company or individual; location of principal office when different from that of the mine; product; kind of mine, whether shaft, tunnel, slope or open pit; annual output of ore in tons of 2,000 pounds; kind of ore; kind of power used; number of stamps, etc., and name of mine superintendent. Where the word "(local)" occurs, it indicates that party does no shipping. The other lists will be understood by reference to the headings.

It is intended to issue THE MINING DIRECTORY annually, and we will feel under obligations to those of our patrons who may be disposed to furnish us information in regard to any matter deserving a place in the book, as it is our desire to make the work a standard guide and reference book for the mining interests of the country.

In conclusion, we tender our sincere thanks for the many kindnesses shown by government officials and individuals connected with mining interests, for valuable information furnished, and to our many patrons for the generous support given the work, which we fully appreciate, and of which we will strive to merit a continuance.

GEO. W. RAMAGE,  
Manager.

POOLE BROS.,  
Publishers.

CHICAGO, Ill., U. S. A., December, 1892.

## GENERAL INDEX

	PAGE		PAGE
ADVERTISEMENTS, INDEX TO	35	Minnesota, Corporation, Lien and Mining Laws	92
ASSAYERS	495 to 511	" Mining Companies and Operators	283 and 437
ATTORNEYS, MINING AND COMMERCIAL	517 to 523	Mississippi, Corporation, Lien and Mining Laws	93
BLAST FURNACES	483	" Mining Companies and Operators	285
BROKERS	513 to 515	Missouri, Corporation, Lien and Mining Laws	94
CHEMISTS	495 to 511	" Mining Companies and Operators	286 and 438
ENGINEERS, MINING, MECHANICAL, ELECTRI- CAL	495 to 511	Montana, Corporation, Lien and Mining Laws	95
EXCHANGES, MINING	495 to 511	" Mining Companies and Operators	228 and 439
GEOLOGISTS	495 to 511	Nebraska, Corporation, Lien and Mining Laws	97
INTRODUCTORY AND EXPLANATORY	25	Nevada, Corporation, Lien and Mining Laws	98
INVESTMENT COMPANIES	513 to 515	" Mining Companies and Operators	312 and 439
LAWS—CORPORATION, LIEN AND MINING:		New Brunswick, Corporation, Lien and Mining Laws	151
Canadian Provinces	135 to 156	" Mining Companies and Operators	460 and 476
States and Territories	67 to 125	New Hampshire, Corporation, Lien and Mining Laws	98
Canadian Mining Code	127 to 134	" Mining Companies and Operators	321 and 441
Mexico	157 to 164	New Jersey, Corporation, Lien and Mining Laws	99
United States	57 to 66	" Mining Companies and Operators	323 and 441
(See also list of states following.)		New Mexico, Corporation, Lien and Mining Laws	100
MACHINERY AND SUPPLY HOUSES—		" Mining Companies and Operators	325 and 442
Classified List	37 to 56	New York, Corporation, Lien and Mining Laws	101
" Mining Companies and Operators	331 and 443	North Carolina, Corporation, Lien and Mining Laws	102
MINING COMPANIES AND OPERATORS AND LAWS:		" Mining Companies and Operators	336 and 444
Alabama, Corporation, Lien and Mining Laws	67	North Dakota, Corporation, Lien and Mining Laws	103
" Mining Companies and Operators	165 and 417	" Mining Companies and Operators	340 and 444
Alaska, Corporation, Lien and Mining Laws	69	North-West Territories, Mining Companies and Operators	461 and 476
" Mining Companies and Operators	169 and 417	Nova Scotia, Mining Companies and Operators	462 and 476
Arizona, Corporation, Lien and Mining Laws	69	Ohio, Corporation, Lien and Mining Laws	105
" Mining Companies and Operators	170 and 417	" Mining Companies and Operators	340 and 444
Arkansas, Corporation, Lien and Mining Laws	70	Oklahoma, Corporation, Lien and Mining Laws	106
" Mining Companies and Operators	173 and 418	Ontario, Corporation, Lien and Mining Laws	152
British Columbia, Corporation, Lien and Mining Laws	135	" Mining Companies and Operators	465 and 476
" Mining Companies and Operators	457 and 475	Oregon, Corporation, Lien and Mining Laws	106
California, Corporation, Lien and Mining Laws	71	" Mining Companies and Operators	355 and 447
" Mining Companies and Operators	176 and 418	Pennsylvania, Corporation, Lien and Mining Laws	107
Canada, Mining Laws	127	" Mining Companies and Operators	359 and 448
" Mining Companies and Operators	457 to 477	Quebec, Corporation, Lien and Mining Laws	154
Colorado, Corporation, Lien and Mining Laws	75	" Mining Companies and Operators	471 and 477
" Mining Companies and Operators	195 and 422	Rhode Island, Corporation, Lien and Mining Laws	110
Connecticut, Corporation, Lien and Mining Laws	77	" Mining Companies and Operators	379 and 450
" Mining Companies and Operators	229 and 426	South Carolina, Corporation, Lien and Mining Laws	110
Delaware, Corporation, Lien and Mining Laws	78	" Mining Companies and Operators	380 and 450
" Mining Companies and Operators	229 and 246	South Dakota, Corporation, Lien and Mining Laws	111
Florida, Corporation, Lien and Mining Laws	78	" Mining Companies and Operators	382 and 451
" Mining Companies and Operators	221 and 426	Tennessee, Corporation, Lien and Mining Laws	112
Georgia, Corporation, Lien and Mining Laws	79	" Mining Companies and Operators	385 and 451
" Mining Companies and Operators	225 and 427	Texas, Corporation, Lien and Mining Laws	114
Idaho, Corporation, Lien and Mining Laws	80	" Mining Companies and Operators	388 and 451
" Mining Companies and Operators	227 and 427	United States, Mining Laws	57
Illinois, Corporation, Lien and Mining Laws	81	" Mining Companies and Operators	165 to 455
" Mining Companies and Operators	232 and 428	Utah, Corporation, Lien and Mining Laws	115
Indiana, Corporation, Lien and Mining Laws	84	" Mining Companies and Operators	390 and 451
" Mining Companies and Operators	234 and 429	Vermont, Corporation, Lien and Mining Laws	116
Indian Territory, Corporation, Lien and Mining Laws	84	" Mining Companies and Operators	396 and 452
" Mining Companies and Operators	240	Virginia, Corporation, Lien and Mining Laws	117
Iowa, Corporation, Lien and Mining Laws	85	" Mining Companies and Operators	399 and 435
" Mining Companies and Operators	250 and 430	Washington, Corporation, Lien and Mining Laws	118
Kansas, Corporation, Lien and Mining Laws	86	" Mining Companies and Operators	404 and 453
" Mining Companies and Operators	255 and 431	West Virginia, Corporation, Lien and Mining Laws	120
Kentucky, Corporation, Lien and Mining Laws	87	" Mining Companies and Operators	407 and 454
" Mining Companies and Operators	260 and 431	Wisconsin, Corporation, Lien and Mining Laws	122
Louisiana, Corporation, Lien and Mining Laws	88	" Mining Companies and Operators	411 and 454
" Mining Companies and Operators	267 and 432	Wyoming, Corporation, Lien and Mining Laws	124
Maine, Corporation, Lien and Mining Laws	88	" Mining Companies and Operators	415 and 455
" Mining Companies and Operators	268 and 435	MINE INSPECTORS	495 to 511
Manitoba, Corporation, Lien and Mining Laws	149	RAILWAYS AND WATER ROUTES, INDEX TO	29
" Mining Companies and Operators	89	REDUCTIOX WORKS	491
Maryland, Corporation, Lien and Mining Laws	89	REFINERS	491
" Mining Companies and Operators	271 and 436	SAMPLING WORKS	491
Massachusetts, Corporation, Lien and Mining Laws	89	SMELTERS	491
" Mining Companies and Operators	274 and 436	U. S. MINERAL LAND SURVEYORS	495 to 511
Mexico, Mining Laws	157	U. S. SURVEYORS GENERAL	495 to 511
" Mining Companies and Operators	479 and 482		
Michigan, Corporation, Lien and Mining Laws	90		
" Mining Companies and Operators	277 and 437		

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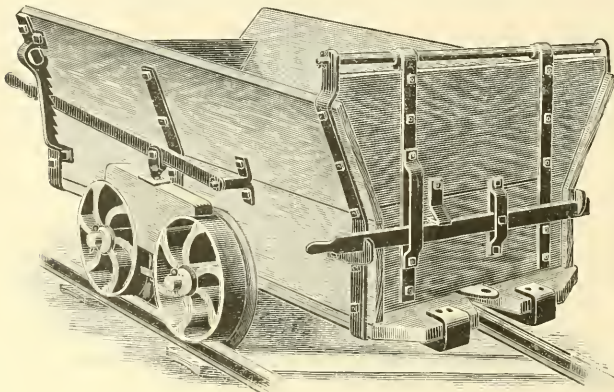
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made to Complete Tipples, etc., by a  
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# INDEX

## OF

### RAILWAYS, WATER-ROUTES AND EXPRESS COMPANIES

**EXPLANATION.**—To ascertain on what Railway or Water-Route a shipping point is located, and Express Company to that point, see figures following Ry. in list of Mining Companies and Operators, which refer to the numbers in this index.

- |    |  |     |  |
|----|--|-----|--|
| 1  | Abbeville & Waverly Ry. Southern Express.  | 74  | Bradford, Waterloo & Lake Erie Ry. American Express.                                 |
| 2  | Abbotsford & Northwestern Ry. Southern Pacific Express.                            | 75  | Bravo River.   |
| 3  | Addison & Pennsylvania Ry. Wells, Fargo & Co.'s Express.                           | 76  | Breckinridge Co. Ry. Adams Express.  |
| 4  | Adirondack & St. Lawrence Ry. American Express.                                    | 77  | Bradford & Seneca River Ry. American Express.  |
| 5  | Adirondack Ry. National Express.   | 78  | Brinkley, Helena & Indian Bay Ry. Pacific and Southern Express.                      |
| 6  | Alabama Midland Ry. Southern Express.  | 79  | Bristol, Elizabethton & N. Carolina Ry. Southern Express.                            |
| 7  | Alabama River.   | 80  | Brookville, Westport & Sault Ste. Marie Ry. Dominion Express.                        |
| 8  | Albemarle & Raleigh Ry. Southern Express.  | 81  | Brookville, Bath & West End Ry. New York Local Express.                              |
| 9  | Albemarle & Furlough Ry. Southern Express.   | 82  | Brooklyn & Brighton Beach Ry. New York Local Express.                                |
| 10 | Alberty Ry. & Coal Co. Ry. Dominion Express.                                       | 83  | Brownswick & Western Ry. Southern Express.   |
| 11 | Allegheny Valley Ry. Adams Express.  | 84  | Buccheche & Moncton Ry. Dominion Express.  |
| 12 | Allegheny & Kinzua Ry. Adams Express.  | 85  | Buffalo, Rochester & Pittsburg Ry. American Express.                                 |
| 13 | Allamore & Northwestern Ry. Southern Express.                                      | 86  | Bullard Run, Bellefonte & Bald Eagle Ry. Adams Express.                              |
| 14 | Altoona & Woposnoek Ry. Adams Express.   | 87  | Burlington, Cedar Rapids & Northern Ry. United States Express.                       |
| 15 | Anite River.   | 88  | Burlington & Missouri River Ry. Wells, Fargo & Co.'s Express.                        |
| 16 | Annapolis, Washington & Baltimore Ry. Adams Express.                               | 89  | Burlington & Northwestern Ry. American Express.                                      |
| 17 | Annapolis & Baltimore Short Line Ry. United States and Baltimore & Ohio Expresses. | 90  | Burlington & Western Ry. American Express.   |
| 18 | Apalachicola River.  | 91  | Caddis & Northwestern Ry. Adams Express.   |
| 19 | Arizona & New Mexico Ry. Arizona & New Mexico Express.                             | 92  | Cadiz Mills Branch Ry. American Express.   |
| 20 | Arizona & Northwestern Ry. Wells, Fargo & Co.'s Express.                           | 93  | Calden & Atlantic Ry. Adams and Calden & Atlantic Expresses.                         |
| 21 | Arkansas Midland Ry. Southern Express.   | 94  | Canada Atlantic Ry. Canadian Express.  |
| 22 | Arkansas & Louisiana Ry. Pacific Express.  | 95  | Canada Eastern Ry. Canadian Express.   |
| 23 | Arkansas River.  | 96  | Canada Pacific Ry. Dominion and American Expresses.                                  |
| 24 | Ashtand Coal & Iron Ry. Adams Express.   | 97  | Cape Breton Ry. Canadian Express.  |
| 25 | Ashville & Spartanburg Ry. American Express.                                       | 98  | Cape Fear & Yadkin Valley Ry. Southern Express.                                      |
| 26 | Atholton, Tomoka & Santa Fe Ry. Wells, Fargo & Co.'s Express.                      | 99  | Cape Girardeau & Southwestern Ry. Cape Girardeau Southern Express.                   |
| 27 | Atlanta & Florida Ry. Southern Express.  | 100 | Cape May & Sewell's Point Ry. West Jersey Express.                                   |
| 28 | Atlanta & West Point Ry. Southern Express.   | 101 | Caraport Ry. Canadian Express.   |
| 29 | Atlanta City Ry. United States Express.  | 102 | Carroll & Greenville Ry. Canadian Express.   |
| 30 | Atlanta Coast Line Passenger Route Ry. Southern Express.                           | 103 | Carrollville Ry. From Carrollville to Bowersville, Ga., 10 miles.) Southern Express. |
| 31 | Atlantic Ocean.  | 104 | Carolina Central Ry. Southern Express.   |
| 32 | Atlantic & Beaville Ry. Southern Express.  | 105 | Carolina, Cumberland Gap & Chicago Ry. Southern Express.                             |
| 33 | Atlantic & North Carolina Ry. Southern Express.                                    |     | (Operated by South Carolina Ry.)   |
| 34 | Atlantic & Western Ry. Southern Express.   | 106 | Carolina Midland Ry. Southern Express.   |
| 35 | Augusta, Gibson & Sandersville Ry. Southern Express.                               | 107 | Carrabelle, Tallahassee & Gulf Ry. Southern Express.                                 |
| 36 | Aurifer & Northwestern Ry. American Express.                                       | 108 | Carron & Colorado Ry. Wells, Fargo & Co.'s Express.                                  |
| 37 | Austin & Northwestern Ry. Pacific Express.   | 109 | Cartledge & Adirondack Ry. American Express.   |
| 38 | Baie des Chaleurs Ry. Canadian Express.  | 110 | Catasimqua & Foglesville Ry. United States Express.                                  |
| 39 | Baltimore & Delaware Bay Ry. Adams Express.  |     | (Operated by Philadelphia & Reading Ry.)   |
| 40 | Baltimore & Eastern Shore Ry. United States Express.                               | 111 | Catskill Mountain & Caro Ry. American Express.                                       |
| 41 | Baltimore & Lehigh Ry. Adams Express.  | 112 | Cedar Rapids & Marion Ry. Adams Express.   |
| 42 | Baltimore & Ohio Ry. Baltimore & Ohio Express.                                     | 113 | Central Arizona Ry. Wells, Fargo & Co.'s Express.                                    |
| 43 | Baltimore & Ohio Northwestern Ry. Baltimore & Ohio Express.                        | 114 | Central Ry. of South Carolina. Southern Express.                                     |
| 44 | Baltimore & Potomac Ry. Adams Express.   | 115 | Centralia & Chester Ry. Adams Express.   |
| 45 | Bangor & Katahdin Iron Works Ry. American Express.                                 | 116 | Central New England & Western Ry. Adams Express.                                     |
| 46 | Bangor & Piscataquis Ry. American Express.   | 117 | Central Ry. of New Brunswick. Canadian Express.                                      |
| 47 | Bangor & Portland Ry. and Martin's Creek Branch. United States Express.            | 118 | Central Ry. of New Jersey. United States Express.                                    |
| 48 | Barely Railroad Co. Ry. Adams Express.   | 119 | Central Ontario Ry. Canadian Express.  |
|    | (Operated by Towanda Coal Co., Towanda, Pa.)                                       | 120 | Central Pennsylvania Ry. American Express.   |
| 49 | Barre Ry. American Express.  | 121 | Charleston, Cincinnati & Chicago Ry. American Express.                               |
| 50 | Bath & Lamond-shore Ry. Wells, Fargo & Co.'s Express.                              | 122 | Charleston, Sumter & Northern Ry. Southern Express.                                  |
| 51 | Bay of Quinte Railway and Navigation Co. Canadian Express.                         | 123 | Charleston & Savannah Ry. Southern Express.  |
| 52 | Beach Creek Ry. Adams Express.   | 124 | Chattanooga Ry. National Express.  |
| 53 | Beaver & Elwood R. R.  | 125 | Chatham Ry. Northern & Western. Canadian Express.                                    |
| 54 | Beaver Lake & Eastern Ry. American Express.  | 126 | Chattanooga Southern Ry. Southern Express.   |
| 55 | Bellaire, Zanesville & Cincinnati Ry. Adams Express.                               | 127 | Chattanooga Union Ry. Co. United States Express.                                     |
| 56 | Bellingham Bay & British Columbia Ry. Wells, Fargo & Co.'s Express.                | 128 | Chattanooga & Lookout Mountain Ry. Southern Express.                                 |
| 57 | Bennington & Glasbury Ry. National Express.  | 129 | Chattanooga Lake Ry. American Express.   |
| 58 | Bennington & Rutland Ry. National Express.   | 130 | Cheraw & Darlington and Cheraw & Salisbury Rys. Southern Express.                    |
| 59 | Bentonsville Ry. Adams Express.  | 131 | Chesapeake & Nashville Ry. Adams Express.  |
| 60 | Birmingham, Selma & New Orleans Ry. Southern Express.                              | 132 | Chesapeake & Ohio Ry. Adams and Baltimore & Ohio Expresses.                          |
| 61 | Birmingham, Sheffield & Tennessee River Ry. Southern Express.                      | 133 | Chicago, Burlington & Kansas City Ry. American Express.                              |
| 62 | Birmingham & Atlantic Ry. Southern Express.  | 134 | Chicago, Burlington & Northern Ry. American Express.                                 |
| 63 | Bishopville Ry. Southern Express.  | 135 | Chicago, Burlington & Quincy Ry. American Express.                                   |
| 64 | Black Hills & Fort Pierre Ry. Wells, Fargo & Co.'s Express.                        | 136 | Chicago, Fairchild & Eau Claire River Ry. American Express.                          |
| 65 | Blackville, Alston & Newberry Ry. Southern Express.                                | 137 | Chicago, Ft. Madison & Des Moines Ry. American Express.                              |
| 66 | Blountsburg & Sullivan Ry. United States Express.                                  | 138 | Chicago, Iowa & Dakota Ry. American Express.   |
| 67 | Blue Ridge & Atlantic Ry. Southern Express.  | 139 | Chicago, Kalamazoo & Saginaw Ry. American Express.                                   |
| 68 | Boston, Beverly Beach & Lynn Ry. Boston Local Express.                             | 140 | Chicago, Kalamazoo City & Texas Ry. United States Express.                           |
| 69 | Boston, Winthrop & Shore Ry. Boston Local Express.                                 | 141 | Chicago, Milwaukee & St. Paul Ry. American and Adams Expresses.                      |
| 70 | Boston & Albany Ry. American and Adams Expresses.                                  | 142 | Chicago, Rock Island & Pe. Ry. United States Express.                                |
| 71 | Boston & Maine Ry. American Express.   | 143 | Chicago, St. Paul, Manassas & Omaha Ry. American Express.                            |
| 72 | Bradford, Bordell & Kinzua Ry. Wells, Fargo & Co.'s Express.                       |     |  |
| 73 | Bradford, Eldred & Cuba Ry. Wells, Fargo & Co.'s Express.                          |     |  |

- 144 Chicago, St. Paul & Kansas City Ry. United States Express.
- 145 Chicago & Alton Ry. United States Express.
- 146 Chicago & Eastern Illinois Ry. American Express.
- 147 Chicago & Grand Trunk Ry. National Express.
- 148 Chicago & Iowa Ry. American Express.
- 149 Chicago & Northern Pacific Ry. Northern Pacific Express.
- 150 Chicago & Northwestern Ry. American and United States Expresses.
- 151 Chicago & Ohio River Ry. Adams and American Expresses.
- 152 Chicago & West Michigan Ry. American Express.
- 153 Chippewa River & Menominee Ry. American Express.
- 154 Cincinnati & Dayton Ry. Adams Express.
- 155 Cincinnati, Georgetown & Portsmouth Ry. Adams Express.
- 156 Cincinnati, Hamilton & Dayton Ry. Baltimore & Ohio Express.
- 157 Cincinnati, Jackson & Mackinaw Ry. American Express.
- 158 Cincinnati, Lebanon & Northern Ry. American Express.
- 159 Cincinnati, New Richmond & Ohio River Ry. Adams Express.
- 160 Cincinnati Northwestern Ry. United States Express.
- 161 Cincinnati, Saginaw & Mackinaw Ry. National Express.
- 162 Cincinnati & Green River Ry. Baltimore & Ohio Express.
- 163 Cincinnati & Kentucky Southern Ry. United States and Baltimore & Ohio Express Co.'s Adams Express.
- 164 Cincinnati & Muskegon Valley Ry. Adams Express.
- 165 Cincinnati, Portsmouth & Virginia R. R. Adams Express.
- 166 Cincinnati & Southeastern Ry. Adams Express.
- 167 Cincinnati, Wabash & Michigan Ry. United States Express.
- 168 Cincinnati, Wheeling & New York Ry. Adams Express.
- 169 Cleveland, Akron & Columbus Ry. Adams Express.
- 170 Cleveland, Cincinnati, Chicago & St. Louis Ry. Adams and American Expresses.
- 171 Cleveland, Lorain & Wheeling Ry. American Express.
- 172 Cleveland, St. Louis & Kansas City Ry. Pacific Express.
- 173 Cleveland & Canton Ry. American Express.
- 174 Cleveland & Marietta Ry. American Express.
- 175 Cleveland & Pittsburg Ry. Adams Express.
- 176 Colourg, Blainville & Marmora Ry. Canadian Express.
- 177 Colorado River.
- 178 Colorado River (Texas).
- 179 Columbia & Puget Sound Ry. Northwestern Express.
- 180 Columbia River.
- 181 Columbus, Hocking Valley & Toledo Ry. American Express.
- 182 Columbus, Shawnee & Hocking Ry. United States and Wells, Fargo & Co.'s Express.
- 183 Columbus Southern Ry. Southern Express.
- 184 Colusa & Lake Ry. Wells, Fargo & Co.'s Express.
- 185 Concord & Montreal Ry. American Express.
- 186 Connecticut River Ry. American Express.
- 187 Connecticut River.
- 188 Cooperstown & Charlotte Valley Ry. National Express.
- 189 Cornwall Ry. United States Express.
- 190 Cornwallis Valley Ry. Canadian Express.
- 191 Cornwall & Lebanon Ry. Adams Express.
- 192 Coronado Ry. Wells, Fargo & Co.'s Express.
- 193 Coudersport & Port Allegany Ry. American Express.
- 194 Covington & Mason Ry. Southern Express.
- 195 Cresson, Clearfield County & New York Short Route Ry. Adams Express.
- 196 Crown Point Ry. National Express.
- 197 Crystal City Ry. Pacific Express.
- 198 Cumberland Ry. Canadian Express.
- 199 Cumberland Valley Ry. Adams Express.
- 200 Cumberland & Pennsylvania Ry. Adams Express.
- 201 Cumberland River.
- 202 Danville & Lee's Forge Ry. Southern Express.
- 203 Danville & New River Ry. Southern Express.
- 204 Danville & Western R. R. Southern Express.
- 205 Dardanelle & Russellville Ry. Pacific Express.
- 206 Dayton, Fort Wayne & Chicago Ry. American and United States Expresses.  
(Operated by Cincinnati, Hamilton & Dayton Ry.)
- 207 Dayton & Union Ry. United States Express.
- 208 Deadwood Central Ry. Wells, Fargo & Co.'s Express.
- 209 Delaware, Lackawanna & Western Ry. United States Express.
- 210 Delaware River Ry. Adams Express.
- 211 Delaware River.
- 212 Delaware River & Lancaster R. R.
- 213 Delaware & Hudson Ry. National Express.
- 214 Denison & Washita Valley Ry. Pacific Express.
- 215 Denver & Rio Grande Ry. Denver & Rio Grande Express.
- 216 Denver & Scranton R. R. Pacific and Wells, Fargo & Co.'s Express.
- 217 Des Moines & Kansas City Ry. American Express.
- 218 Des Moines & Northern Ry. United States Express.
- 219 Des Moines & Northwestern Ry. United States Express.
- 220 Detroit, Bay City & Alpena Ry. American Express.
- 221 Detroit, Grand Haven & Milwaukee Ry. National Express.
- 222 Detroit, Lansing & Northern Ry. American Express.
- 223 Detroit River.
- 224 Diamond Valley Ry. Adams Express.
- 225 Dodge City, Montezuma & Trinidad Ry. United States Express.
- 226 Dover & Statesborough Ry. Southern Express.
- 227 Drummond County Ry. Dominion Express.
- 228 Duluth, Mesaba & Northern Ry.
- 229 Duluth, Red Wing & Southern Ry. American Express.
- 230 Duluth, South Shore & Atlantic Ry. American Express.
- 231 Duluth & Iron Range Ry. United States Express.
- 232 Duluth & Winnipeg Ry. Adams Express.
- 233 Dunkirk, Allegheny Valley & Pittsburg Ry. American Express.
- 234 Durham & Northern Ry. Southern Express.
- 235 East & West R. R. of Alabama. Southern Express.
- 236 East Broad Top Ry. Adams Express.
- 237 Eastern Ohio R. R. American and Baltimore & Ohio Expresses.
- 238 East Florida & Atlantic R. R. Southern Express.
- 239 East Line & Red River Ry. Pacific Express.
- 240 East Louisiana Ry. Baltimore & Ohio Express.
- 241 East Tennessee, Virginia & Georgia Ry. Southern Express.
- 242 East Tennessee & Western North Carolina Ry. Southern Express.
- 243 Eastern Kentucky Ry. Adams Express.
- 244 El River & Eureka Ry. Wells, Fargo & Co.'s Express.
- 245 Egypt of North Carolina Ry. Southern Express.
- 246 Elgin, Joliet & Eastern Ry. United States Express.
- 247 Elgin, Petrolia & Harveyok Ry. Canadian Express.
- 248 Elmira, Cortland & Northern Ry. National Express.
- 249 Empire & Hudson Ry. Southern Express.
- 250 Erie & Huron Ry. Dominion Express.
- 251 Erie Canal.
- 252 Erie & Pittsburg Ry. Adams Express.
- 253 Erie & Wyoming Valley Ry. Wells, Fargo & Co.'s Express.
- 254 Esplanade & Natalino Ry. Northern Pacific, Dominion & Wells, Fargo & Co.'s Expresses.
- 255 Eureka Springs Ry. Adams Express.
- 256 Eureka & Fallsdale Ry. Wells, Fargo & Co.'s Express.
- 257 Eureka & Terre Haute Ry. Adams and Pacific Expresses.
- 258 Fall Brook Coal Co. Ry. American Express.
- 259 Fallhaven & Southern Ry. Dominion Express.
- 260 Farquhar & Poughatton Ry. Southern Express.
- 261 Fidelity, Fort Wayne & Western Ry. United States Express.
- 262 Fitchburg Ry. National Express.
- 263 Flint & Pere Marquette Ry. American Express.
- 264 Florida, Central & Peninsular Ry. Southern Express.
- 265 Florida Midland Ry. Southern Express.
- 266 Florida Southern-Orange Belt Route Ry. Southern Express.
- 267 Fond du Lac, Johnston & Groversville Ry. American Express.
- 268 Fort Wayne, Cincinnati & Louisville Ry. United States Express.
- 269 Fort Worth & Rio Grande Ry. Pacific Express.
- 270 Frankfort & Southeastern Ry. American Express.
- 271 Franklin & Mezzanine Ry. American Express.
- 272 Franklin & Tilton Ry. American Express.
- 273 Freshhold & New York Ry. Adams Express.
- 274 Frazier River.
- 275 Fremont, Elkhorn & Missouri Valley Ry. Wells, Fargo & Co.'s Express.
- 276 Fulton County Narrow Gauge Ry. American Express.
- 277 Galveston, Jefferson & Southern Ry. Southern Express.
- 278 Galveston & Western Ry. Southern Express.
- 279 Georgia Creek & Cumberland Ry. Adams, United States and Baltimore & Ohio Expresses.
- 280 Georgetown & Western Ry. Southern Express.
- 281 Georgia Ry. Southern Express.
- 282 Georgia, Carolina & Northern Ry. Southern Express.
- 283 Georgia, Midland & Gulf Ry. Southern Express.
- 284 Georgia Pacific Ry. Southern Express.
- 285 Georgia Southern & Florida Ry. Southern Express.
- 286 Gettysburg & Harrisburg Ry. Adams Express.
- 287 Grafton Centre R. R. Adams Express.
- 288 Grafton & Union Ry. Adams Express.
- 289 Grand Rapids & Indiana Ry. Adams Express.
- 290 Grand Tower & Carbonate Ry. Adams Express.
- 291 Grand Trunk Ry. National and Canadian Expresses.
- 292 Great Eastern Ry. Canadian Express.
- 293 Great Falls & Canadian Ry. Great Falls & Canadian Express.
- 294 Great Northern Ry. Line. American Express.
- 295 Great Northwest Central Ry. Dominion Express.
- 296 Great Northern Line of Canada Ry. Dominion Express.
- 297 Green Bay, Winona & Duluth Ry. United States Express.
- 298 Greenwood, Waterboro & Branchville Ry. Southern Express.  
(See Plant System.)
- 299 Green Ridge Ry. United States and Baltimore & Ohio Expresses.
- 300 Green River (Kentucky).
- 301 Greenwich & Johnsonville Ry. National Express.
- 302 Gulf & Chicago Ry. Southern Express.
- 303 Gulf of Mexico.
- 304 Grayson Valley R. R. Adams Express.
- 305 Haines, Hamilton & Kingston Ry. American Express.
- 306 Hancock & Calumet Ry. American Express.
- 307 Hannibal & St. Joseph Ry. American Express.
- 308 Harrisburg & Potomac Ry. United States Express.
- 309 Hartsville Ry. Southern Express.
- 310 Herkimer, Newport & Poland Ry. American Express.
- 311 Hidalgo Ry. Mexican National Express.
- 312 Hot Springs Ry. Pacific Express.
- 313 Hoosac Tunnel & Wilmington Ry. American Express.
- 314 Houston Ry. United States Express.
- 315 Houston, East & West Texas Ry. Southern & Texas Express.
- 316 Houston & Texas Central Ry. Wells, Fargo & Co.'s Express.
- 317 Hudson River.
- 318 Hunstont & Shamodan Ry. American Express.
- 319 Huntington & Broad Top Mountain Ry. Adams Express.
- 320 Hutchinson & Southern R. R. United States Express.
- 321 Illinois Central Ry. American and Southern Expresses.
- 322 Illinois River.
- 323 Indiana, Illinois & Iowa Ry. United States Express.

- 322 Indiana & Illinois Southern Ry. Adams Express.  
 323 Indianapolis, Decatur & Western Ry. American Express.  
 324 Ingalis, White Rapids & Northern Ry. American Express.  
 325 Intercolonial Ry. Canadian and Dominion Expresses.  
 326 International & Great Northern Ry. Pacific, Southern, Texas and Wells, Fargo & Co.'s Expresses, between Houston and Galveston; all other branches Pacific.  
 327 Iowa Central Ry. United States Express.  
 328 Iowa Northern Ry. United States Express.  
 329 Iron Ry. United States Express.  
 330 Ironton Ry. Adams Express.  
 331 Irondele, Bancroft & Ottawa Ry. Canadian Express.  
 332 Jorydale & Mill Creek Valley Ry. American and United States Expresses.  
 333 Jacksonville, Mayport & Pablo Ry. Southern Express.  
 334 Jacksonville, St. Augustine & Haitax River Ry. Southern Express.  
 335 Jacksonville Southeastern Ry. Adams Express.  
 336 Jacksonville, Tampa & Key West Ry. Southern Express.  
 337 Jacksonville & Atlantic Ry. Southern Express.  
 338 James River.  
 339 Jamestown & Washington Ry. Southern Express.  
 340 Joggins Ry. Dominion Express.  
 341 Kaiterskill Ry. American Express.  
 (Operated by the Uster & Delaware Ry.)  
 342 Kanawha Ry. Adams Express.  
 343 Kanawha River.  
 344 Kanawha & Coal River Ry. United States Express.  
 345 Kanawha & Michigan Ry. United States Express.  
 346 Kanukake & Seneca Ry. American Express.  
 (Operated by the Cleveland, Cincinnati, Chicago & St. Louis Ry.)  
 347 Kanona & Prattsburg Ry. Wells, Fargo & Co.'s Express.  
 348 Kansas City Belt Ry. Co.  
 349 Kansas City, Fort Scott & Memphis Ry. Adams and Southern Expresses.  
 350 Kansas City, Fort Smith & Southern Ry. Adams Express.  
 351 Kansas City & Independence Rapid Transit Ry.  
 352 Kansas City, Memphis & Birmingham Ry. Adams and Southern Expresses.  
 353 Kansas City, Nevada & Fort Smith Ry. Wells, Fargo & Co.'s Express.  
 354 Kansas City, Osceola & Southern Ry. Pacific Express.  
 355 Kansas City, St. Joseph & Covered Bluffs Ry. American Express.  
 356 Kansas City, Wyandotte & Northwestern Ry. Pacific Express.  
 357 Kearney & Black Hills Ry. Pacific Express.  
 358 Keosauqua, Au Sable Chasin & Lake Champlain Ry. National Express.  
 359 Kennebec Central Ry. American Express.  
 360 Kent Northern Ry. Canadian Express.  
 361 Kentucky Central Ry. Adams Express.  
 362 Kentucky Midland Ry. United States Express.  
 363 Kentucky Midland Ry. Adams Express.  
 364 Kentucky & South Atlantic Ry. Adams Express.  
 365 Knoxville & Western Ry. Pacific Express.  
 366 Kildare & Linden Ry. Pacific Express.  
 367 Kingston & Adolph Ry. Adams Express.  
 368 Kingston & Hudson Ry. American Express.  
 369 Kingston & Poughkeepsie Ry. Canadian Express.  
 370 Kingston, Napanee & Western Ry. Dominion and Canadian Expresses.  
 371 Knox & Lincoln Ry. American Express.  
 372 Knoxville, Cumberland Gap & Louisville Ry. Southern Express.  
 373 Knoxville & Augusta Ry. Southern Express.  
 374 Knoxville & New River Ry. Southern Express.  
 375 Lake Erie & Pittsburg Ry. American Express.  
 376 Lake Erie.  
 377 Lake Erie, Alliance & Southern Ry. Adams Express.  
 378 Lake Erie, Essex & Detroit River Ry. Canadian Express.  
 379 Lake Erie & Western Ry. United States Express.  
 380 Lake Huron.  
 381 Lake Michigan.  
 382 Lake Ontario.  
 383 Lake Pontchartrain.  
 384 Lake Shore & Michigan Southern Ry. United States Express, all points between Cleveland and Buffalo; United States runs through express to Dunkirk and Buffalo.  
 385 Lake St. Clair.  
 386 Lake Superior.  
 387 Lake Umbagogue Colonization Ry. Dominion and American Express.  
 388 Lake Winnebago.  
 389 Lanester, Oxford & Southern Ry. Adams Express.  
 390 L'Assomption Ry. Dominion Express.  
 391 Laurel Fork & Sand Hill Ry. Baltimore & Ohio Express.  
 392 Lehigh Springs Ry. National Express.  
 393 Lehigh Valley Ry. Adams Express.  
 394 Lehigh & Hudson River Ry. Wells, Fargo & Co.'s Express.  
 395 Lehigh & Lackawanna Ry. United States Express.  
 396 Lehigh Valley Ry. Adams Express.  
 397 Little Rock & Fort Smith Ry. Pacific Express.  
 398 Little Rock & Memphis Ry. Pacific and Southern Expresses.  
 399 Long Island Ry. Long Island Express.  
 400 Los Angeles Terminal Ry. Wells, Fargo & Co.'s Express.  
 401 Louisiana Northwest Ry. Baltimore & Ohio Express.  
 402 Louisville, Evansville & St. Louis Ry. United States Express.  
 403 Louisville, Hardansburg & Western Ry. United States Express.  
 404 Louisville, New Albany & Chicago Ry. American Express.  
 405 Louisville, New Albany & Corydon Ry. Adams Express.  
 406 Louisville, New Orleans & Texas Ry. Pacific Express.  
 407 Louisville & Texas Ry. United States Express.  
 408 Louisville & Nashville Ry. Adams and Southern Expresses.  
 409 Louisville & Wadley Ry. Southern Express.  
 410 Lowell & Hastings R. Ry. National Express.  
 411 Lynchburg & Durham Ry. Southern Express.  
 412 Macon, Dublin & Savannah Ry. Southern Express.  
 413 Mahoning Valley R. R. American Express.  
 414 Maine Central Ry. American Express; Dominion Express operates between Mattawamkeag and Vaneboro.  
 415 Manhattan Ry. (Elevated Ry. of New York City.)  
 416 Manistee & Northwestern Ry. American Express.  
 417 Manitoba & Northwestern Ry. Dominion Express.  
 418 Mantion & Pikes Peak Ry.  
 419 Marietta & Phoenix Ry. Wells, Fargo & Co.'s Express.  
 420 Marietta & North Georgia Ry. Southern Express.  
 421 Maryland Central Ry. Adams Express.  
 422 Mary Lee Coal & Ry. Co. Southern Express.  
 423 Mason City & Fort Dodge Ry. American Express.  
 424 Mason & Oceana Ry. American Express.  
 425 Maxton, Alma & Rowland Ry. Southern Express.  
 426 McKeesport & Connetquot R. Co.  
 427 Meadville & Linesville Ry. Adams Express.  
 428 Meherin Valley Ry. Southern Express.  
 429 Memphis Route Ry. Southern Express.  
 430 Meriden & Hartford Ry. Southern Express.  
 431 Meriden, Waterbury & Connecticut River Ry. United States Express.  
 432 Merrimack River.  
 433 Mexican Ry. Wells, Fargo & Co.'s Express.  
 434 Mexican Central Ry. Wells, Fargo & Co.'s Express.  
 435 Mexican International Ry. Wells, Fargo & Co.'s Express.  
 436 Mexican National Ry. Mexican National Express.  
 437 Mexican Northern Ry. Wells, Fargo & Co.'s Express.  
 438 Mexican Southern Ry.  
 439 Miami & Erie Canal.  
 440 Michigan Central Ry. American Express.  
 441 Michigan & Pacific Ry. Mexican National Express.  
 442 Michigan & Schellville Ry. National Express.  
 443 Middleborough Belt R. R.  
 444 Middleburg, Highland & Lake Butler Ry. Southern Express.  
 445 Middle Georgia & Atlantic Ry. Southern Express.  
 446 Middle & East Tennessee Ry. Southern Express.  
 447 Midland Ry. (Indiana). United States Express.  
 448 Millen & Southern Ry. Southern Express.  
 449 Milwaukee, Lake Shore & Western Ry. U. S. Express.  
 450 Milwaukee, Menomonee Falls & Western Ry. American Express.  
 451 Milwaukee & Northern Ry. American Express.  
 452 Minden Ry. United States Express.  
 453 Mineral Range Ry. American Express.  
 454 Minneapolis, Lyndale & Minnetonka Ry. American Express.  
 455 Minneapolis, St. Paul & Sault Ste. Marie Ry. American Express.  
 456 Minneapolis & St. Louis Ry. United States Express.  
 457 Mississippi River & Bonne Terre Ry. Pacific Express.  
 458 Mississippi River.  
 459 Missouri, Kansas & Texas Ry. Pacific Express.  
 460 Missouri Pacific Ry. Pacific Express.  
 461 Missouri River.  
 462 Mobile & Birmingham Ry. Adams & Southern Expresses; (Operated by East Tennessee, Virginia & Georgia R. R.)  
 463 Mobile & Ohio Ry. Southern Express.  
 464 Mobile & Spring Hill Ry. Southern Express.  
 465 Monongahela River Ry. Baltimore & Ohio Express.  
 466 Monongahela River.  
 467 Montreal, New York & Boston Despatch Express.  
 468 Mont Alto Ry. Adams Express.  
 469 Montana Union Ry. Pacific Express.  
 470 Monterey & Mexican Gulf Ry. Wells, Fargo & Co.'s Express.  
 471 Montour Ry. American Express.  
 472 Montreal & Ottawa Ry.  
 473 Montpelier & Wells River Ry. American Express.  
 474 Montreal & Lake Maskouche Ry. Dominion Express.  
 475 Montrose Ry. Adams Express.  
 476 Morris County Ry. United States Express.  
 477 Morriswood & Cumberland Gap Ry. Southern Express.  
 478 Mount Airy & Salisbury Ry. Southern Express.  
 479 Mount McGregor Ry. National Express.  
 480 Mount Hope Ry. New York & Boston Despatch Express.  
 481 Narragansett Pier Ry. Adams Express.  
 482 Nashville & Chattanooga & Louisville Ry. Southern Express.  
 483 Nashville, Florence & Sheffield Ry. Southern Express; (Operated by Louisville & Nashville Ry.)  
 484 Nashville & Knoxville Ry. Southern Express.  
 485 Nashville & Tellico Ry. Southern Express.  
 486 Natchez, Red River & Texas Ry. Southern Express.  
 487 Natchitoches Ry. United States Express.  
 488 National City & Otay Ry. Wells, Fargo & Co.'s Express.  
 489 Nevada Central Ry. Wells, Fargo & Co.'s Express.  
 490 Nevada County Narrow Gauge Ry. Wells, Fargo & Co.'s Express.  
 491 Nevada & California Ry. Wells, Fargo & Co.'s Express.  
 492 New Brunswick & Prince Edward Island Ry. Dominion Express.

- 493 Nowburg, Dulchess & Cammearket Ry. American Express.  
 494 New Jersey & New York Ry. United States Express.  
 495 New Orleans, Fort Jackson & Grand Isle Ry. Wells, Fargo & Co.'s Express.  
 496 New Orleans & Gulf Ry. Southern Express.  
 497 New Orleans & Northwestern Ry. Southern Express.  
 498 Newport & Sherman's Valley R. R. Southern Express.  
 499 Newport News & Mississippi Valley Ry. Adams and Baltimore & Ohio Express.  
 500 New Westminster Southern Ry. Dominion Express.  
 501 New York Central & Hudson River Ry. American Express.  
 502 New York, Chicago & St. Louis Ry. American Express.  
 503 New York, Lake Erie & Western Ry. Wells, Fargo & Co.'s Express.  
 504 New York, New Haven & Hartford Ry. Adams Express.  
 505 New York, Ontario & Western Ry. National Express.  
 506 New York, Pennsylvania & Ohio Ry. Wells, Fargo & Co.'s Express.  
 507 New York, Philadelphia & Norfolk Ry. Adams Express.  
 508 New York, Providence & Boston Ry. Adams and New York & Boston Despatch Express.  
 509 New York, Susquehanna & Western Ry. National Express.  
 510 New York & Greenwood Lake Ry. Wells, Fargo & Co.'s Express.  
 511 New York & Long Branch Ry. United States Express.  
 512 New York & Massachusetts Ry. American Express.  
 513 New York & New England Ry. Adams Express.  
 514 New York & Northern Ry. American Express.  
 515 New York & Rockaway Beach Ry. Long Island Express.  
 516 New York & Sea Beach Ry. New York Local Express.  
 517 New York & Washington New Line Ry., composed of Central Ry. of New Jersey, United States Express, Philadelphia & Reading Ry., United States Express, Baltimore & Ohio Ry., Baltimore & Ohio Express.  
 518 Niagara Falls Short Line Ry., composed of Wabash Ry. Pacific Express.  
 519 Niagara River.  
 520 Norfolk, Albemarle & Atlantic R. R. Southern Express.  
 521 Norfolk Southern Ry. Southern Express.  
 522 Norfolk & Virginia Beach Ry. Southern Express.  
 523 Norfolk & Western Ry. Southern Express.  
 524 Northeastern South Carolina Ry. Southern Express.  
 525 North Pacific Coast Ry. Wells, Fargo & Co.'s Express.  
 526 Northern Adirondack Ry. Wells, Fargo & Co.'s Express.  
 527 Northern Adirondack and American Express, Wells, Fargo & Co.'s Express.  
 528 Northern California Ry. Wells, Fargo & Co.'s Express.  
 529 Northern Central Ry. United States and American Expresses.  
 530 Northern Pacific Ry. Northern Pacific Express.  
 531 Northwestern Ohio Ry. Adams Express.  
 (Operated by Pennsylvania Ry.)  
 532 Northern & Western Ry. Canadian Express.  
 533 Nova Scotia Central Ry. Canadian Express.  
 534 Ohio River Ry. Adams Express.  
 535 Ohio Southern Ry. United States Express.  
 536 Ohio Valley Ry. Southern Express.  
 537 Ohio & Pennsylvania Ry. Adams Express.  
 538 Ohio & Mississippi Ry. Adams Express.  
 539 Ohio & Northwestern Ry. Adams Express.  
 (Cincinnati, Portsmouth & Virginia Ry.)  
 540 Old Colony Ry. New York & Boston Dispatch Express.  
 541 Olympia & Nehalem Valley Ry. Northern Pacific Express.  
 542 Omaha & St. Louis Ry. Pacific Express.  
 543 Orange Belt Ry. Southern Express.  
 544 Orange County Ry. Wells, Fargo & Co.'s Express.  
 545 Oregon Pacific Ry. Wells, Fargo & Co.'s Express.  
 546 Oregon & Washington Territory Ry. Northern Pacific Express.  
 547 Orlando & Winter Park Ry. Southern Express.  
 548 Ottawa River.  
 549 Owensboro, Falls of Rough & Green River Ry. Adams Express.  
 550 Pacific & Great Eastern Ry. Adams Express.  
 551 Pacific Coast Ry. Wells, Fargo & Co.'s Express.  
 552 Pacific Coast.  
 553 Pacific Short Line Ry. Pacific Short Line Express.  
 554 Panama Ry.  
 555 Palmetto Ry. Southern Express.  
 556 Paragon & Buffalo Island Ry. Southern Express.  
 557 Paris, Marshall & Sabine Pass Ry. Pacific Express.  
 558 Pawnee Ry. Adams Express.  
 559 Pearl River.  
 560 Peos Valley Ry. Pacific Express.  
 561 Pennsboro & Harrisville Ry. Adams Express.  
 562 Pennsylvania Ry. Adams Express.  
 563 Pennsylvania, Montgomery & Charles City Ry. Adams Express.  
 564 Pennsylvania, Poughkeepsie & Boston Ry. Adams Express.  
 565 Pennsylvania & Northwestern Ry. Adams Express.  
 566 Penobscot River.  
 567 Penobscot Valley Line Ry. American Express.  
 568 Penobscot Valley Line Ry. American Express.  
 (Operated by Maine Central Ry.)  
 569 Pensacola & Perdido Ry. Southern Express.  
 570 People's Ry. United States Express.  
 571 Peoria, Decatur & Evansville Ry. American and Adams Expresses.  
 572 Peoria & Pekin Union Ry. American Express.  
 573 Perkiomen Ry. Adams Express.  
 574 Perry County Ry. Adams Express.  
 575 Petersburg Ry. Southern Express.  
 576 Philadelphia, Newton & New York Ry. United States Express.  
 577 Philadelphia, Wilmington & Baltimore Ry. Adams Express.  
 578 Philadelphia & Reading Ry. United States Express.  
 579 Phillips & Rangleley Ry. American Express.  
 580 Piedmont Air Line Ry. Southern Express.  
 581 Pine Bluff, Monroe & New Orleans Ry. Southern Express.  
 582 Pittsburgh & Western Ry. United States Express.  
 583 Pittsburg, Chartiers & Younghighway Ry. Adams Express.  
 584 Pittsburg, Cincinnati, Chicago & St. Louis Ry. Adams Express.  
 585 Pittsburg, Fort Wayne & Chicago Ry. Adams Express.  
 586 Pittsburg, Marion & Chicago Ry. Adams Express.  
 587 Pittsburg, Painesville & Fairport Ry. Wells, Fargo & Co.'s Express.  
 588 Pittsburg, Shenango & Lake Erie Ry. Adams Express.  
 589 Pittsburg, Youngstown & Ashtabula Ry. Adams Express.  
 590 Pittsburg & Castle Shannon Ry. Adams Express.  
 591 Pittsburg & Lake Erie Ry. American Express.  
 592 Pittsburg & Western Ry. Wells, Fargo & Co.'s Express.  
 593 Pittsburg, Ohio Ry. Southern Express.  
 594 Pontiac, Oxford & Northern Ry. American Express.  
 595 Pontiac & Pacific Junction Ry. Canadian Express.  
 596 Port Arthur, Duluth & Western Ry. Dominion Express.  
 597 Port Antonio & New York Ry. National Express.  
 598 Port Townsend Southern Ry. Northern Pacific Express.  
 599 Portland & Rochester Ry. American Express.  
 600 Portland & Rumford Falls Ry. Canadian Express.  
 601 Portland & Vancouver Ry. Pacific Express.  
 602 Potomac, Fredericksburg & Piedmont Ry. Adams Express.  
 603 Potomac River.  
 604 Poughkeepsie Bridge Route Ry. Adams Express.  
 605 Prescott & Arizona Central Ry. Wells, Fargo & Co.'s Express.  
 606 Prince Edward Island Ry. Canadian Express.  
 607 Profile & Fraconia Notch Ry. New York & Boston Despatch Express.  
 608 Prospect Park & Coney Island Ry. New York Local Express.  
 609 Providence & Springfield Ry. United States Express.  
 610 Quebec Central Ry. Canadian Express.  
 611 Quebec, Montmorency & Charlevoix Ry. Canadian Express.  
 612 Quebec & Lake St. John Ry. Canadian Express.  
 613 Queen & Crescent Route Ry. Baltimore & Ohio Express.  
 614 Quincy, Omaha & Kansas City Ry. Pacific Express.  
 615 Raleigh & Augusta Air Line Ry. Southern Express.  
 (Operated by the Richmond & Danville Ry.)  
 616 Raleigh & Gaston Ry. Southern Express.  
 (Operated by the Richmond & Danville Ry.)  
 617 Raritan River. United States Express.  
 618 Red River.  
 619 Reynoldsville & Fall Creek Ry. American Express.  
 620 Richmond, Fredericksburg & Potomac Ry. Adams and Southern Expresses.  
 621 Richmond, Nichols, Irvine & Beattysville Ry. United States Express.  
 622 Richmond, York River & Chesapeake Ry. Southern Express.  
 623 Richmond & Danville Ry. Southern Express.  
 624 Richmond & Petersburg Ry. Southern Express.  
 625 Rio Grande Junction Ry.  
 626 Rio Grande Ry. Wells, Fargo & Co.'s Express.  
 627 Rio Grande Western Ry. Denver & Rio Grande Express.  
 628 Rio Grande River.  
 629 Rio Grande Southern Ry. Denver & Rio Grande Express.  
 630 Rio Grande & Eagle Pass Ry. Pacific Express.  
 631 Ripley & Mill Creek Valley Ry. Adams Express.  
 632 Rockwell & Southern Ry. Southern Express.  
 633 Rochester, Hornesville & Larkawanna Ry. United States Express.  
 634 Rochester & Lake Ontario Ry. American Express.  
 635 Rockaway Valley Ry. Adams Express.  
 636 Rock Island & Poor's Ry. United States Express.  
 637 Rockwood & Tennessee River Ry. Adams Express.  
 638 Rome (Georgia) Ry. Southern Express.  
 639 Rome, Watertown & Ogdensburg Ry. American Express.  
 640 Runtow, Falls & Buckfield Ry. Canadian Express.  
 641 Saginaw River.  
 642 Saginaw Ry.  
 643 Saginaw, Tuscola & Huron Ry. American Express.  
 644 Saginaw Valley & Lake Huron Ry. American Express.  
 645 Saginaw Valley & St. Louis Ry. American Express.  
 646 Salem & Eastern Ry. Adams Express.  
 647 Salisbury & Harvey Ry. Dominion Express.  
 648 San Antonio & Aransas Pass Ry. Pacific Express.  
 649 San Diego, Cuyamaca & Eastern Ry. Wells, Fargo & Co.'s Express.  
 650 Sandy River Ry. American Express.  
 651 San Francisco & North Pacific Ry. Wells, Fargo & Co.'s Express.  
 652 Sanford & Indian River Ry. Southern Express.  
 653 San Pete Valley Ry. Pacific Express.  
 654 Santa Fe Southern Ry. Denver & Rio Grande Express.  
 655 Satsop Ry. Northern Pacific Express.  
 656 Sault Ste. Marie & Southwestern Ry. American Express.  
 657 Savannah, Americus & Montgomery Ry. Southern Express.  
 658 Savannah, Florida & Western Ry. Southern Express.  
 659 Savannah, Griffin & Northern Alabama Ry. Southern Express.  
 660 Savannah River.  
 661 Sawyer River.



- 662 Selolharie Valley Ry., National Express.  
 663 Seaboard of Alabama Ry., Southern Express.  
 664 Seaboard & Roanoke Ry., Southern Express.  
 665 Seattle, Lake Shore & Eastern Ry., Northern Pacific Express.  
 666 Seattle & Northern Ry., Northern Pacific Express.  
 667 Seasidebrook & Meridian Ry., American Express.  
 668 Sharpshooter Ry., American Express.  
 669 Shepang, Litchfield & Northern Ry., Adams Express.  
 670 Shore Line Ry., Adams Express.  
 671 Shreveport & Houston Ry., American Express.  
 672 Silver City, Pecos Altos & Monagall Ry., Wells, Fargo & Co.'s Express.  
 673 Silver Lake Ry., American Express.  
 674 Silver Spring, Oebla & Gulf Ry., Southern Express.  
 675 Silverton Ry., Denver & Rio Grande Express.  
 676 Sinaloa & Durango Ry., Wells, Fargo & Co.'s Express.  
 677 Simeonalong Valley Ry., American Express.  
 678 Sioux City & Northern Ry., American Express.  
 679 Sioux City & Pacific Ry., American Express.  
 680 Skaneateles Ry., American Express.  
 681 Slate Run Ry., American Express.  
 682 Smithton & Dunith Ry., Southern Express.  
 683 Somerset Ry., American Express.  
 684 Somerset County Ry., Baltimore & Ohio Express.  
 685 Sonora Ry., Wells, Fargo & Co.'s Express.  
 686 South Line Ry., Dunith & South Shore Atlantic, American Express.  
 687 (Operated by Minneapolis, St. Paul & South Ste. Marie Ry.,  
 688 South Atlantic & Ohio Ry., Southern Express.  
 688 South Bond E. R., Southern Express.  
 689 South Brunswick & Northern Ry., Southern Express.  
 690 South Carolina Ry., Southern Express.  
 691 South Florida Ry., Southern Express.  
 692 Southern Pacific Company Ry., Wells, Fargo & Co.'s Express.  
 693 Southwestern Arkansas & Indian Territory Ry., Pacific Express.  
 694 Spoklank, Union & Columbia Ry., Southern Express.  
 695 (Operated by the Richmond & Danville Ry.)  
 696 Spokane Falls & Northern Ry., Northern Pacific Express.  
 697 St. Augustine & South Beach Ry., Southern Express.  
 698 St. Clair River.  
 699 St. Catharines & Niagara Central Ry., American Express.  
 700 St. Catharines & Southern Ry., American Express.  
 701 St. Cloud Sugar Hill Ry., Southern Express.  
 702 St. Croix & Pemberton Ry., American Express.  
 703 St. Helen, Houghton Lake & Western Ry., American Express.  
 704 St. Johnsbury & Lake Champlain Ry., American Express.  
 705 (Operated by Boston & Maine System.)  
 706 St. John's River, Canada.  
 707 St. John's River, Trinidad & Southern Express.  
 708 St. Joseph Valley Ry., American Express.  
 709 St. Lawrence River.  
 710 St. Louis, Alton & Springfield Ry., American Express.  
 711 St. Louis Alton & Terre Haute Ry., Adams Express.  
 712 St. Louis, Arkansas & Texas Ry., Southern Express.  
 713 St. Louis Bridge & Tunnel Company Ry.  
 714 St. Louis, Cuba & Western Ry., Adams Express.  
 715 St. Louis, Cape Girardeau & Fort Smith Ry., Pacific Express.  
 716 St. Louis, Iron Mountain & Southern Ry., Pacific Express.  
 717 St. Louis, Kansas City & Colorado Ry., Wells, Fargo & Co.'s Express.  
 718 St. Louis, Kennett & Southern Ry., Southern Express.  
 719 St. Louis, Keokuk & Northwestern Ry., American Express.  
 720 St. Louis, Vandalia & Terre Haute Ry., Adams Express.  
 721 St. Louis & Hannibal Ry., American and Pacific Expresses.  
 722 St. Paul & Dunith Ry., Adams Express.  
 723 State Line & Sullivan Ry., Adams Express.  
 724 Staten Island Rapid Transit Co., United States Express.  
 725 Sterling Mountain Ry., United States Express.  
 726 Stewartstown Ry., Adams Express.  
 727 Stony Cove & Fort Skill Mountain Ry., American Express.  
 728 Stony Creek Ry., Adams Express.  
 729 Strasburg Ry., Adams Express.  
 730 Stuttgart & Arkansas River Ry., Southern Express.  
 731 Sudbik & Carolina Ry., Southern Express.  
 732 Summit Branch Ry., Adams Express.  
 733 Surr, Sussex & Southampton Ry., Southern Express.  
 734 Suswannee River Ry., Southern Express.  
 735 Swainsboro Ry., Southern Express.  
 736 Switch Back Ry., Adams Express.  
 737 Sylvania Ry., Southern Express.  
 738 Syracuse & Baldwinsville Ry., National and United States Express.  
 739 Tabor & Northern Ry., American Express.  
 740 Tallboton Ry., Southern Express.  
 741 Tazewell & Gulf Ry., Southern Express.  
 742 Tazewell, Orange & Northern Ry., Southern Express.  
 743 Tennessee Ry., Canadian Express.  
 744 Tennessee Central Ry., Adams Express.  
 745 Tennessee River & Gulfway Ry., Southern Express.  
 746 Tennessee Hillland Ry., Southern Express.  
 747 Tennessee River.  
 748 Tennessee & Coosa R. R., Southern Express.  
 749 Terre Haute & Indianapolis Ry., Adams Express.  
 750 Terre Haute & Peoria Ry., American Express.  
 751 Tazewell & Fort Milling.  
 752 Tazewell & Shreveport Ry., (projected).  
 753 Texas Central Ry., Wells, Fargo & Co.'s Express.  
 754 (Operated by Houston & Texas Central Ry.)  
 755 Texas, Sabine Valley & Northwestern Ry., Pacific Express.  
 756 Texas Trunk Ry., Southern and Texas Expresses.  
 757 Texas Western Ry., Wells, Fargo & Co.'s Express.  
 758 Texas & Pacific Ry., Pacific Express.  
 759 The Thousand Islands Ry., Canadian and American Expresses.  
 760 Tionesta Valley Ry., Adams Express.  
 761 Toledo, Ann Arbor & North Michigan Ry., American Express.  
 762 Toledo, Columbus & Cincinnati Ry., Wells, Fargo & Co.'s Express.  
 763 Toledo, Findlay & Springfield Ry., United States and Baltimore & Ohio Expresses.  
 764 Toledo, Peoria & Western Ry., Adams Express.  
 765 Toledo, St. Louis & Kansas City Ry., National Express.  
 766 Toledo, Suzzanaw & Muskegon Ry., National Express.  
 767 Toledo & Ohio Central Ry., United States Express.  
 768 Toledo & Ohio Central Extension Ry., United States Express.  
 769 Toledo & South Haven Ry., American Express.  
 770 Tomahawk Valley & Cuba Ry., United States Express.  
 771 Trout Run Ry., American Express.  
 772 Tucker Ry., Adams Express.  
 773 Tunnelton, Kingwood & Fairhance Ry., United States Express.  
 774 Tuskegee Ry., Southern Express.  
 775 Uxton & Delaware Ry., American Express.  
 776 Ultima Thule, Arkadelphia & Mississippi Ry., United States Express.  
 777 Union Pacific Ry., Pacific Express.  
 778 Utah Central Ry., Pacific Express.  
 779 (Operated by Union Pacific Ry.)  
 780 Valley Ry., American Express.  
 781 Vancouer, Bricelita & Arkana Ry., Pacific Express.  
 782 Virginia & Western Ry., Adams Express.  
 783 Virginia & Truckee Ry., Wells, Fargo & Co.'s Express.  
 784 Visalia Ry., Wells, Fargo & Co.'s Express.  
 785 Visalia & Tulare Ry., Wells, Fargo & Co.'s Express.  
 786 Walsh Ry., Pacific Express.  
 787 Walsh River.  
 788 Walsh, Chester & Western Ry., Adams Express.  
 789 Wadley & Mt. Vernon Ry., Southern Express.  
 790 Wadwell Valley Ry., National Express.  
 791 Warren & Fairborth Ry., Adams Express.  
 792 Washington & Potomac Ry., Adams Express.  
 793 Washington Southern Ry., Adams Express.  
 794 (Operated by Baltimore & Potomac R. R.)  
 795 Waynesburg & Washington Ry., Adams Express.  
 796 Weatherford, Mineral Wells & Northwestern Ry., Pacific Express.  
 797 West Branch & Southwestern Ry., American Express.  
 798 Wellsville, Condersport & Pine Creek Ry., Wells, Fargo & Co.'s Express.  
 799 West Branch & Moonstown Ry., Adams Express.  
 800 West Jersey Ry., Adams and West Jersey Expresses.  
 801 West Shore Ry., National Express.  
 802 West Virginia Central & Pittsburg Ry., Adams Express.  
 803 West Virginia & Pittsburg Ry., United States Express.  
 804 Western Alabama Ry., Southern Express.  
 805 Western Counties Ry., American Express.  
 806 Western Florida Ry., Southern Express.  
 807 Western Maryland Ry., Adams Express.  
 808 Western New York & Pennsylvania Ry., American Express.  
 809 Western & North Carolina Ry., Southern Express.  
 810 Western & Atlantic Ry., Southern Express.  
 811 Wheeling & Elm Grove Ry., Adams Express.  
 812 Wheeling & Lake Erie Ry., Wells, Fargo & Co.'s Express.  
 813 White & Black River Valley Ry., Southern Express.  
 814 Whitewater & Maehiapor Ry., American Express.  
 815 Wichita & Western Ry., Adams Express.  
 816 (Operated by Atchison, Topeka & Santa Fe Ry.)  
 817 Wickes Barre & Western Ry., Adams Express.  
 818 Wilanette Valley & Coist R. R., Wells, Fargo & Co.'s Express.  
 819 Williamsport & North Branch Ry., United States Express.  
 820 Wilmington & Madison County Ry., Southern Express.  
 821 Wilmington, Columbia & Augusta Ry., Southern Express.  
 822 Wilmington, Onslow & East Carolina Ry., Southern Express.  
 823 (Operated by Wilmington & North Branch Ry.)  
 824 Wilmington & Southern Ry., Southern Express.  
 825 Wilmington & Northern Ry., United States Express.  
 826 Wilmington & Weldon Ry., Southern Express.  
 827 Wilson & Summerton Ry., Southern Express.  
 828 Windsor & Annapolis Ry., Western Express.  
 829 Winifrede Ry., Adams Express.  
 830 Winipeg & Hudson Bay Ry., Dominion Express.  
 831 Winona & Southwestern Ry., American Express.  
 832 Wisconsin Central Ry., Northern Pacific Express.  
 833 Wood River Branch Ry., Adams Express.  
 834 Woodstock Ry., American Express.  
 835 Worcester & Shrewsbury Ry., Boston Local Express.  
 836 Wrightsville & Tompkins Ry., Southern Express.  
 837 York Harbor & Beaufort Ry., American Express.  
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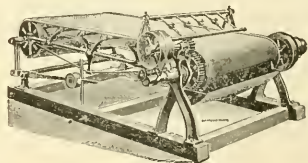
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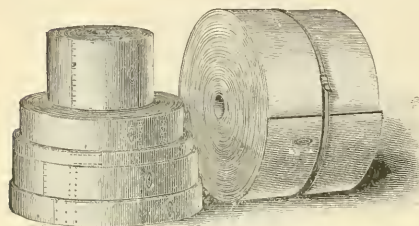
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# INDEX TO ADVERTISEMENTS

PAGE	PAGE	PAGE			
Aemie Powder Co., Pittsburgh, Pa. . . . .	548	Fuller & Randolph, Pittsburg, Kan. . . . .	19	Norwalk Iron Works Co., South Nor-	36
Atma Powder & Machine Co., Sprin-	543	Garrison, C. M., Pittsburg, Pa. . . . .	16	Otto Gas Engine Works, Philadelphia,	541
Beld, H. H., Chicago . . . . .	534	General Electric Co., New York . . . . .	538	Palmer & Roy, San Francisco . . . . .	526
Etna Foundry Co., Chicago . . . . .	534	Gilbert Respirator Co., Chicago . . . . .	526	Parker, Melcher & Ingraham, Chicago.	22
Alston, The, Edward P., Co., Milwaukee	9	Gilbert & Bennett Manufacturing Co.,	Chicago . . . . .	28	
American Fluoride Co., New York . . .	533	Gordon Steam Pump Co., Hamilton,	Ohio, and Chicago . . . . .	543	
American Injector Co., Detroit, Mich.	542	Geo. Manufacturing Co., The, Seneca	Falls, N. Y. . . . .	556	
American Mill, M. & M. Co., Cleveland,	Ohio . . . . .	Gross, Geo. M., Chicago . . . . .	543	Phlegar & Johnson, Christburg, Va.	531
Arkell, MacMillan & Stewart, Aspen,	Colo . . . . .	Guillaume, Alfred, Chicago . . . . .	9	Phony Wire Works, The, Detroit,	Mich . . . . .
Badgley, C. W., & Co., Denver, Colo . .	549	Guirley, W. & L. E., Troy, N. Y . . . . .	9	Phyllis J. & Co., Osceola Mills, Pa.	536
Baker, Herbert L., Boston . . . . .	19	Gutta Percha & Rubber Manufacturing	Co., The, Chicago . . . . .	9	
Balliet, C. O., Cleveland, Ohio . . . . .	13	Hamilton, Lowe & Co., Chicago . . . . .	9	Pillans, Torrey & Hanway, Mobile, Ala.	18
Beckett Foundry & Machine Co., Ar-	lington, N. J. . . . .	Harris, W. O., Louisville, Ky. . . . .	545	Porter, H. K., & Co., Pittsburgh, Pa.	548
Bendy, N. B., El Paso, Texas . . . . .	545	Hastings & Gleason, New York . . . . .	529	Presb'n & Co., Philadelphia . . . . .	539
Bishop, Victor, & Co., New York . . . .	534	Haus, Francis J., Tucson, Ariz . . . . .	545	Pross & Hankman Mfg. Co., Terre-	Haute, Ind . . . . .
Blincoe, William, Guthrie, Okla . . . . .	529	Herbertson's Sons, J., Brownsville, Pa.	542	Queen City Supply Co., Cincinnati,	Ohio . . . . .
Boggs, James A., Duluth, Minn . . . . .	14	Hoagland, M., Rockaway, N. J . . . . .	545	Queen & Co., Philadelphia . . . . .	547
Booth, Lee & Gray, Salt Lake City	539	Hoppes Manufacturing Co., The, Spring-	field, Ohio . . . . .	533	
Boston Heating Co., Boston . . . . .	21	Hoskins, William, Chicago . . . . .	547	Iland Drill Co., New York . . . . .	20
Boston & Lockport Block Co., Boston	17	Hough & Campbell, Wimpier, Minn. . . .	37	Raymond Bros., Chicago . . . . .	34
Bradley Fertilizer Co., Boston . . . . .	42	Howard & Morse, New York . . . . .	527	Reedy, J. W., Elevator Manufacturing	Co., Chicago . . . . .
Brady & Alexander, Jackson, Miss . . .	528	Ingersoll-Sergeant Drill Co., New York	545	Ree Machinery Co., Chicago . . . . .	541
Brandt, Randolph, New York . . . . .	547	Jackson & Woodin Manufacturing Co.,	Berwick, Pa. . . . .	545	
Brown, C. M., What Cheer, Iowa . . . . .	18	Jelley Manufacturing Co., The, Colum-	bia, Mo. . . . .	539	
Brown Hoisting & Conveying Machin-	ery Co., Cleveland, Ohio . . . . .	Jenny Electric Motor Co., Indianapolis,	Ind . . . . .	36	
Bullock & Crenshaw, Philadelphia . . .	532	John Manufacturing Co., H. W., Chi-	cago . . . . .	547	
Burch & Waller, Nashville, Tenn . . . .	530	Johnson, Geo. A., San Francisco . . . . .	547	Richardson, Frank L., New Orleans, La.	19
Burt, Lee, Detroit, Mich . . . . .	546	Johns, Voorhes & Stephens, Spokane,	Wash . . . . .	531	
Burke & Sons, Thos., Allegheny, Pa	543	Johnson, W. H., Denver, Colo . . . . .	551	Ricketts & Banks, New York . . . . .	11
Carpenter, David B., Helena, Mont	528	Kilbourne & Jacobs Manufacturing	Co., Columbus, Ohio . . . . .	544	
Carpenter, Geo. B., & Co., Chicago	534	Kimberk, S. D., Chicago . . . . .	541	Ross & Todd, Chicago . . . . .	529
Carver Magnetic Ore Separator Co.,	Brooklyn, N. Y . . . . .	King Bridge Co., Cleveland, Ohio . . . .	548	Russell, J. W., Burlington, Vt. . . . .	531
Chandler, W. J., & Co., Denver, Colo . .	542	Kirk & Son, Arthur, Pittsburgh, Pa . . .	548	Russel Wheel & Foundry Co., Detroit,	Mich . . . . .
Chandler & Taylor Co., Indianapolis	526	Kissel, Oakes & Connor, Colorado Springs,	Colo . . . . .	540	
Chicago & Aurora Smelting & Refining	Co., Chicago . . . . .	Krosschell & Burgeois, Chicago . . . . .	549	Saint Louis Smelting & Refining Co., St.	Louis, Mo . . . . .
Chicago Copper Refining Co., Chic . . .	11	Lauchester, James H., New York . . . .	544	St. Louis Sampling & Testing Works,	St. Louis, Mo . . . . .
Chicago Iron Works, Chicago . . . . .	21	Lebel Manufacturing Co., Chicago . . . . .	542	St. Louis Smelting & Refining Co., St.	Louis, Mo . . . . .
Chicago Shafting & Pulley Co., Chicago	541	Leff, The James & Co., Springfield, O.	532	Salt Lake City Foundry & Manufac-	turing Co., Salt Lake City, Utah . . . . .
Chicago Water Motor Co., Chicago . . .	544	Leo & Jordan, Tacoma, Wash . . . . .	531	Sargent E. H., & Co., Chicago . . . . .	7
Chimase Steel Works, Brooklyn, N. Y . .	534	Leona Locomotive & Machinery Co.,	Lima, Ohio . . . . .	529	
Chinox Pipe Co., The, New York . . . . .	534	Litchfield Car & Machinery Co., Litch-	field, Ill . . . . .	536	
Clinton Wire Cloth Co., Clinton, Mass . .	8	Litt, Geo. W., Philadelphia . . . . .	533	Southey, John, & Co., Boston, Mass . . .	532
Conrad, Thomas T., Philadelphia . . . .	535	Lowthorp & Oliphant, Trenton, N. J . . .	529	Spaulding & Phelps, San, Dak . . . . .	529
Connor & Grant, San Francisco, Cal.	9	McIntock & Irvine, Allegheny, Pa . . . .	529	Stevens, Low & Cochran, Lincoln, Neb.	528
Contractors' Plant Manufacturing Co.,	Ltd., Buffalo, N. Y. . . . .	McJoy, Jos. F. Co., New York . . . . .	544	Sturtevant, Wm. E., Pittsburgh & W.	548
Cooper & Nelson, Racine, Wis . . . . .	526	McManus, A. E., Duluth, Minn . . . . .	528	Stine, S. B., Greola Mills, Pa . . . . .	547
Copeland & Bacon, New York and	Chicago . . . . .	McMyler Manufacturing Co., Clevel-	and, Ohio . . . . .	542	
Creechhead Engineering Co., The, Cin-	cinnati, Ohio . . . . .	Manly & Moore, Denver, Colo . . . . .	549	Sturtevant Mill Co., The, Boston . . . . .	525
Cutter, George, Chicago . . . . .	12	Marcus & Hoskins, Chicago . . . . .	530	Sullivan Machinery Co., Chicago . . . . .	535
Cutter, H. A., Nashville, N. H . . . . .	18	Marlin & Mason, Deadwood, S. Dak . . .	530	Thayer & Jackson Stationery Co., Chi-	cago . . . . .
Davis, Horatio, Gainesville, Fla. . . . .	18	Merrick & Smith, Parkersburg, W. Va . .	534	Traber & McNeil, Kansas City, Mo . . . .	728
Dayton Gole Iron Works Co., Dayton,	Ohio . . . . .	Metallic Cap Manufacturing Co., New	York . . . . .	Union Foundry & Machine Works	545
Dayton, Poble & Brown, Chicago . . . . .	14	Mey, F. H. C., Buffalo, N. Y . . . . .	541	Union Iron Works, San Francisco . . . .	9
Deane Steam Pump Co., Holyoke, Mass.	543	Michigan Emery Wheel Co., Detroit,	Mich . . . . .	Van Hook Iron Works, Chicago . . . . .	547
Denlinger Bros., Pittsburgh, Pa . . . . .	548	Milgram Pipe Co., Bay City, Mich . . . . .	530	Vareum Iron Works, San Francisco . . . .	7
Detrol Graphite Manufacturing Co.,	Detroit, Mich . . . . .	Miner, Sidney R., Wilkes-Barre, Pa . . . .	530	Wadhams Oil & Grease Co., Milwa-	ukee . . . . .
Detroit Lubricator Co., Detroit, Mich	549	Mineral Ridge Manufacturing Co.,	Mineral Ridge, Ohio . . . . .	Walburn-Swenson Co., Chicago . . . . .	5
Diamond Anti-Friction Metal Co., Chi-	cago . . . . .	Montague, W. W., & Co., San Fran-	cisco . . . . .	Waters Bros., Denver, Colo . . . . .	37
Dodge, Eugene, & Co., Chicago . . . . .	7	Morris, C. B., Little Rock, Ark . . . . .	528	Webster, Camp & Lane Machine Co.,	Akron, Ohio . . . . .
Doworth, C. B., Maehus, Mo . . . . .	19	Murray & Walter, New York, N. C . . . .	547	Webster Manufacturing Co., Chicago . . .	22
Eastern Electric Cable Co., Boston	539	Nimitz & Sons, New York . . . . .	546	Western Bank Note Co., Chicago . . . . .	20
Eastwood Wire Manufacturing Co.,	Bellefonte, Pa . . . . .	National Smelting & Refining Co., Chi-	cago . . . . .	Wheeler & Tappan Co., Chicago . . . . .	543
Eddy Electric Manufacturing Co.,	Windsor, Conn . . . . .	Ohio Steel, Springfield & Rubber Co.,	New York . . . . .	Whitcomb, George D., Chicago . . . . .	20
Electrical Construction Co., Chicago	539	New Jersey Car Spring & Rubber Co.,	New York . . . . .	Whitney, A. & Sons, Philadelphia	536
Electrical Engineering & Supply Co.,	St. Paul, Minn. . . . .	Ohio Steel, Springfield & Rubber Co.,	New York . . . . .	Wood, Geo. R., New York . . . . .	546
Elliott & Hoffman, Baltimore, Md	19	Montague, W. W., & Co., San Fran-	cisco . . . . .	Wyckoff, A., & Son, Elmira, N. Y. . . . .	15
Elliott & Townsend, Benouf, S. C . . . .	530	Moore, C. B., Little Rock, Ark . . . . .	528	Wyckoff, Scumans & Benedict, Chicago	8
Emerson & Chandler, Dorchester,	N. B . . . . .	Murray & Walter, New York, N. C . . . .	547		
Epping, Carpenter & Co., Pittsburgh, Pa .	548	National Smelting & Refining Co., Chi-	cago . . . . .		
Everhart, James M., Scranton, Pa . . . .	544	New Jersey Car Spring & Rubber Co.,	New York . . . . .		
Excelsior Iron Works Co., Cleveland, O.	547	New York Domestic Gas Machine Co.,	New York . . . . .		
Fendon & Co., Philadelphia, Pa . . . . .	547				
Fennerty, A. P., Denver, Colo . . . . .	513				
Field Feed Water Purifier Co., Chicago	533				

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**CEO. W. LORD**, Philadelphia, Pa. See adv., page 36.

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**CHICAGO IRON WORKS**, Chicago, Ill. See adv., page 21.

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**NORWALK IRON WORKS CO.**, South Norwalk, Conn. See adv., page 36.

**PARKER, MELCHER & INCRAHAM**, Chicago, Ill. See adv., page 22.

**H. K. PORTER & CO.**, Pittsburgh, Pa. See adv., page 548.

**RAND DRILL CO.**, New York and Chicago. See adv., page 20.

**UNION IRON WORKS**, San Francisco, Cal. See adv., page 6.

**WALBURN-SWENSON CO.**, Chicago, Ill. See adv., page 547.

**WEBSTER, CAMP & LANE MACHINE CO.**, Akron, Ohio. See adv., page 22.

**AMALGAMATORS**

**CHICAGO IRON WORKS**, Chicago, Ill. See adv., page 21.

**CATES IRON WORKS**, Chicago, Ill. See adv., page 3.

**WALBURN-SWENSON CO.**, Chicago, Ill. See adv., page 547.

**ANTI-FRICTION METAL**

**EASTWOOD WIRE MANUFACTURING CO.**, Belleville, N. J. See adv., page 526.

**DIAMOND ANTI-FRICTION METAL CO.**, Chicago, Ill. See adv., page 546.

**QUEEN CITY SUPPLY CO.**, Cincinnati, Ohio. See adv., page 540.

**WADHAMS OIL & CREASE CO.**, Milwaukee, Wis. See adv., page 5.

**ASBESTOS**

**FENLON & CO.**, Philadelphia, Pa. See adv., page 547.

**H. W. JOHNS MANUFACTURING CO.**, Chicago, Ill. See adv., page 547.

**ASSAY FURNACES**

**W. HOSKINS**, Chicago, Ill. See adv., page 11.

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**ALFRED CUILLAUME**, Chicago, Ill. See adv., page 11.

**MARINER & HOSKINS**, Chicago, Ill. See adv., page 9.

**RICKETTS & BANKS**, New York City. See adv., page 11.

**ST. LOUIS SAMPLING & TESTING WORKS**, St. Louis, Mo. See adv., page 346.

**SELBY SMELTING & LEAD CO.**, San Francisco, Cal. See adv., page 10.

**ASSAYERS' SUPPLIES**

**BULLOCK & CRENSHAW**, Philadelphia, Pa. See adv., page 542.

**W. HOSKINS**, Chicago, Ill. See adv., page 11.

**QUEEN & CO.**, Philadelphia, Pa. See adv., page 547.

**RICHARDS & CO., LTD.**, Chicago and New York. See adv., page 5.

**E. H. SARCENT & CO.**, Chicago, Ill. See adv., page 4.

**ATTORNEYS**

*(See list, page 112.)*

**AUXILIARY PUMPS**

**THE COULDS MANUFACTURING CO.**, Seneca Falls, N. Y. See adv., page 556.

**BABBITT METAL**

**DIAMOND ANTI-FRICTION METAL CO.**, Chicago, Ill. See adv., page 546.

**EASTWOOD WIRE MANUFACTURING CO.**, Belleville, N. J. See adv., page 526.

**EPPING, CARPENTER & CO., LTD.**, Pittsburgh, Pa. See adv., page 548.

**QUEEN CITY SUPPLY CO.**, Cincinnati, Ohio. See adv., page 540.

**WADHAMS OIL & CREASE CO.**, Milwaukee, Wis. See adv., page 5.

**BATTERY SCREENS**

- CLINTON WIRE CLOTH CO.**, Clinton, Mass. See adv., page 8.  
**ROBERT AITCHISON PERFORATED METAL CO.**, Chicago, Ill. See adv., page 9.  
**HOWARD & MORSE**, New York City. See adv., page 527.  
**THE PHENIX WIRE WORKS**, Detroit, Mich. See adv., page 9.

**BELT DRESSING**

- WADHAMS OIL & GREASE CO.**, Milwaukee, Wis. See adv., page 5.

**BELT HOOKS**

- JEWELL BELTING CO.**, Hartford, Conn. See adv., page 36.

**BELTING**

- BOSTON BELTING CO.**, Boston, Mass. See adv., page 21.  
**THE CUTTA BERCHA & RUBBER MANUFACTURING CO.**, Chicago, Ill. See adv., page 9.  
**JEWELL BELTING CO.**, Hartford Conn. See adv., page 36.  
**NEW JERSEY CAR SPRING & RUBBER CO.**, Jersey City, N. J. See adv., page 322.  
**QUEEN CITY SUPPLY CO.**, Cincinnati, Ohio. See adv., page 549.

**BLACKSMITH TOOLS**

- KELLEY, MAUS & CO.**, Chicago, Ill. See adv., page 8.  
**S. D. KIMBARK**, Chicago, Ill. See adv., page 8.

**BLASTING POWDER**

- ACME POWDER CO.**, Pittsburgh, Pa. See adv., page 548.  
**ÆTNA POWDER CO.**, Chicago, Ill. See adv., page 534.

**BLASTING PRIMERS**

- METALLIC CAP MANUFACTURING CO.**, New York City. See adv., page 534.

**BLOWERS**

- EDWARD P. ALLIS CO.**, Milwaukee, Wis. See adv., page 2.  
**CHICAGO IRON WORKS**, Chicago, Ill. See adv., page 21.  
**KELLEY, MAUS & CO.**, Chicago, Ill. See adv., page 8.  
**THE P. H. & F. M. ROOTS CO.**, Connersville, Ind. See adv., page 539.  
**WALBURN-SWENSON CO.**, Chicago, Ill. See adv., page 537.

**BLOWING ENGINES**

- EDWARD P. ALLIS CO.**, Milwaukee, Wis. See adv., page 2.

**BLOW PIPES**

- W. HOSKINS**, Chicago, Ill. See adv., page 11.

**BLUE VITRIOL MANUFACTURERS**

- CHICAGO & AURORA SMELTING & REFINING CO.**, Chicago and Aurora, Ill. See adv., page 11.

**BOILER COMPOUND**

- AMERICAN FLUORIDE CO.**, New York City. See adv., page 533.  
**GEORGE W. LORD**, Philadelphia, Pa. See adv., page 533.  
**WADHAMS OIL & GREASE CO.**, Milwaukee, Wis. See adv., page 5.

**BOILER FEED PUMPS**

- THE COULDS MANUFACTURING CO.**, Seneca Falls, N. Y. See adv., page 559.  
**DEANE STEAM PUMP CO.**, Holyoke, Mass. See adv., page 543.  
**WHEELER & TAPPAN CO.**, Chicago, Ill. See adv., page 543.

**BOILER FEEDERS**

- AMERICAN INJECTOR CO.**, Detroit, Mich. See adv., page 542.  
**PENBERTHY INJECTOR CO.**, Detroit, Mich. See adv., page 542.

**BOILER PROTECTOR**

- GEORGE W. LORD**, Philadelphia, Pa. See adv., page 533.

**BOILERS**

- EDWARD P. ALLIS CO.**, Milwaukee, Wis. See adv., page 2.  
**CHANDLER & TAYLOR CO.**, Indianapolis, Ind. See adv., page 542.  
**CHICAGO IRON WORKS.**, Chicago, Ill. See adv., page 21.  
**COPELAND & BACON**, Chicago and New York. See adv., page 535.  
**EXCELSIOR IRON WORKS**, Cleveland, Ohio. See adv., page 17.  
**KROESCHELL BROS.**, Chicago, Ill. See adv., page 549.  
**OSTERLOH SUPPLY CO.**, Pittsburgh, Pa. See adv., page 541.  
**SCIOTO BOILER WORKS**, Columbus, Ohio. See adv., page 549.  
**THE STIRLING CO.**, Chicago, Ill. See adv., page 542.  
**UNION IRON WORKS**, San Francisco, Cal. See adv., page 6.

**BOILER SCALE PREVENTIVE**

- AMERICAN FLUORIDE CO.**, New York City. See adv., page 533.  
**FIELD FEED WATER PURIFIER CO.**, Chicago, Ill. See adv., page 533.  
**HOPPES MANUFACTURING CO.**, Springfield, Ohio. See adv., page 533.

**BOILER SCALE REMOVER**

**AMERICAN FLUORIDE CO.**, New York City. See adv., page 533.

**BONDS**

**THE WESTERN BANK NOTE CO.**, Chicago, Ill. See adv., page 550.

**BRIDGES**

**BERLIN IRON BRIDGE CO.**, East Berlin, Conn. Our illustrated catalogue sent free.

**BOSTON BRIDGE WORKS**, Boston, Mass. See adv., page 532.

**KING BRIDGE CO.**, Cleveland, Ohio. See adv., page 28.

**BROKERS**

(See also Mine Brokers)

**JAMES A. BOCCS**, Duluth, Minn. See adv., page 14.

**LEE BURT**, Detroit, Mich. See adv., page 546.

**A. P. FENNERTY**, Denver, Colo. See adv., page 513.

**W. F. KENDRICK**, Denver, Colo. See adv., page 571.

**BRONZE CASTINGS**

**EASTWOOD WIRE MANUFACTURING CO.**, Belleville, N. J. See adv., page 526.

**BUCKETS**

**EXCELSIOR IRON WORKS**, Cleveland, Ohio. See adv., page 17.

**McMYLER MANUFACTURING CO.**, Cleveland, Ohio. See adv., page 13.

**F. H. C. MEY**, Buffalo, N. Y. See adv., page 541.

**BUILDING PAPER**

**KANSAS CITY METAL ROOFING & CORRUGATING CO.**, Kansas City, Mo. See adv., page 7.

**CABLE TRAMWAY**

**THE BROWN HOISTING & CONVEYING MACHINE CO.**, Cleveland, Ohio. See adv., page 34.

**C. W. BADCLEY & CO.**, Denver, Colo. See adv., page 549.

**CHICAGO IRON WORKS**, Chicago, Ill. See adv., page 21.

**COPELAND & BACON**, Chicago and New York. See adv., page 535.

**VULCAN IRON WORKS**, San Francisco, Cal. See adv., page 7.

**CARBONS**

**VICTOR BISHOP & CO.**, New York City. See adv., page 531.

**CAR BEARINGS**

**EPPING, CARPENTER & CO., LTD.**, Pittsburgh, Pa. See adv., page 548.

**CAR CASTINGS**

(See also Castings)

**THE LIMA LOCOMOTIVE & MACHINE CO.**, Lima, Ohio. See adv., page 20.

**CAR HEATERS**

**RAILWAY EQUIPMENT CO.**, Chicago, Ill. See adv., page 28.

**CARS**

(See Mine Cars)

**CARS FOR CONCENTRATES**

(See also Mine Cars)

**THE LIMA LOCOMOTIVE & MACHINE CO.**, Lima, Ohio. See adv., page 20.

**CAR WHEELS**

**CHICAGO IRON WORKS**, Chicago, Ill. See adv., page 21.

**J. HERBERTSON'S SONS**, Brownsville, Pa. See adv., page 542.

**JACKSON & WOODIN MANUFACTURING CO.**, Berwick, Pa. See adv., page 541.

**THE LIMA LOCOMOTIVE & MACHINE CO.**, Lima, Ohio. See adv., page 20.

**PHILLIPS MINE SUPPLY CO.**, Pittsburgh, Pa. See adv., page 536.

**JUSTIN J. PIE & CO.**, Osceola Mills, Pa. See adv., page 536.

**PITTSBURGH CAR WHEEL CO.**, cor. Home and Hatfield sts., Pittsburgh, Pa.

**THE RUSSEL WHEEL & FOUNDRY CO.**, Detroit, Mich. See adv., page 536.

**S. B. STINE**, Osceola Mills, Pa. See adv., page 17.

**A. WHITEY & SONS**, Philadelphia, Pa. See adv., page 536.

**CASTINGS**

**EXCELSIOR IRON WORKS**, Cleveland, Ohio. See adv., page 17.

**JACKSON & WOODIN MANUFACTURING CO.**, Berwick, Pa. See adv., page 541.

**LIMA LOCOMOTIVE & MACHINE CO.**, Lima, Ohio. See adv., page 20.

**SALT LAKE CITY FOUNDRY & MANUFACTURING CO.**, Salt Lake City, Utah. See adv., page 7.

**SCAIFE FOUNDRY & MACHINE CO.**, Pittsburgh, Pa. See adv., page 548.

**WALBURN-SWENSON CO.**, Chicago, Ill. See adv., page 537.

**A. WHITNEY & SONS**, Philadelphia, Pa. See adv., page 536.

**CAST-IRON PIPES**

**JACKSON & WOODIN MANUFACTURING CO.**, Berwick, Pa. See adv., page 541.

**CEMENT MILLS**

(See also Pulverizers)

**BRADLEY FERTILIZER CO.**, Boston, Mass. See adv., page 12.

**STURTEVANT MILL CO.**, Boston, Mass. See adv., page 525.

**CHAIN BELTING**

**JEFFREY MANUFACTURING CO.**, Columbus, Ohio. See adv., page 4.

**F. H. C. MEY**, Buffalo, N. Y. See adv., page 541.

**CHARGING BARROWS**

**THE KILBOURNE & JACOBS MANUFACTURING CO.**, Columbus, Ohio. See adv., page 544.

**CHEMICAL APPARATUS**

**BULLOCK & CRENSHAW**, Philadelphia, Pa. See adv., page 532.

**QUEEN & CO.**, Philadelphia, Pa. See adv., page 547.

**RICHARDS & CO., LTD.**, Chicago and New York. See adv., page 5.

**E. H. SARCENT & CO.**, Chicago, Ill. See adv., page 4.

**CHEMICALS**

**BULLOCK & CRENSHAW**, Philadelphia, Pa. See adv., page 532.

**QUEEN & CO.**, Philadelphia, Pa. See adv., page 547.

**RICHARDS & CO., LTD.**, Chicago and New York. See adv., page 5.

**E. H. SARCENT & CO.**, Chicago, Ill. See adv., page 4.

**COAL AND ORE WASHERS**

**COPELAND & BACON**, Chicago and New York. See adv., page 535.

**RAYMOND BROS. IMPACT PULVERIZER CO.**, Chicago, Ill. See adv., page 34.

**SCAIFE FOUNDRY & MACHINE CO.**, Pittsburgh, Pa. See adv., page 548.

**WALBURN-SWENSON CO.**, Chicago, Ill. See adv., page 537.

**COAL DRILLS**

**MINERAL RIDGE MANUFACTURING CO.**, Mineral Ridge, Ohio. See adv., page 28.

**GEORGE D. WHITCOMB**, Chicago, Ill. See adv., page 20.

**COAL MINING MACHINERY**

**GENERAL ELECTRIC CO.**, New York City. See adv., page 538.

**THE JEFFREY MANUFACTURING CO.**, Columbus, Ohio. See adv., page 4.

**NORWALK IRON WORKS CO.**, South Norwalk, Conn. See adv., page 36.

**FRANK N. SLADE**, Columbus, Ohio. See adv., page 539.

**GEORGE D. WHITCOMB**, Chicago, Ill. See adv., page 20.

**COKE CRUSHERS**

(See also Crushers)

**C. M. KELLER**, Columbus, Ind. See adv., page 533.

**COKE-WORKS EQUIPMENTS**

**PHILLIPS MINE SUPPLY CO.**, Pittsburgh, Pa. See adv., page 536.

**WALBURN-SWENSON CO.**, Chicago, Ill. See adv., page 537.

**COMPRESSION GREASE CUPS**

**WADHAMS OIL & GREASE CO.**, Milwaukee, Wis. See adv., page 5.

**CONCENTRATORS**

**EDWARD P. ALLIS CO.**, Milwaukee, Wis. See adv., page 2.  
**AMERICAN MANUFACTURING, MINING & MILLING CO.**, Cleveland, Ohio. See adv., page 12.

**CARTER MAGNETIC ORE SEPARATOR CO.**, Brooklyn, N. Y. See adv., page 545.

**CHICAGO IRON WORKS**, Chicago, Ill. See adv., page 21.

**CATES IRON WORKS**, Chicago, Ill. See adv., page 3.

**GEORGE M. CROSS**, Chicago, Ill. See adv., page 34.

**UNION IRON WORKS**, San Francisco, Cal. See adv., page 6.

**WALBURN-SWENSON CO.**, Chicago, Ill. See adv., page 537.

**CONSTRUCTING ENGINEERS**

**CREAGHEAD ENGINEERING CO.**, Cincinnati, Ohio. See adv., page 546.

**RICE MACHINERY CO.**, Chicago, Ill. See adv., page 541.

**CONTRACTORS**

**CONNOR & CRANT**, San Francisco, Cal. See adv., page 9.

**CONTRACTORS' AND MINERS' SUPPLIES**

**THOS. CARLIN'S SONS**, Allegheny, Pa. See adv., page 13.

**CHICAGO IRON WORKS**, Chicago, Ill. See adv., page 21.

**CONTRACTORS' PLANT MANUFACTURING CO.**, Buffalo, N. Y. See adv., page 526.

**KELLEY, MAUS & CO.**, Chicago, Ill. See adv., page 8.

**PARKER, MELCHER & INGRAHAM**, Chicago, Ill. See adv., page 25.

**RAND DRILL CO.**, New York. See adv., page 24.

**SOMERS, FITLER & CLARKE**, Pittsburgh, Pa. See adv., page 548.

**SULLIVAN MACHINERY CO.**, Chicago, Ill. See adv., page 535.



## CONVEYING MACHINERY

- C. W. BADGLEY & CO.**, Denver, Colo. See adv., page 549.  
**C. O. BARTLETT**, Cleveland, Ohio. See adv., page 13.  
**THE BROWN HOISTING & CONVEYING MACHINE CO.**,  
 Cleveland, Ohio. See adv., page 34.  
**COPELAND & BACON**, New York and Chicago. See adv.,  
 page 535.  
**CHICAGO IRON WORKS**, Chicago, Ill. See adv., page 21.  
**THE JEFFREY MANUFACTURING CO.**, Columbus, Ohio.  
 See adv., page 4.  
**THE KING BRIDGE CO.**, Cleveland, Ohio. See adv., page 28.  
**McMYLER MANUFACTURING CO.**, Cleveland, Ohio. See  
 adv., page 13.  
**F. H. C. MEY**, Buffalo, N. Y. See adv., page 541.  
**RICE MACHINERY CO.**, Chicago, Ill. See adv., page 541.  
**SCAIFE FOUNDRY & MACHINE CO.**, Pittsburgh, Pa. See  
 adv., page 548.  
**VULCAN IRON WORKS**, San Francisco, Cal. See adv.,  
 page 7.  
**WEBSTER MANUFACTURING CO.**, Chicago, Ill. See  
 adv., page 13.

## COPPER

- C. M. GARRISON**, Pittsburgh, Pa. See adv., page 10.

## COPPER AND BRASS CASTINGS

- EASTWOOD WIRE MANUFACTURING CO.**, Belleville,  
 N. J. See adv., page 526.

## COPPER INGOTS

- CHICAGO COPPER REFINING CO.**, Chicago, Ill. See adv.,  
 page 11.

## COPPER REFINERS

- CHICAGO COPPER REFINING CO.**, Chicago, Ill. See adv.,  
 page 11.

## CORNISH ROLLS

- CHICAGO IRON WORKS**, Chicago, Ill. See adv., page 21.  
**CATES IRON WORKS**, Chicago, Ill. See adv., page 3.  
**VULCAN IRON WORKS**, San Francisco, Cal. See adv.,  
 page 7.  
**WALBURN-SWENSON CO.**, Chicago, Ill. See adv., page 537.

## CORRUGATED IRON

- KANSAS CITY METAL ROOFING & CORRUGATING CO.**,  
 Kansas City, Mo. See adv., page 7.  
**W. W. MONTAGUE & CO.**, San Francisco, Cal. See adv.,  
 page 527.

## CORUNDUM WHEELS

- MICHIGAN EMERY WHEEL CO.**, Detroit, Mich. See adv.,  
 page 9.

## CRANES AND DERRICKS

- THE BROWN HOISTING & CONVEYING MACHINE CO.**,  
 Cleveland, Ohio. See adv., page 34.  
**CONTRACTORS' PLANT MANUFACTURING CO.**, Buffalo,  
 N. Y. See adv., page 523.  
**THE EXCELSIOR IRON WORKS CO.**, Cleveland, Ohio.  
 See adv., page 17.  
**McMYLER MANUFACTURING CO.**, Cleveland, Ohio.  
 See adv., page 13.  
**PENNSYLVANIA DIAMOND DRILL & MANUFACTUR-  
 ING CO.**, Birdsboro, Pa. See adv., page 545.  
**WALBURN-SWENSON CO.**, Chicago, Ill. See adv., page 537.

## CRUSHER PLATES

- EDWARD P. ALLIS CO.**, Milwaukee, Wis. See adv., page 2.  
**CHROME STEEL WORKS**, Brooklyn, N. Y. See adv.,  
 page 544.

## CRUSHERS

(Ore, Rock, Coal, etc. See also Pulverizers.)

- EDWARD P. ALLIS CO.**, Milwaukee, Wis. See adv., page 2.  
**AMERICAN MANUFACTURING, MINING & MILLING  
 CO.**, Cleveland, Ohio. See adv., page 12.  
**THE BECKETT FOUNDRY & MACHINE CO.**, Arlington,  
 N. J. See adv., page 545.  
**BRADLEY FERTILIZER CO.**, Boston, Mass. See adv.,  
 page 12.  
**CHICAGO IRON WORKS**, Chicago, Ill. See adv., page 21.  
**COPELAND & BACON**, Chicago and New York. See adv.,  
 page 535.  
**CATES IRON WORKS**, Chicago, Ill. See adv., page 3.  
**C. M. KELLER**, Columbus, Ind. See adv., page 535.  
**ARTHUR KIRK & SON**, Pittsburgh, Pa. See adv., page 545.  
**JAMES H. LANCASTER**, New York City. See adv., page 544.  
**RAYMOND BROS. IMPACT PULVERIZER CO.**, Chicago,  
 Ill. See adv., page 11.  
**SCAIFE FOUNDRY & MACHINE CO.**, Pittsburgh, Pa.  
 See adv., page 548.  
**STURTEVANT MILL CO.**, Boston, Mass. See adv., page 525.  
**UNION FOUNDRY & MACHINE WORKS**, Rockaway, N. J.  
 See adv., page 545.  
**UNION IRON WORKS**, San Francisco, Cal. See adv.,  
 page 6.  
**VULCAN IRON WORKS**, San Francisco, Cal. See adv.,  
 page 7.  
**WALBURN-SWENSON CO.**, Chicago, Ill. See adv., page 537.

## CUT-OFF COUPLINGS

- CHICAGO SHAFTING & PULLEY CO.**, Chicago, Ill. See  
 adv., page 541.

## DERRICKS

(See Cranes and Derricks.)

## DIAMOND DRILLS

- PENNSYLVANIA DIAMOND DRILL & MANUFACTUR-  
 ING CO.**, Birdsboro, Pa. See adv., page 545.  
**SULLIVAN MACHINERY CO.**, Chicago, Ill. See adv., page 535.

**DIAMONDS**

**VICTOR BISHOP & CO.**, New York City. See adv., page 534.

**DRAINAGE PUMPS**

(See also Mine Pumps)

**THE GOULDS MANUFACTURING CO.**, Seneca Falls, N. Y.  
See adv., page 550.

**DRAWING INSTRUMENTS & MATERIALS**

**EUCENE DIETZCEN & CO.**, Chicago, Ill. See adv., page 7.  
**W. & L. E. CURLEY**, Troy, N. Y. See adv., page 9.

**DRIVER'S LAMPS**

**DEMMLER BROTHERS**, Pittsburgh, Pa. See adv., page 548.

**DUMP CARS**

(See also Mine Cars)

**EXCELSIOR IRON WORKS**, Cleveland, Ohio. See adv.,  
page 47.

**MCMYLER MANUFACTURING CO.**, Cleveland, Ohio. See  
adv., page 13.

**MINERAL RIDGE MANUFACTURING CO.**, Mineral Ridge,  
Ohio. See adv., page 28.

**RUSSEL WHEEL & FOUNDRY CO.**, Detroit, Mich. See  
adv., page 533.

**DUMPING BUCKETS**

(See also Buckets.)

**THE BROWN HOISTING & CONVEYING MACHINE CO.**,  
Cleveland, Ohio. See adv., page 34.

**DUST PROTECTORS**

**CIBBS RESPIRATOR CO.**, Chicago, Ill. See adv., page 526.

**DUST RESPIRATOR**

**CIBBS RESPIRATOR CO.**, Chicago, Ill. See adv., page 526.

**DYNAMITE**

**ACME POWDER CO.**, Pittsburgh, Pa. See adv., page 548.  
**ÆTNA POWDER CO.**, Chicago, Ill. See adv., page 534.  
**ARTHUR KIRK & SON.**, Pittsburgh, Pa. See adv., page 548.

**DYNAMOS**

**EDDY ELECTRIC MANUFACTURING CO.**, Windsor, Conn.  
See adv., page 17.

**ELECTRICAL ENGINEERING & SUPPLY CO.**, St. Paul,  
Minn. See adv., page 539.

**GENERAL ELECTRIC CO.**, New York. See adv., page 538.

**JENNEY ELECTRIC MOTOR CO.**, Indianapolis, Ind. See  
adv., page 539.

**EJECTORS**

**AMERICAN INJECTOR CO.**, Detroit, Mich. See adv.,  
page 542.

**PENBERTHY INJECTOR CO.**, Detroit, Mich. See adv.,  
page 542.

**ELECTRIC BLASTING APPARATUS**

**ÆTNA POWDER CO.**, Chicago, Ill. See adv., page 534.

**METALLIC CAP MANUFACTURING CO.**, New York, N. Y.  
See adv., page 534.

**RAND DRILL CO.**, New York. See adv., page 20.

**ELECTRIC CABLES**

(See also Insulated Wire and Cables)

**EASTERN ELECTRIC CABLE CO.**, Boston, Mass. See adv.,  
page 539.

**ELECTRIC DRILLS.**

**GENERAL ELECTRIC CO.**, New York, N. Y. See adv., page  
538.

**ELECTRIC GENERATORS**

(See Dynamos)

**ELECTRIC HEATERS**

**RAILWAY EQUIPMENT CO.**, Chicago, Ill. See adv.,  
page 28.

**ELECTRIC HOISTS**

**EDDY ELECTRIC MANUFACTURING CO.**, Windsor, Conn.  
See adv., page 17.

**GENERAL ELECTRIC CO.**, New York, N. Y. See adv.,  
page 538.

**ELECTRIC LIGHT AND POWER  
MACHINERY**

**GENERAL ELECTRIC CO.**, Boston and New York. See adv.,  
page 538.

**JENNEY ELECTRIC MOTOR CO.**, Indianapolis, Ind. See  
adv., page 539.

**ELECTRIC LIGHT WIRE**

(See also Insulated Wire and Cables.)

- CEO. CUTTER**, Chicago, Ill. See adv., page 12.  
**EASTERN ELECTRIC CABLE CO.**, Boston, Mass. See adv., page 339.  
**SIMPLEX ELECTRICAL CO.**, Boston, Mass. See adv., page 339.

**ELECTRIC LOCOMOTIVES**

- GENERAL ELECTRIC CO.**, New York. See adv., page 538.

**ELECTRIC MINING MACHINERY**

- GENERAL ELECTRIC CO.**, New York. See adv., page 538.  
**JEFFREY MFC. CO.**, Columbus, Ohio. See adv., page 4.  
**FRANK N. SLADE**, Columbus, Ohio. See adv., page 399.

**ELECTRIC MOTORS**

- EDDY ELECTRIC MANUFACTURING CO.**, Windsor, Conn. See adv., page 17.  
**GENERAL ELECTRIC CO.**, New York. See adv., page 538.  
**JENNEY ELECTRIC MOTOR CO.**, Indianapolis, Ind. See adv., page 339.

**ELECTRIC POWER TRANSMISSION PLANTS**

- THE CREACHEAD ENGINEERING CO.**, Cincinnati, Ohio. See adv., page 546.  
**GENERAL ELECTRIC CO.**, New York. See adv., page 538.

**ELECTRICAL CONSTRUCTION**

- ELECTRICAL CONSTRUCTION CO.**, Chicago, Ill. See adv., page 339.

**ELECTRICAL ENGINEERS**

- ALFRED CUILLAUME**, Chicago, Ill. See adv., page 11.  
**ELECTRICAL CONSTRUCTION CO.**, Chicago, Ill. See adv., page 339.

**ELECTRICAL ENGINEERS AND CON-TRACTORS**

- THE CREACHEAD ENGINEERING CO.**, Cincinnati, Ohio. See adv., page 546.  
**ELECTRICAL CONSTRUCTION CO.**, Chicago, Ill. See adv., page 339.

**ELECTRICAL MACHINERY AND SUPPLIES**

- CHICAGO IRON WORKS**, Chicago, Ill. See adv., page 21.  
**THE CREACHEAD ENGINEERING CO.**, Cincinnati, Ohio. See adv., page 546.  
**GEORGE CUTTER**, Chicago, Ill. See adv., page 12.  
**EDDY ELECTRIC MANUFACTURING CO.**, Windsor, Conn. See adv., page 17.  
**ELECTRICAL ENGINEERING & SUPPLY CO.**, St. Paul, Minn. See adv., page 539.  
**GENERAL ELECTRIC CO.**, New York, N.Y. See adv., page 538.  
**JEFFREY MANUFACTURING CO.**, Columbus, Ohio. See adv., page 4.  
**JENNEY ELECTRIC MOTOR CO.**, Indianapolis, Ind. See adv., page 339.  
**OSTERLOH SUPPLY CO.**, Pittsburgh, Pa. See adv., page 541.  
**SIMPLEX ELECTRICAL CO.**, Boston, Mass. See adv., page 339.

**ELECTRICAL MINE PUMPS**

- THE GOULDS MANUFACTURING CO.**, Seneca Falls, N.Y. See adv., page 550.

**ELECTROLYTIC COPPER**

- CHICAGO COPPER REFINING CO.**, Chicago, Ill. See adv., page 11.

**ELEVATING MACHINERY**

(See also Hoisting Machinery.)

- C. O. BARTLETT**, Cleveland, Ohio. See adv., page 19.  
**CHICAGO IRON WORKS**, Chicago, Ill. See adv., page 21.  
**THE JEFFREY MANUFACTURING CO.**, Columbus, Ohio. See adv., page 4.  
**F. H. C. MEY**, Buffalo, N. Y. See adv., page 541.  
**RICE MACHINERY CO.**, Chicago, Ill. See adv., page 541.

**ELEVATORS**

- J. W. REEDY ELEVATOR MANUFACTURING CO.**, Chicago, Ill. See adv., page 525.

**EMERY WHEELS**

- MICHIGAN EMERY WHEEL CO.**, Detroit, Mich. See adv., page 399.

**ENGINEERING AND SURVEYING INSTRUMENTS**

(See also Mathematical Instruments.)

- EUGENE DIETZGEN & CO.**, Chicago, Ill. See adv., page 547.  
**W. & L. E. CURLEY**, Troy, N. Y. See adv., page 9.  
**QUEEN & CO.**, Philadelphia, Pa. See adv., page 540.  
**WILLIAM E. STIEREN**, Pittsburgh, Pa. See adv., page 548.

**ENGINES AND BOILERS**

(See also Boilers and Steam Engines)

- ATLAS ENGINE WORKS**, Indianapolis, Ind.  
**THOMAS CARLIN'S SONS**, Allegheny, Pa. See adv., page 13.  
**CHANDLER & TAYLOR CO.**, Indianapolis, Ind. See adv., page 542.  
**CHICAGO IRON WORKS**, Chicago, Ill. See adv., page 21.  
**THOMAS P. CONARD**, Philadelphia, Pa. See adv., page 535.  
**NORWALK IRON WORKS CO.**, South Norwalk, Conn. See adv., page 36.  
**OSTERLOH SUPPLY CO.**, Pittsburgh, Pa. See adv., page 541.  
**PALMER & REY**, San Francisco, Cal. See adv., page 7.  
**FRANK N. SLADE**, Columbus, Ohio. See adv., page 539.  
**UNION IRON WORKS**, San Francisco, Cal. See adv., page 6.  
**WALBURN-SWENSON CO.**, Chicago, Ill. See adv., page 537.

**EXHAUST FANS**

- GENERAL ELECTRIC CO.**, New York, N. Y. See adv., page 538.  
**GEORGE M. CROSS**, Chicago, Ill. See adv., page 34.

**FEED WATER HEATERS AND PURIFIERS**

- FIELD FEED WATER PURIFIER CO.**, Chicago, Ill. See adv., page 533.  
**HOPPE'S MANUFACTURING CO.**, Springfield, Ohio. See adv., page 533.  
**KROESCHELLS & BOURCEOIS**, Chicago, Ill. See adv., page 540.

**FEED WATER NEUTRALIZER**

- GEO. W. LORD**, Philadelphia, Pa. See adv., page 533.

**FIRE BRICK GRINDING MACHINERY**

- THOMAS CARLIN'S SONS**, Allegheny, Pa. See adv., page 13.

**FORCE PUMPS**

(See also Pumps)

- THE P. H. & F. M. ROOTS CO.**, Columbus, Ind. See adv., page 550.

**FORGINGS**

- JACKSON & WOODIN MANUFACTURING CO.**, Berwick, Pa. See adv., page 541.

**FREIGHT CARS**

- JACKSON & WOODIN MANUFACTURING CO.**, Berwick, Pa. See adv., page 541.

**FRICTION CLUTCHES**

- CHICAGO SHAFTING & PULLEY CO.**, Chicago, Ill. See adv., page 541.  
**RICE MACHINERY CO.**, Chicago, Ill. See adv., page 541.  
**WEBSTER, CAMP & LANE MACHINE CO.**, Akron, Ohio. See adv., page 22.

**FURNACE HOISTS**

(See also Hoisting Machinery)

- THE BROWN HOISTING & CONVEYING MACHINE CO.**, Cleveland, Ohio. See adv., page 34.

**FURNACES**

(Blasting and Smelting)

- CHICAGO IRON WORKS**, Chicago, Ill. See adv., page 21.  
**CATES IRON WORKS**, Chicago, Ill. See adv., page 3.  
**VULCAN IRON WORKS**, San Francisco, Cal. See adv., page 7.  
**WALBURN-SWENSON CO.**, Chicago, Ill. See adv., page 537.

**FUSE**

- CLIMAX FUSE CO.**, New York, N. Y. See adv., page 534.

**GAS COMPRESSORS**

- NORWALK IRON WORKS CO.**, South Norwalk, Conn. See adv., page 36.

**GAS AND GASOLINE APPLIANCES**

- NEW YORK DOMESTIC GAS MACHINE CO.**, New York. See adv., page 26.

**GAS MACHINES**

- NEW YORK DOMESTIC GAS MACHINE CO.**, New York. See adv., page 26.

**GAS PLANTS**

- NEW YORK DOMESTIC GAS MACHINE CO.**, New York. See adv., page 26.

**GAS AND VAPOR ENGINES**

- OTTO GAS ENGINE WORKS**, Philadelphia, Pa. See adv., page 526.  
**PALMER & REY**, San Francisco, Cal. See adv., page 7.  
**PRIESTMAN & CO.**, Philadelphia, Pa. See adv., page 539.  
**WEBSTER MANUFACTURING CO.**, Chicago, Ill. See adv., page 13.

**GASOLINE ENGINES**

- OTTO GAS ENGINE WORKS**, Philadelphia, Pa. See adv., page 526.  
**PALMER & REY**, San Francisco, Cal. See adv., page 7.  
**PRIESTMAN & CO.**, Philadelphia, Pa. See adv., page 539.

**GRAPHITE**

- DETROIT GRAPHITE MANUFACTURING CO.**, Detroit, Mich. See adv., page 546.

**GRAPHITE PAINTS**

- DETROIT GRAPHITE MANUFACTURING CO.**, Detroit, Mich. See adv., page 546.

**GRAPPLE BUCKETS**

- McMYLER MANUFACTURING CO.**, Cleveland, Ohio. See adv., page 13.

**GRAPPLES**

- JAMES H. LANCASTER**, New York City. See adv., page 544.

**GRAVEL EXCAVATORS**

- JOHN SOUTHER & CO.**, Boston, Mass. See adv., page 532.

**GREASE**

- McCLINTOCK & IRVINE**, Allegheny, Pa. See adv., page 531.  
**WADHAMS OIL & GREASE CO.**, Milwaukee, Wis. See adv., page 5.

**GRINDING AND POLISHING MACHINERY**

- MICHIGAN EMERY WHEEL CO.**, Detroit, Mich. See adv., page 9.

**HAIR FELT**

- FENLON & CO.**, Philadelphia, Pa. See adv., page 547.

**HANGERS**

- RICE MACHINERY CO.**, Chicago, Ill. See adv., page 541.

**HARD PAN EXCAVATORS**

- JOHN SOUTHER & CO.**, Boston, Mass. See adv., page 532.

**HARDWARE**

- KELLEY, MAUS & CO.**, Chicago, Ill. See adv., page 8.  
**S. D. KIMBARK**, Chicago, Ill. See adv., page 8.

**HAULAGE ENGINES**

- LITCHFIELD CAR & MACHINE CO.**, Litchfield, Ill. See adv., page 536.  
**McMYLER MANUFACTURING CO.**, Cleveland, Ohio. See adv., page 13.  
**WEBSTER, CAMP & LANE MACHINE CO.**, Akron, Ohio. See adv., page 42.

**HEATERS**

(See also Feed Water Heaters)

- HOPPES MANUFACTURING CO.**, Springfield, Ohio. See adv., page 53.

**HEAVY SHEET METAL WORKERS**

- HOPPES MANUFACTURING CO.**, Springfield, Ohio. See adv., page 53.

**HOISTING ENGINES**

- EDWARD P. ALLIS CO.**, Milwaukee, Wis. See adv., page 2.  
**CHICAGO IRON WORKS**, Chicago, Ill. See adv., page 21.  
**CONTRACTORS' PLANT MANUFACTURING CO.**, Buffalo, N. Y. See adv., page 526.  
**COPELAND & BACON**, New York and Chicago. See adv., page 33.  
**EXCELSIOR IRON WORKS**, Cleveland, Ohio. See adv., page 17.  
**PARKER, MELCHER & INCRAHAM**, Chicago, Ill. See adv., page 2.  
**PROX & BRINKMAN MANUFACTURING CO.**, Terre Haute, Ind. See adv., page 50.  
**J. W. REEDY ELEVATOR MANUFACTURING CO.**, Chicago, Ill. See adv., page 525.  
**UNION FOUNDRY & MACHINE WORKS**, Rockaway, N. J. See adv., page 545.  
**UNION IRON WORKS**, San Francisco, Cal. See adv., page 6.  
**VULCAN IRON WORKS**, San Francisco, Cal. See adv., page 7.

**HOISTING MACHINERY**

- EDWARD P. ALLIS CO.**, Milwaukee, Wis. See adv., page 2.  
**BOSTON & LOCKPORT BLOCK CO.**, Boston, Mass. See adv., page 17.  
**THE BROWN HOISTING & CONVEYING MACHINE CO.**, Cleveland, Ohio. See adv., page 34.  
**THOMAS CARLIN'S SONS**, Allegheny, Pa. See adv., page 13.  
**CHICAGO IRON WORKS**, Chicago, Ill. See adv., page 21.  
**THOS. P. CONARD**, Philadelphia, Pa. See adv., page 535.  
**CONTRACTORS' PLANT MANUFACTURING CO.**, Buffalo, N. Y. See adv., page 526.

**HOISTING MACHINERY (CONTINUED)**

- COPELAND & BACON**, Chicago and New York. See adv., page 535.
- J. HERBERTSON'S SONS**, Brownsville, Pa. See adv., page 542.
- THE KINC BRIDGE CO.**, Cleveland, Ohio. See adv., page 28.
- LEEDS MANUFACTURING CO.**, Chicago, Ill. See adv., page 545.
- LITCHFIELD CAR & MACHINE CO.**, Litchfield, Ill. See adv., page 536.
- McMYLER MANUFACTURING CO.**, Cleveland, Ohio. See adv., page 13.
- JUSTIN J. PIE & CO.**, Osceola Mills, Pa. See adv., page 536.
- J. W. REEDY ELEVATOR MANUFACTURING CO.**, Chicago, Ill. See adv., page 526.
- S. B. STINE**, Osceola Mills, Pa. See adv., page 17.
- UNION FOUNDRY & MACHINE WORKS**, Rockaway, N. J. See adv., page 545.
- VULCAN IRON WORKS**, San Francisco, Cal. See adv., page 7.
- WALBURN-SWENSON CO.**, Chicago, Ill. See adv., page 537.
- WEBSTER, CAMP & LANE MACHINE CO.**, Akron, Ohio. See adv., page 22.

**HOISTING ROPES**

- CEO. B. CARPENTER & CO.**, Chicago, Ill. See adv., page 534.
- RICE MACHINERY CO.**, Chicago, Ill. See adv., page 541.

**HORIZONTAL MINE PUMPS**

(See also Mine Pumps)

- THE COULDS MANUFACTURING CO.**, Seneca Falls, N. Y. See adv., page 550.

**HOSE—STEAM AND AIR**

- BOSTON BELTING CO.**, Boston, Mass. See adv., page 21.
- THE CUTTA PERCHA & RUBBER MANUFACTURING CO.**, Chicago, Ill. See adv., page 9.
- NEW JERSEY CAR SPRING & RUBBER CO.**, Jersey City, N. J. See adv., page 532.

**HOT WATER BOILERS**

- JUSTIN J. PIE & CO.**, Osceola Mills, Pa. See adv., page 536.
- S. B. STINE**, Osceola Mills, Pa. See adv., page 17.

**HYDRAULIC JACKS**

- JOSEPH F. McCOY CO.**, New York, N. Y. See adv., page 544.

**HYDRAULIC MACHINERY**

- ÆTNA FOUNDRY & MACHINE CO.**, Springfield, Ill. See adv., page 543.

**INCANDESCENT LAMPS**

- GEORGE CUTTER**, Chicago, Ill. See adv., page 12.
- ELECTRICAL ENGINEERING AND SUPPLY CO.**, St. Paul, Minn. See adv., page 539.
- GENERAL ELECTRIC CO.**, New York. See adv., page 538.

**INJECTORS**

- AMERICAN INJECTOR CO.**, Detroit, Mich. See adv., page 542.
- J. M. EVERHART**, Scranton, Pa. See adv., page 544.
- PENBERTHY INJECTOR CO.**, Detroit, Mich. See adv., page 542.

**INSULATED WIRE AND CABLES**

(See also Electric Light Wire)

- GEORGE CUTTER**, Chicago, Ill. See adv., page 12.
- EASTERN ELECTRIC CABLE CO.**, Boston, Mass. See adv., page 539.
- SIMPLEX ELECTRICAL CO.**, Boston, Mass. See adv., page 539.

**INVESTMENTS**

(See also Brokers)

- A. P. FENNERTY**, Denver, Colo. See adv., page 513.
- W. F. KENDRICK**, Denver, Colo. See adv., page 551.

**IRON AND STEEL BRIDGES**

- BERLIN IRON BRIDGE CO.**, East Berlin, Conn. Our illustrated catalogue sent free.
- BOSTON BRIDGE WORKS**, Boston, Mass. See adv., page 532.
- THE KINC BRIDGE CO.**, Cleveland, Ohio. See adv., page 28.

**IRON BUILDINGS**

- BERLIN IRON BRIDGE CO.**, East Berlin, Conn. Our illustrated catalogue sent free.
- BOSTON BRIDGE WORKS**, Boston, Mass. See adv., page 532.
- KINC BRIDGE CO.**, Cleveland, Ohio. See adv., page 28.

**IRON, STEEL AND HEAVY HARDWARE**

- KELLEY, MAUS & CO.**, Chicago, Ill. See adv., page 8.
- S. D. KIMBARK**, Chicago, Ill. See adv., page 8.

**IRRIGATING PLANTS**

- THE JAMES LEFFEL & CO.**, Springfield, Ohio. See adv., page 532.
- FRANCIS SMITH & CO.**, San Francisco, Cal. See adv., page 15.

## JIG MACHINES

WALBURN-SWENSON CO., Chicago, Ill. See adv., page 537.

## JOURNAL BOXES

RICE MACHINERY CO., Chicago, Ill. See adv., page 541.

## LACE LEATHER

(See also Belting)

JEWELL BELTING CO., Hartford, Conn. See adv., page 46

## LAMPS

(See Miners' Lamps)

## LEAD BULLION

CHICAGO & AURORA SMELTING & REFINING CO.,  
Chicago and Aurora, Ill. See adv., page 11.

SELBY SMELTING & LEAD CO., San Francisco, Cal. See  
adv., page 10.

## LEAD PIPE

SELBY SMELTING & LEAD CO., San Francisco, Cal.  
See adv., page 10.

## LINK BELT MACHINERY

C. O. BARTLETT, Cleveland, Ohio. See adv., page 14.

THE JEFFREY MANUFACTURING CO., Columbus, Ohio.  
See adv., page 4.

F. H. C. MEY, Buffalo, N. Y. See adv., page 541.

## LITHOGRAPHERS

WESTERN BANK NOTE CO., Chicago, Ill. See adv., page  
550.

## LOCOMOTIVE AND MACHINERY CASTINGS

THE LIMA LOCOMOTIVE & MACHINE CO., Lima, Ohio.  
See adv., page 20.

## LOCOMOTIVES

(See also Mine Locomotives)

THE LIMA LOCOMOTIVE & MACHINE CO., Lima, Ohio.  
See adv., page 20.

H. K. PORTER & CO., Pittsburgh, Pa. See adv., page 548

## LUBRICANTS

DETROIT GRAPHITE MANUFACTURING CO., Detroit,  
Mich. See adv., page 546.

DETROIT LUBRICATOR CO., Detroit, Mich. See adv.,  
page 546.

McCLINTOCK & IRVINE, Allegheny, Pa. See adv., page 532.

WADHAMS OIL & GREASE CO., Milwaukee, Wis. See  
adv., page 5.

## MAGNESIA PIPE COVERING

ROBERT A. KEASBEY, New York, N. Y. See adv., page 547.

## MATHEMATICAL INSTRUMENTS

EUGENE DIETZGEN & CO., Chicago, Ill. See adv., page 7.

W. & L. E. CURLEY, Troy, N. Y. See adv., page 9.

WILLIAM E. STIEREN, Pittsburgh, Pa. See adv., page 548.

E. H. SARCENT & CO., Chicago, Ill. See adv., page 4.

## MECHANICAL ENGINEERS

CONNOR & CRANT, San Francisco, Cal. See adv., page 9.

WATERS BROS., Denver, Colo. See adv., page 9.

## METAL ROOFING

BOSTON BRIDGE WORKS, Boston, Mass. See adv., page 532.

GEORGE M. CROSS, Chicago, Ill. See adv., page 34.

KANSAS CITY METAL ROOFING & CORRUGATING CO.,  
Kansas City, Mo. See adv., page 7.

W. W. MONTAGUE & CO., San Francisco, Cal. See adv.,  
page 555.

## METALLIC PAINT

McCLINTOCK & IRVINE, Allegheny, Pa. See adv., page 532.

## METALLURGISTS AND METALLURGICAL WORKS AND PROCESSES

RICKETTS & BANKS, New York, N. Y. See adv., page 11.

ST. LOUIS SAMPLING & TESTING WORKS, St. Louis,  
Mo. See adv., page 546.

## MILLING AND SMELTING MACHINERY

(See also Mining and Milling Machinery)

SALT LAKE CITY FOUNDRY & MANUFACTURING CO.,  
Salt Lake City, Utah. See adv., page 7.

## MILL MACHINERY

(See Mining and Milling Machinery)

**MILLWRIGHTS**

**CONNOR & CRANT**, San Francisco, Cal. See adv., page 9.

**MINE BROKERS**

**ARKELL, MAC MILLAN & STEWART**, Aspen, Colo. See adv., page 14.

**J. CHAUVIN**, Butte, Mont. See adv., page 526.

**A. P. FENNERTY**, Denver, Colo. See adv., page 513.

**HAMILTON, LOWE & CO.**, Chicago, Ill. See adv., page 14.

**W. F. KENDRICK**, Denver, Colo. See adv., page 551.

**KISSEL, OTIS & CONNOR**, Colorado Springs, Colo. See adv., page 14.

**GEORGE R. WOOD**, New York City. See adv., page 546.

**MINE CARS**

**CHICAGO IRON WORKS**, Chicago, Ill. See adv., page 21.

**COPELANO & BACON**, Chicago and New York. See adv., page 535.

**THE LIMA LOCOMOTIVE & MACHINE CO.**, Lima, Ohio. See adv., page 29.

**MINERAL RIDGE MANUFACTURING CO.**, Mineral Ridge, Ohio. See adv., page 28.

**PHILLIPS MINE SUPPLY CO.**, Pittsburgh, Pa. See adv., page 536.

**JUSTIN J. PIE & CO.**, Oseola Mills, Pa. See adv., page 536.

**PROX & BRINKMAN MANUFACTURING CO.**, Terre Haute, Ind. See adv., page 536.

**RUSSEL WHEEL & FOUNDRY CO.**, Detroit, Mich. See adv., page 536.

**S. B. STINE**, Oseola Mills, Pa. See adv., page 17.

**WALBURN-SWENSON CO.**, Chicago, Ill. See adv., page 537.

**MINE CAR WHEELS**

(See also Car Wheels)

**A. WHITNEY & SONS**, Philadelphia, Pa. See adv., page 536.

**MINE DEALERS**

(See also Brokers)

**ARKELL, MAC MILLAN & STEWART**. See adv., page 14.

**JAMES A. BOCCS**, Duluth, Minn. See adv., page 14.

**LEE BURT**, Detroit, Mich. See adv., page 546.

**J. CHAUVIN**, Butte, Mont. See adv., page 526.

**A. P. FENNERTY**, Denver, Colo. See adv., page 513.

**HAMILTON, LOWE & CO.**, Chicago, Ill. See adv., page 14.

**W. F. KENDRICK**, Denver, Colo. See adv., page 551.

**KISSEL, OTIS & CONNOR**, Colorado Springs, Colo. See adv., page 14.

**WATERS BROS.**, Denver, Colo. See adv., page 9.

**GEORGE R. WOOD**, New York, N. Y. See adv., page 546.

**MINE LOCOMOTIVES**

**GENERAL ELECTRIC CO.**, New York. See adv., page 538.

**JEFFREY MFG. CO.**, Columbus, Ohio. See adv., page 4.

**THE LIMA LOCOMOTIVE & MACHINE CO.**, Lima, Ohio. See adv., page 29.

**H. K. PORTER & CO.**, Pittsburgh, Pa. See adv., page 548.

**MINE PIPE**

**THE MICHIGAN PIPE CO.**, Bay City, Mich. See adv., page 15.

**A. WYCKOFF & SON**, Elmira, N. Y. See adv., page 15.

**MINE PUMPS**

**EDWARD P. ALLIS CO.**, Milwaukee, Wis. See adv., page 2.

**ETNA FOUNDRY & MACHINE CO.**, Springfield, Ill. See adv., page 543.

**DEANE STEAM PUMP CO.**, Holyoke, Mass. See adv., page 543.

**EPPING, CARPENTER & CO., LTD.**, Pittsburg, Pa. See adv., page 548.

**THE GORDON STEAM PUMP CO.**, Hamilton, Ohio, and Chicago, Ill. See adv., page 543.

**THE COULDS MANUFACTURING CO.**, Seneca Falls, N. Y. See adv., page 559.

**UNION FOUNDRY & MACHINE WORKS**, Rockaway, N. J. See adv., page 545.

**WHEELER & TAPPAN CO.**, Chicago, Ill. See adv., page 543.

**MINE SUPPLIES**

**EDWARD P. ALLIS CO.**, Milwaukee, Wis. See adv., page 2.

**THE BROWN HOISTING & CONVEYING MACHINE CO.**, Cleveland, Ohio. See adv., page 34.

**THOMAS CARLIN'S SONS**, Allegheny, Pa. See adv., page 13.

**CEO. B. CARPENTER & CO.**, Chicago, Ill. See adv., page 534.

**CHICAGO IRON WORKS**, Chicago, Ill. See adv., page 21.

**J. M. EVERHART**, Scranton, Pa. See adv., page 544.

**GATES IRON WORKS**, Chicago, Ill. See adv., page 3.

**THE JEFFREY MANUFACTURING CO.**, Columbus, Ohio. See adv., page 4.

**MINERAL RIDGE MANUFACTURING CO.**, Mineral Ridge, Ohio. See adv., page 28.

**OSTERLOH SUPPLY CO.**, Pittsburgh, Pa. See adv., page 541.

**PHILLIPS MINE SUPPLY CO.**, Pittsburgh, Pa. See adv., page 536.

**H. K. PORTER & CO.**, Pittsburgh, Pa. See adv., page 548.

**QUEEN CITY SUPPLY CO.**, Cincinnati, Ohio. See adv., page 549.

**RICE MACHINERY CO.**, Chicago, Ill. See adv., page 541.

**SOMERS, FITLER & CLARKE**, Pittsburgh, Pa. See adv., page 548.

**UNION IRON WORKS**, San Francisco, Cal. See adv., page 6.

**WALBURN-SWENSON CO.**, Chicago, Ill. See adv., page 537.

**MINERAL LANDS**

(See also Mine Brokers)

**JAMES A. BOCCS**, Duluth, Minn. See adv., page 14.

**LEE BURT**, Detroit, Mich. See adv., page 546.



**MINERAL WOOL**

- FENLON & CO.**, Philadelphia, Pa. See adv., page 547.  
**UNITED STATES MINERAL WOOL CO.**, New York, N. Y. See adv., page 547.

**MINERS' LAMPS**

(See also Safety Lamps)

- DEMMLER BROS.**, Pittsburgh, Pa. See adv., page 548.  
**J. M. EVERHART**, Scranton, Pa. See adv., page 544.  
**JOSEPH F. McCOY CO.**, New York, N. Y. See adv., page 544.  
**WM. E. STIEREN**, Pittsburgh, Pa. See adv., page 548.

**MINERS' SUPPLIES**

- MINERS' SUPPLY CO.**, St. Clair, Pa. See adv., page 534.  
**THOS. CARLIN'S SONS**, Allegheny, Pa. See adv., page 43.

**MINING AND QUARRYING MACHINERY**

- BOSTON & LOCKPORT BLOCK CO.**, Boston, Mass. See adv., page 17.  
**EXCELSIOR IRON WORKS**, Cleveland, Ohio. See adv., page 17.

**MINING AND MILLING MACHINERY**

- AMERICAN MANUFACTURING, MINING & MILLING CO.**, Cleveland, Ohio. See adv., page 12.  
**EDWARD P. ALLIS CO.**, Milwaukee, Wis. See adv., page 2.  
**C. W. BADCLEY & CO.**, Denver, Colo. See adv., page 549.  
**C. O. BARTLETT**, Cleveland, Ohio. See adv., page 13.  
**THE BECKETT FOUNDRY & MACHINE CO.**, Arlington, N. J. See adv., page 545.  
**THE BROWN HOISTING & CONVEYING MACHINE CO.**, Cleveland, Ohio. See adv., page 44.  
**CARTER MAGNETIC ORE SEPARATOR CO.**, Brooklyn, N. Y. See adv., page 545.  
**CHICAGO IRON WORKS**, Chicago, Ill. See adv., page 21.  
**THOS. P. CONARD**, Philadelphia, Pa. See adv., page 545.  
**COPELAND & BACON**, Chicago and New York. See adv., page 535.  
**CATES IRON WORKS**, Chicago, Ill. See adv., page 3.  
**GEORGE M. CROSS**, Chicago, Ill. See adv., page 44.  
**INCERSOLL-SERCEANT DRILL CO.**, New York, N. Y. See adv., page 535.  
**LITCHFIELD CAR & MACHINE CO.**, Litchfield, Ill. See adv., page 536.  
**NORWALK IRON WORKS CO.**, South Norwalk, Conn. See adv., page 46.  
**OSTERLOH SUPPLY CO.**, Pittsburgh, Pa. See adv., page 541.  
**PARKER, MELCHER & INCRAHAM**, Chicago, Ill. See adv., page 22.  
**JUSTIN J. PIE & CO.**, Osceola Mills, Pa. See adv., page 536.  
**RAND DRILL CO.**, New York and Chicago. See adv., page 20.  
**SALT LAKE CITY FOUNDRY & MANUFACTURING CO.**, Salt Lake City, Utah. See adv., page 7.

- SOMERS, FITLER & CLARKE**, Pittsburgh, Pa. See adv., page 548.  
**S. B. STINE**, Osceola Mills, Pa. See adv., page 17.  
**SULLIVAN BATTERY CO.**, Chicago, Ill. See adv., page 535.  
**UNION IRON WORKS**, San Francisco, Cal. See adv., page 6.  
**WALBURN-SWENSON CO.**, Chicago, Ill. See adv., page 537.  
**WEBSTER, CAMP & LANE MACHINE CO.**, Akron, Ohio. See adv., page 22.  
**WEBSTER MANUFACTURING CO.**, Chicago, Ill. See adv., page 13.  
**GEORGE D. WHITCOMB**, Chicago, Ill. See adv., page 20.

**MINING ENGINEERS**

- ALFRED CUILLAUME**, Chicago, Ill. See adv., page 11.  
**ST. LOUIS SAMPLING & TESTING WORKS**, St. Louis, Mo. See adv., page 546.  
**WATERS BROS.**, Denver, Colo. See adv., page 9.

**MINING PUBLICATIONS**

- ENGINEERING & MINING JOURNAL**. See adv., page 16.  
**SCIENTIFIC PUBLISHING CO.**, New York City. See adv., page 16.

**OFFICE SUPPLIES**

- CILBERT & BENNETT MANUFACTURING CO.**, New York and Chicago. See adv., page 527.  
**THAYER & JACKSON STATIONERY CO.**, Chicago, Ill. See adv., page 44.  
**WESTERN BANK NOTE CO.**, Chicago, Ill. See adv., page 540.  
**WYCKOFF, SEAMANS & BENEDICT**, Chicago, Ill. See adv., page 8.

**OILS**

- OSTERLOH SUPPLY CO.**, Pittsburgh, Pa. See adv., page 541.  
**WADHAMS OIL & CREASE CO.**, Milwaukee, Wis. See adv., page 7.

**ORE BROKERS**

- C. M. CARRISON**, Pittsburgh, Pa. See adv., page 10.

**ORE BUCKETS**

(See also Buckets)

- THE EXCELSIOR IRON WORKS CO.**, Cleveland, O. See adv., page 17.  
**WEBSTER MANUFACTURING CO.**, Chicago, Ill. See adv., page 13.

**ORE BUYERS**

- W. J. CHAMBERLAIN & CO.**, Denver, Colo. See adv., page 10.  
**ST. LOUIS SMELTING & REFINING CO.**, St. Louis, Mo. See adv., page 10.

**ORE CARS**

(See also Mine Cars)

- THE LIMA LOCOMOTIVE & MACHINE CO.**, Lima, Ohio. See adv., page 29.  
**RUSSEL WHEEL & FOUNDRY CO.**, Detroit, Mich. See adv., page 536.

**ORE SEPARATORS**

- BECKETT FOUNDRY & MACHINE WORKS**, Arlington, N. J. See adv., page 545.  
**CARTER MAGNETIC ORE SEPARATOR CO.**, Brooklyn, N. Y. See adv., page 545.  
**CHICAGO IRON WORKS**, Chicago, Ill. See adv., page 21.

**ORE-TESTING WORKS**

- W. J. CHAMBERLAIN & CO.**, Denver, Colo. See adv., page 10.  
**RICKETTS & BANKS**, New York City. See adv., page 11.

**PACKINGS**

(Fibrous and Metallic. See also Rubber Packing)

- THE COODSELL PACKING CO.**, cor. Canal and Washington sts., Chicago, Ill.  
**THE CUTTA PERCHA & RUBBER MANUFACTURING CO.**, Chicago, Ill. See adv., page 9.  
**RANDOLPH BRANDT**, New York City. See adv., page 547.

**PAINTS**

- McCLINTOCK & IRVINE**, Allegheny, Pa. See adv., page 532.

**PATENT SOLICITORS**

- DAYTON, POOLE & BROWN**, Chicago, Ill. See adv., page 12.

**PERFORATED METALS**

- ROBERT AITCHISON PERFORATED METAL CO.**, Chicago, Ill. See adv., page 9.  
**CHICAGO IRON WORKS**, Chicago, Ill. See adv., page 21.  
**CLINTON WIRE CLOTH CO.**, Clinton, Mass. See adv., page 8.  
**MUNDT & SONS**, New York City. See adv., page 527.  
**UNION IRON WORKS**, San Francisco, Cal. See adv., page 6.  
**WALBURN-SWENSON CO.**, Chicago, Ill. See adv., page 537.

**PICKS AND SHOVELS**

- KELLEY, MAUS & CO.**, Chicago, Ill. See adv., page 8.  
**S. D. KIMBARK**, Chicago, Ill. See adv., page 8.

**PIG LEAD**

- C. M. CARRISON**, Pittsburgh, Pa. See adv., page 10.

**PIG TIN**

- C. M. CARRISON**, Pittsburgh, Pa. See adv., page 10.

**PIPE AND BOILER COVERINGS**

(See also Wood Steam-Pipe Covering)

- FENLON & CO.**, Philadelphia, Pa. See adv., page 547.  
**H. W. JOHNS MANUFACTURING CO.**, Chicago, Ill. See adv., page 547.  
**ROBERT A. KEASBEY**, New York, N. Y. See adv., page 547.  
**UNITED STATES MINERAL WOOL CO.**, New York, N. Y. See adv., page 547.

**PIPES—WOOD**

- MICHIGAN PIPE CO.**, Bay City, Mich. See adv., page 15.  
**A. WYCKOFF & SON**, Elmira, N. Y. See adv., page 15.

**PIT CARS**

(See also Cars)

- J. HERBERTSON'S SONS**, Brownsville, Pa. See adv., page 542.

**PORTABLE PUMPS**

(See also Pumps)

- THE COULDS MANUFACTURING CO.**, Semeer Falls, N. Y. See adv., page 550.

**POWDER**

- ACME POWDER CO.**, Pittsburgh, Pa. See adv., page 548.  
**ÆTNA POWDER CO.**, Chicago, Ill. See adv., page 534.  
**ARTHUR KIRK & SON**, Pittsburgh, Pa. See adv., page 548.

**POWER TRANSMISSION.**

- CHICAGO SHAFTING & PULLEY CO.**, Chicago, Ill. See adv., page 541.  
**GENERAL ELECTRIC CO.**, New York City. See adv., page 538.  
**JENNEY ELECTRIC MOTOR CO.**, Indianapolis, Ind. See adv., page 539.  
**RICE MACHINERY CO.**, Chicago, Ill. See adv., page 541.  
**WEBSTER MANUFACTURING CO.**, Chicago, Ill. See adv., page 13.

**PRINTING**

- THAYER & JACKSON STATIONERY CO.**, Chicago, Ill. See adv., page 34.

**PROSPECTING DRILLS.**

- PENNSYLVANIA DIAMOND DRILL & MANUFACTURING CO.**, Birdsboro, Pa. See adv., page 545.  
**SULLIVAN MACHINERY CO.**, Chicago, Ill. See adv., page 535.  
**WALBURN-SWENSON CO.**, Chicago, Ill. See adv., page 537.

**PULLEYS.**

(See also Shafting and Pulleys.)

- CHICAGO IRON WORKS**, Chicago, Ill. See adv., page 21.  
**RICE MACHINERY CO.**, Chicago, Ill. See adv., page 541.

**PULVERIZERS.**

- EDWARD P. ALLIS CO.**, Milwaukee, Wis. See adv., page 2.  
**AMERICAN MANUFACTURING, MINING & MILLING CO.**, Cleveland, Ohio. See adv., page 12.  
**BRADLEY FERTILIZER CO.**, Boston, Mass. See adv., page 12.  
**CHICAGO IRON WORKS**, Chicago, Ill. See adv., page 21.  
**CATES IRON WORKS**, Chicago, Ill. See adv., page 3.  
**RAYMOND BRDS. IMPACT PULVERIZER CO.**, Chicago, Ill. See adv., page 31.  
**STURTEVANT MILL CO.**, Boston, Mass. See adv., page 525.

**PUMP GOVERNORS**

- WHEELER & TAPPAN CO.**, Chicago, Ill. See adv., page 543.

**PUMPS**

(See also Steam Pumps.)

- EDWARD P. ALLIS CO.**, Milwaukee, Wis. See adv., page 2.  
**ÆTNA FOUNDRY & MACHINE CO.**, Springfield, Ill. See adv., page 543.  
**CHICAGO IRON WORKS**, Chicago, Ill. See adv., page 21.  
**DEANE STEAM PUMP CO.**, Holyoke, Mass. See adv., page 543.  
**EPPING, CARPENTER & CO., LTD.**, Pittsburg, Pa. See adv., page 548.  
**GENERAL ELECTRIC CO.**, New York City. See adv., page 548.  
**THE CORDON STEAM PUMP CO.**, Hamilton, Ohio, and Chicago, Ill. See adv., page 543.  
**THE COULDS MANUFACTURING CO.**, Seneca Falls, N. Y. See adv., page 550.  
**NORWALK IRON WORKS CO.**, South Norwalk, Conn. See adv., page 36.  
**OSTERLOH SUPPLY CO.**, Pittsburg, Pa. See adv., page 541.  
**THE P. H. & F. M. ROOTS CO.**, Comersville, Ind. See adv., page 550.  
**UNION IRON WORKS**, San Francisco, Cal. See adv., page 6.  
**VULCAN IRON WORKS**, San Francisco, Cal. See adv., page 7.  
**WEBSTER, CAMP & LANE MACHINE CO.**, Akron, Ohio. See adv., page 22.  
**WHEELER & TAPPAN CO.**, Chicago, Ill. See adv., page 543.

**QUARRYING MACHINERY**

- EDWARD P. ALLIS CO.**, Milwaukee, Wis. See adv., page 2.  
**THOMAS CARLIN'S SONS**, Allegheny, Pa. See adv., page 13.  
**COPELAND & BACON**, Chicago and New York. See adv., page 545.  
**CATES IRON WORKS**, Chicago, Ill. See adv., page 3.  
**INCERSOLL-SERCEANT DRILL CO.**, New York, N. Y. See adv., page 15.  
**ARTHUR KIRK & SON.**, Pittsburg, Pa. See adv., page 548.

- LEEDS MANUFACTURING CO.**, Chicago, Ill. See adv., page 545.  
**LITCHFIELD CAR & MACHINE CO.**, Litchfield, Ill. See adv., page 546.  
**NORWALK IRON WORKS CO.**, South Norwalk, Conn. See adv., page 36.  
**PARKER, MELCHER & INCRAHAM**, Chicago, Ill. See adv., page 22.  
**RAND DRILL CO.**, New York and Chicago. See adv., page 20.  
**SULLIVAN MACHINERY CO.**, Chicago, Ill. See adv., page 535.  
**WALBURN-SWENSON CO.**, Chicago, Ill. See adv., page 537.  
**WEBSTER, CAMP & LANE MACHINE CO.**, Akron, Ohio. See adv., page 22.

**QUARRY SUPPLIES**

(See also Quarrying Machinery.)

- MINERS' SUPPLY CO.**, St. Clair, Pa. See adv., page 534.  
**QUEEN CITY SUPPLY CO.**, Cincinnati, Ohio. See adv., page 549.

**RAILS**

- S. D. KIMBARK**, Chicago, Ill. See adv., page 8.

**RAILWAY SUPPLIES AND EQUIPMENT**

- THOMAS CARLIN'S SONS**, Allegheny, Pa. See adv., page 13.  
**JOSEPH F. McCOY CO.**, New York, N. Y. See adv., page 541.  
**OSTERLOH SUPPLY CO.**, Pittsburg, Pa. See adv., page 541.  
**RAILWAY EQUIPMENT CO.**, Chicago, Ill. See adv., page 28.  
**GEORGE R. WOOD**, New York City. See adv., page 546.

**REDUCTION WORKS**

- ST. LOUIS SMELTING & REFINING CO.**, St. Louis, Mo. See adv., page 10.  
**WALBURN-SWENSON CO.**, Chicago, Ill. See adv., page 537.

**ROCK CRUSHERS.**

(See Crushers.)

**ROCK DRILLS**

- CHICAGO IRON WORKS**, Chicago, Ill. See adv., page 21.  
**INCERSOLL-SERCEANT DRILL CO.**, New York, N. Y. See adv., page 15.  
**PARKER, MELCHER & INCRAHAM**, Chicago, Ill. See adv., page 22.  
**PENNSYLVANIA DIAMOND DRILL & MANUFACTURING CO.**, Birdsboro, Pa. See adv., page 545.  
**RAND DRILL CO.**, New York and Chicago. See adv., page 20.  
**SULLIVAN MACHINERY CO.**, Chicago, Ill. See adv., page 535.

**ROCK EMERY MILLSTONES**

- STURTEVANT MILL CO.**, Boston, Mass. See adv., page 525.

**ROLL SHELLS**

- CHROME STEEL WORKS**, Brooklyn, N. Y. See adv., page 541.

## ROOFS

- BERLIN IRON BRIDGE CO.**, East Berlin, Conn. Our illustrated catalogue sent free.  
**CEO. M. CROSS**, Chicago, Ill. See adv., page 34.

## ROPE TRAMWAYS

(See also Cable Tramways)

- C. W. BADGLEY & CO.**, Denver, Colo. See adv., page 549.

## ROPE TRANSMISSION

(Hodge System. See also Power Transmission)

- RICE MACHINERY CO.**, Chicago, Ill. See adv., page 541.

## RUBBER GOODS

- BOSTON BELTING CO.**, Boston, Mass. See adv., page 21.  
**THE CUTTA PERCHA & RUBBER MANUFACTURING CO.**, Chicago, Ill. See adv., page 9.  
**NEW JERSEY CAR SPRING & RUBBER CO.**, Jersey City, N. J. See adv., page 532.

## RUBBER HOSE

- THE CUTTA PERCHA & RUBBER MANUFACTURING CO.**, Chicago, Ill. See adv., page 9.  
**NEW JERSEY CAR SPRING & RUBBER CO.**, Jersey City, N. J. See adv., page 532.

## RUBBER PACKING

- BOSTON BELTING CO.**, Boston, Mass. See adv., page 21.

## SAFETY LAMPS

- DEMMLER BROS.**, Pittsburgh, Pa. See adv., page 548.  
**J. M. EVERHART**, Scranton, Pa. See adv., page 544.  
**JOSEPH F. McCOY CO.**, New York, N. Y. See adv., page 544.  
**WILLIAM E. STIEREN**, Pittsburgh, Pa. See adv., page 548.

## SAFETY SQUIBS

- MINERS' SUPPLY CO.**, St. Clair, Pa. See adv., page 534.

## SAMPLING WORKS

- W. J. CHAMBERLAIN & CO.**, Denver, Colo. See adv., page 10.  
**RICKETTS & BANKS**, New York City. See adv., page 11.  
**ST. LOUIS SAMPLING & TESTING WORKS**, St. Louis, Mo. See adv., page 516.  
**WALBURN-SWENSON CO.**, Chicago, Ill. See adv., page 537.

## SCIENTIFIC PUBLICATIONS

- W. & L. E. CURLEY**, Troy, N. Y. See adv., page 9.  
**E. H. SARCENT & CO.**, Chicago, Ill. See adv., page 4.  
**SCIENTIFIC PUBLISHING CO.**, New York City. See adv., page 16.

## SCREEN PLATES

- CHICAGO IRON WORKS**, Chicago, Ill. See adv., page 21.  
**CLINTON WIRE CLOTH CO.**, Clinton, Mass. See adv., page 8.

## SCREENS

- ROBERT AITCHISON PERFORATED METAL CO.**, Chicago, Ill. See adv., page 9.  
**CHICAGO IRON WORKS**, Chicago, Ill. See adv., page 21.  
**CLINTON WIRE CLOTH CO.**, Clinton, Mass. See adv., page 8.  
**EASTWOOD WIRE MANUFACTURING CO.**, Belleville, N. J. See adv., page 526.  
**GILBERT & BENNETT MANUFACTURING CO.**, New York and Chicago. See adv., page 527.  
**HOWARD & MORSE**, New York City. See adv., page 527.  
**MUNDT & SONS**, New York City. See adv., page 527.  
**PHILLIPS MINE SUPPLY CO.**, Pittsburgh, Pa. See adv., page 536.  
**PROX & BRINKMAN MANUFACTURING CO.**, Terre Haute, Ind. See adv., page 536.  
**THE PHOENIX WIRE WORKS**, Detroit, Mich. See adv., page 9.  
**UNION FOUNDRY & MACHINE WORKS**, Rockaway, N. J. See adv., page 545.  
**WALBURN-SWENSON CO.**, Chicago, Ill. See adv., page 537.

## SECOND-HAND MINING MACHINERY

- THOS. P. CONARD**, Philadelphia, Pa. See adv., page 533.

## SHAFT PUMPS

(See also Pumps)

- THE COULDS MANUFACTURING CO.**, Seneca Falls, N. Y. See adv., page 530.

## SHAFTING AND PULLEYS

- CHICAGO IRON WORKS**, Chicago, Ill. See adv., page 21.  
**CHICAGO SHAFTING & PULLEY CO.**, Chicago, Ill. See adv., page 541.  
**DAYTON GLOBE IRON WORKS CO.**, Dayton, Ohio. See adv., page 14.  
**RICE MACHINERY CO.**, Chicago, Ill. See adv., page 541.  
**WALBURN-SWENSON CO.**, Chicago, Ill. See adv., page 537.

## SHEET-IRON AND STEEL PIPE

- W. W. MONTAGUE & CO.**, San Francisco, Cal. See adv., page 527.  
**FRANCIS SMITH & CO.**, San Francisco, Cal. See adv., page 15.

## SHEET-IRON WORKS

- SCIOTO BOILER WORKS**, Columbus, Ohio. See adv., page 540.

**SHEET LEAD**

**SELBY SMELTING & LEAD CO.**, San Francisco, Cal. See adv., page 10.

**SHOES AND DIES**

**CHICAGO IRON WORKS**, Chicago, Ill. See adv., page 21.  
**CHROME STEEL WORKS**, Brooklyn, N. Y. See adv., page 544.  
**A. WHITNEY & SONS**, Philadelphia, Pa. See adv., page 536.

**SINKING PUMPS**

(See also Pumps)

**THE COULDS MANUFACTURING CO.**, Seneca Falls, N. Y. See adv., page 550.

**SLACK REMOVERS**

**THE P. H. & F. M. ROOTS CO.**, Connersville, Ind. See adv., page 550.

**SMELTERS AND REFINERS**

**CHICAGO & AURORA SMELTING & REFINING CO.**, Chicago and Aurora, Ill. See adv., page 11.  
**CHICAGO COPPER REFINING CO.**, Chicago, Ill. See adv., page 11.  
**NATIONAL SMELTING & REFINING CO.**, Chicago, Ill. See adv., page 546.  
**ST. LOUIS SMELTING & REFINING CO.**, St. Louis, Mo. See adv., page 10.  
**SELBY SMELTING & LEAD CO.**, San Francisco, Cal. See adv., page 10.

**SPELTER AND ANTIMONY**

**C. M. GARRISON**, Pittsburgh, Pa. See adv., page 10.

**STAMP MILLS**

**EDWARD P. ALLIS CO.**, Milwaukee, Wis. See adv., page 2.  
**THE BECKETT FOUNDRY & MACHINE CO.**, Arlington, N. J. See adv., page 545.  
**CHICAGO IRON WORKS**, Chicago, Ill. See adv., page 21.  
**CATES IRON WORKS**, Chicago, Ill. See adv., page 3.  
**UNION IRON WORKS**, San Francisco, Cal. See adv., page 6.  
**VULCAN IRON WORKS**, San Francisco, Cal. See adv., page 7.  
**WALBURN-SWENSON CO.**, Chicago, Ill. See adv., page 57.

**STATIONERY**

**THAYER & JACKSON STATIONERY CO.**, Chicago, Ill. See adv., page 34.

**STEAM AND HOT WATER PLANTS**

**NEW YORK DOMESTIC GAS MACHINE CO.**, New York, N. Y. See adv., page 29.

**STEAM ENGINES**

**EDWARD P. ALLIS CO.**, Milwaukee, Wis. See adv., page 2.  
**THE BECKETT FOUNDRY AND MACHINE CO.**, Arlington, N. J. See adv., page 545.  
**CHANDLER & TAYLOR CO.**, Indianapolis, Ind. See adv., page 542.  
**CHICAGO IRON WORKS**, Chicago, Ill. See adv., page 21.  
**J. HERBERTSON'S SONS**, Brownsville, Pa. See adv., page 542.  
**NORWALK IRON WORKS CO.**, South Norwalk, Conn. See adv., page 36.  
**OSTERLOH SUPPLY CO.**, Pittsburgh, Pa. See adv., page 541.  
**PRIESTMAN & CO.**, Philadelphia, Pa. See adv., page 539.  
**SCIOTO BOILER WORKS**, Columbus, Ohio. See adv., page 549.  
**WEBSTER, CAMP & LANE MACHINE CO.**, Akron, Ohio. See adv., page 22.

**STEAM PACKINGS**

(See Packings)

**STEAM PUMPS**

(See also Pumps)

**EDWARD P. ALLIS CO.**, Milwaukee, Wis. See adv., page 2.  
**ÆTNA FOUNDRY & MACHINE CO.**, Springfield, Ill. See adv., page 543.  
**CHICAGO IRON WORKS**, Chicago, Ill. See adv., page 21.  
**DEANE STEAM PUMP CO.**, Holyoke, Mass. See adv., page 545.  
**EPPING, CARPENTER & CO., LTD.**, Pittsburgh, Pa. See adv., page 548.  
**THE CORDON STEAM PUMP CO.**, Hamilton, Ohio, and Chicago, Ill. See adv., page 543.  
**NORWALK IRON WORKS CO.**, South Norwalk, Conn. See adv., page 36.  
**PARKER, MELCHER & INGRAHAM**, Chicago, Ill. See adv., page 23.  
**SCIOTO BOILER WORKS**, Columbus, Ohio. See adv., page 549.  
**VULCAN IRON WORKS**, San Francisco, Cal. See adv., page 7.  
**WALBURN-SWENSON CO.**, Chicago, Ill. See adv., page 57.  
**WEBSTER, CAMP & LANE MACHINE CO.**, Akron, Ohio. See adv., page 22.  
**WHEELER & TAPPAN CO.**, Chicago, Ill. See adv., page 74.

**STEAM SHOVELS**

**JOHN SOUTHER & CO.**, Boston, Mass. See adv., page 32.

**STEEL AND IRON SHAFTING**

(See also Shafting and Pulleys)

**RICE MACHINERY CO.**, Chicago, Ill. See adv., page 541.

**STEEL RAILS**

**KELLEY, MAUS & CO.**, Chicago, Ill. See adv., page 3.

## STOCK CERTIFICATES

**WESTERN BANK NOTE CO.**, Chicago, Ill. See adv., page 550.

## STONE BARROWS

(See also Wheelbarrows)

**THE KILBOURNE & JACOBS MANUFACTURING CO.**, Columbus, Ohio. See adv., page 544.

## STONE CHANNELERS

(See also Quarrying Machinery)

**LEEDS MANUFACTURING CO.**, Chicago, Ill. See adv., page 545.

**PARKER, MELCHER & INCRAHAM**, Chicago, Ill. See adv., page 22.

**SULLIVAN MACHINERY CO.**, Chicago, Ill. See adv., page 555.

## STONE MACHINERY

(See also Quarrying Machinery)

**LEEDS MANUFACTURING CO.**, Chicago, Ill. See adv., page 545.

## STRUCTURAL METAL WORK

**KING BRIDGE CO.**, Cleveland, Ohio. See adv., page 28.

## SURVEYORS' INSTRUMENTS AND SUPPLIES

(See also Mathematical Instruments)

**EUCENE DIETZGEN & CO.**, Chicago, Ill. See adv., page 7.

**W. & L. E. CURLEY**, Troy, N. Y. See adv., page 9.

## TACKLE BLOCKS

**BOSTON & LOCKPORT BLOCK CO.**, Boston, Mass. See adv., page 17.

**CEO. B. CARPENTER & CO.**, Chicago, Ill. See adv., page 544.

## TOOLS

**KELLEY, MAUS & CO.**, Chicago, Ill. See adv., page 8.

## THROTTLE VALVES

**DETROIT LUBRICATOR CO.**, Detroit, Mich. See adv., page 540.

## TRAMWAYS.

(See Cable Tramways)

## TRAVELERS

**LEEDS MANUFACTURING CO.**, Chicago, Ill. See adv., page 545.

## TRUCK PUMPS

(See also Pumps)

**THE COULDS MANUFACTURING CO.**, Seneca Falls, N. Y. See adv., page 550.

## TUBULAR STEEL BARROWS

(See also Wheelbarrows)

**THE KILBOURNE & JACOBS MANUFACTURING CO.**, Columbus, Ohio. See adv., page 544.

## TURBINE WHEELS

**DAYTON GLOBE IRON WORKS CO.**, Dayton, Ohio. See adv., page 14.

**THE JAMES LEFFEL & CO.**, Springfield, Ohio. See adv., page 532.

## TWINES AND CORDAGE

**CEO. B. CARPENTER & CO.**, Chicago, Ill. See adv., page 534.

## TYPEWRITERS

**WYCKOFF, SEAMANS & BENEDICT**, Chicago, Ill. See adv., page 8.

## TYPEWRITERS' SUPPLIES

**WYCKOFF, SEAMANS & BENEDICT**, Chicago, Ill. See adv., page 8.

## VALVES

**ÆTNA FOUNDRY & MACHINE CO.**, Springfield, Ill. See adv., page 543.

**DETROIT LUBRICATOR CO.**, Detroit, Mich. See adv., page 540.

**SALT LAKE FOUNDRY & MANUFACTURING CO.**, Salt Lake City, Utah. See adv., page 7.

## VENTILATING FANS

**CHICAGO WATER MOTOR CO.**, Chicago, Ill. See adv., page 541.

## VENTILATORS

**GENERAL ELECTRIC CO.**, New York City. See adv., page 538.

**WATER ENGINES OR MOTORS**

(See also Water Wheels)

**CHICAGO WATER MOTOR CO.**, Chicago, Ill. See adv., page 541.**WATER GAUGES****WILLIAM E. STIEREN**, Pittsburgh, Pa. See adv., page 548.**WATER PIPE****THE MICHIGAN PIPE CO.**, Bay City, Mich. See adv., page 15.**FRANCIS SMITH & CO.**, San Francisco, Cal. See adv., page 15.**A. WYCKOFF & SON**, Elmira, N. Y. See adv., page 15.**WATER PURIFIERS****FIELD FEED WATER PURIFIER CO.**, Chicago, Ill. See adv., page 533.**HOPPE'S MANUFACTURING CO.**, Springfield, Ohio. See adv., page 531.**KROESCHELLS & BOURCEOIS**, Chicago, Ill. See adv., page 540.**CEO. W. LORD**, Philadelphia, Pa. See adv., page 535.**THE STIRLING CO.**, Chicago, Ill. See adv., page 542.**WATER TUBE BOILERS****THE STIRLING CO.**, Chicago, Ill. See adv., page 542.**WATER WHEELS****CHICAGO WATER MOTOR CO.**, Chicago, Ill. See adv., page 541.**DAYTON CLOBE IRON WORKS CO.**, Dayton, Ohio. See adv., page 11.**THE JAMES LEFFEL & CO.**, Springfield, Ohio. See adv., page 532.**UNION IRON WORKS**, San Francisco, Cal. See adv., page 6.**WATER WORKS****MICHIGAN PIPE CO.**, Bay City, Mich. See adv., page 15.**WELL-DRILLING MACHINERY****WALBURN-SWENSON CO.**, Chicago, Ill. See adv., page 537.**WELL PIPE**

(See also Water Pipe)

**FRANCIS SMITH & CO.**, San Francisco, Cal. See adv., page 15.**WHEELBARROWS****THE KILBOURNE & JACOBS MANUFACTURING CO.**, Columbus, Ohio. See adv., page 544.**S. D. KIMBARK**, Chicago, Ill. See adv., page 8.**WIRE CLOTH****CLINTON WIRE CLOTH CO.**, Clinton, Mass. See adv., page 8.**EASTWOOD WIRE MANUFACTURING CO.**, Belleville, N. J. See adv., page 526.**GILBERT & BENNETT MANUFACTURING CO.**, New York and Chicago. See adv., page 527.**HOWARD & MORSE**, New York City. See adv., page 527.**THE PHOENIX WIRE WORKS**, Detroit, Mich. See adv., page 9.**WALBURN-SWENSON CO.**, Chicago, Ill. See adv., page 537.**WIRE FENCING****KANSAS CITY METAL ROOFING & CORRUGATING CO.**, Kansas City, Mo. See adv., page 7.**WIRE ROPE**

(See also Cable Tramways)

**C. W. BADGLEY & CO.**, Denver, Colo. See adv., page 549.**CEO. B. CARPENTER & CO.**, Chicago, Ill. See adv., page 534.**OSTERLOH SUPPLY CO.**, Pittsburgh, Pa. See adv., page 541.**WOOD STEAM-PIPE COVERING****MICHIGAN PIPE CO.**, Bay City, Mich. See adv., page 15.**A. WYCKOFF & SON**, Elmira, N. Y. See adv., page 15.**WOOD WATER-PIPE****MICHIGAN PIPE CO.**, Bay City, Mich. See adv., page 15.**A. WYCKOFF & SON**, Elmira, N. Y. See adv., page 15.





# MINING LAWS OF THE UNITED STATES OF AMERICA AND REGULATIONS THEREUNDER

1892

**SECTION 218. MINERAL LANDS RESERVED.**—In all cases lands valuable for minerals shall be reserved from sale, except as otherwise expressly directed by law. [4 July, 1866, c. 106, s. 5, v. 14, p. 86.]

**SEC. 219. MINERAL LANDS OPEN TO PUBLIC USE BY CITIZENS.**—All valuable mineral deposits in lands belonging to the United States, both surveyed and unsurveyed, are hereby declared to be free and open to exploration and purchase, and the lands in which they are found to occupation and purchase, by citizens of the United States and those who have declared their intention to become such, under regulations prescribed by law, and according to the local customs or rules of miners in the several mining districts, so far as the same are applicable and not inconsistent with the laws of the United States. [10 May, 1872, c. 152, s. 1, v. 17, p. 91, 7, 8, 5, Gear, 4 How., 120.]

**SEC. 220. LENGTH OF MINING CLAIMS UPON VEINS OR LODES.**—Mining claims upon veins or lodes of quartz or other rock in place bearing gold, silver, platinum, lead, tin, copper or other valuable deposits, heretofore located, shall be governed as to length along the vein or lode by the customs, regulations and laws in force at the date of their location. A mining claim located after the 10th day of May, 1872, whether located by one or more persons, may equal but shall not exceed fifteen hundred feet in length along the vein or lode; but no location of a mining claim shall be made until the discovery of the vein or lode within the limits of the claim located. No claim shall extend more than three hundred feet of surface above and below the vein or lode on the surface, nor shall any claim be limited by any mining regulation to less than twenty-five feet on each side of the middle of the vein at the surface, except where adverse rights exist prior to the 10th day of May, 1872, pending such limitation necessary. The end-lines of each claim shall be parallel to each other. [10 May, 1872, c. 152, s. 2, v. 17, p. 91.]

**SEC. 221. PROOF OF CITIZENSHIP.**—Proof of citizenship, under this chapter, may consist, in the case of an individual, of his own affidavit thereof; in the case of an association of persons unincorporated, of the affidavit of their authorized agent, made on his own knowledge, or upon information and belief; and in the case of a corporation organized under the laws of the United States, or of any state or territory thereof, by the filing of a certified copy of their charter or certificate of incorporation. [10 May, 1872, c. 152, s. 3, v. 17, p. 94.]

**SEC. 222. LOCATOR'S RIGHTS OF POSSESSION AND ENJOYMENT.**—The locators of all mining localities heretofore made, or which shall hereafter be made, on any mineral vein, lode or ledge, situated on the public domain, their heirs and assigns, where no adverse claim exists on the 10th day of May, 1872, so long as they comply with the laws of the United States, and with state, territorial and local regulations not in conflict with the laws of the United States governing their possessory title, shall have the exclusive right of possession and enjoyment of all the surface included within the lines of the locations, any of such veins, lodes and ledges, throughout their entire depth, the top or apex of which lies inside of such surface-lines extended downward vertically, although such veins, lodes or ledges may so far depart from a perpendicular in their course downward as to extend outside the vertical side-lines of such surface locations. But their right of possession to such outside parts of such veins or ledges shall be confined to such portions thereof as lie between vertical planes drawn downward as above described, through the end-lines of their locations, so continued in their own direction that such planes will intersect such exterior parts of such veins or ledges. And nothing in this section shall authorize the locator or possessor of a vein or lode which extends in its downward course beyond the vertical line of such claim to cut through the surface of a claim owned or possessed by another. [10 May, 1872, c. 152, s. 3, v. 17, p. 91.]

**SEC. 223. OWNERS OF TUNNELS, RIGHTS OF.**—Where a tunnel is driven for the discovery of a vein or lode, and the discovery of mines, the owners of such tunnel shall have the right of possession of all veins or lodes within three thousand feet from the face of such tunnel on the line thereof, not previously known to exist, discovered in such tunnel, to the same extent as if discovered from the surface, and locations on the line of such tunnel of veins or lodes not appearing on the surface, made by other parties after the commencement of the tunnel,

and while the same is being prosecuted with reasonable diligence, shall be invalid; but failure to prosecute the work on the tunnel for six months shall be considered as an abandonment of the right to all undiscovered veins on the line of such tunnel. [10 May, 1872, c. 152, s. 4, v. 17, p. 92.]

**SEC. 224. REGULATIONS MADE BY MINERS.**—The miners of each mining district may make regulations not in conflict with the laws of the United States, or with the laws of the state or territory in which the district is situated, governing the location, number of recording, amount of work necessary to hold possession of a mining claim, subject to the following requirements: The location must be distinctly marked on the ground so that its boundaries can be readily traced. All records of mining claims hereafter made shall contain the name or names of the locators, the date of the location, and such a description of the claim or claims located by reference to some natural object or permanent monument as will identify the claim. On each claim located after the 10th day of May, 1872, and until a patent has been issued therefor, not less than \$100 worth of labor shall be performed or improvements made during each year. On all claims located prior to the 10th day of May, 1872, \$10 worth of labor shall be performed or improvements made by the 10th day of May, 1874, and each year thereafter, for each one hundred feet in length along the vein until a patent has been issued therefor; but where such claims are held in common, such expenditure may be made by one or more of the owners, and upon such conditions, the claim or mine upon which such failure occurred shall be open to re-location in the same manner as if no location of the same had ever been made, provided that the original locators, their heirs, assigns or legal representatives, have not resumed work upon the claim after failure and before such location. Upon the failure of any one of several co-owners to contribute his proportion of the expenditures required hereby, the co-owners who have performed the labor or made the improvements may, at the expiration of the year, give such delinquent co-owner personal notice in writing or notice by publication in the newspaper published nearest the claim, for at least once a week for ninety days, and if at the expiration of ninety days after such notice in writing or by publication such delinquent should fail or refuse to contribute his proportion of the expenditure required by this section, his interest in the claim shall become the property of his co-owners who have made the required expenditures. [10 May, 1872, c. 152, s. 5, v. 17, p. 92.]

**SEC. 225. PATENTS FOR MINERAL LANDS, HOW OBTAINED.**—A patent for any land claimed and located for valuable deposits may be obtained in the following manner: Any person, association or corporation authorized to locate a claim under this chapter, having claimed and located a piece of land for such purposes, who has, or have, complied with the terms of this chapter, may file in the proper land-office an application for a patent, under oath, showing such compliance, together with a plat and field-notes of the claim or claims in common, made by or under the direction of the United States surveyor-general, showing accurately the boundaries of the claim or claims, which shall be distinctly marked, by monuments on the ground, and shall post a copy of such plat, together with a notice of such application for a patent, in a conspicuous place on the land embraced in such plat, previous to the filing of the application for a patent, and shall file an affidavit of at least two persons, that such notice has been duly posted, and shall thereupon be entitled to a patent for the land, in the manner following: The register of the land-office, upon the filing of such application, shall post a copy of the said plat, together with a notice that such application has been made, for the period of sixty days, in a newspaper to be by him designated as published nearest to such claim; and he shall also post such notice in his office for the same period. The owner of the claim, filing this application, or at any time thereafter, within the sixty days of publication, shall file with the register a certificate of the United States surveyor-general that \$500 worth of labor has been expended or improvements made upon the claim by himself or grantors; that the plat is correct, with such further description by such reference to natural objects or permanent monuments as shall identify the claim, and furnish an accurate description, to be incorporated

in the patent. At the expiration of the sixty days of publication the claimant shall file his affidavit, showing that the plat and notice have been posted in a conspicuous place on the claim during such period of publication. If no adverse claim shall have been filed, and the receiver-general, at the land-office at the expiration of the sixty days of publication, if shall be assumed that the applicant is entitled to a patent, upon the payment to the proper officer of \$5 per acre, and that no adverse claim exists; and thereupon the receiver-general shall issue to the owner of the claim a copy to be held, except it be shown that the applicant has failed to comply with the terms of this chapter. [10 May, 1872, c. 152, §. 6, v. 17, p. 92.]

SEC. 2322. ADVERSE CLAIM. PLACER CLAIMS ON.—Where an adverse claim is filed during the period of publication, it shall be upon oath of the person or persons making the same, and shall show the nature, boundaries and extent of such adverse claim, and all proceedings, except the publication of notice and making and filing of the affidavit, shall be stayed until the controversy shall have been settled or decided by a court of competent jurisdiction, or the adverse claim waived. It shall be the duty of the adverse claimant, within thirty days after filing his claim, to commence proceedings in a court of competent jurisdiction, to determine the question of the right of possession, and prosecute the same with reasonable diligence to final judgment; and a failure so to do shall be a waiver of his adverse claim. After such judgment shall have been rendered, the party entitled to the possession of the claim, or any portion thereof, may, without giving further notice, file a certified copy of the judgment-roll with the register of the land-office, together with the certificate of the surveyor-general that the requisite amount of labor has been expended thereon, and the same as in the case of the description required in other cases, and shall pay to the receiver \$5 per acre for his claim, together with the proper fees, whereupon the whole proceedings and the judgment-roll shall be certified by the register to the commissioner of the general land-office, and a patent shall issue thereon for the claim, or such portion thereof as the applicant shall appear, from the decision of the court, to rightly possess. If it appears from the decision of the court that several parties are entitled to the claim, each party of the claim with the proper fees, and file the certificate and description by the surveyor-general, whereupon the register shall certify the proceedings and judgment-roll to the commissioner of the general land-office, as in the preceding case, and patents shall issue to the several parties according to their respective rights. Nothing herein contained shall be construed to prevent the alienation of a title conveyed by a patent for a mining-claim to any person who, after May, 1872, c. 152, §. 8, v. 17, p. 94.]

SEC. 2327. DESCRIPTION OF VEIN CLAIMS ON SURVEYED AND UNSURVEYED LANDS.—The description of vein or lode claims upon surveyed lands, shall designate the location of the claim with reference to the plat of the mining-claim, and also to conform therewith; and where a patent shall be issued for claims upon unsurveyed lands, the surveyor-general, in extending the surveys, shall adjust the same to the boundaries of such patented claim, according to the plat or description thereof, but so as not to interfere with or change the location of any such patented claim. [10 May, 1872, c. 152, §. 8, v. 17, p. 94.]

SEC. 2328. PENDING APPLICATIONS. EXISTING RIGHTS.—Applications for patents for mining claims under former laws now pending may be prosecuted to a final decision in the general land-office; but in such cases where adverse rights are not affected thereby, patents may issue in pursuance of the provisions of this chapter; and all patents for mining claims upon veins or lode heretofore issued, shall convey all the rights and privileges conferred by this chapter where no adverse rights existed on the 10th day of May, 1872. [10 May, 1872, c. 152, §. 9, v. 17, p. 94.]

SEC. 2329. CONFORMITY OF PLACER CLAIMS TO SURVEYS. LIMIT OF.—Claims usually called "placers," including all forms of deposit, excepting veins of quartz, or other rock in place, shall be subject to entry and patent, under like circumstances and conditions, as placer claims on unsurveyed lands, for vein or lode claims, but where the lands have been previously surveyed by the United States, the entry in its exterior limits shall conform to the legal subdivisions of the public lands. [10 May, 1872, c. 152, §. 10, v. 17, p. 94.]

SEC. 2330. SUBDIVISION OF PLACER CLAIMS INTO TRACTS; MAXIMUM OF PLACER LOCATIONS. Legal subdivisions of forty acres may be subdivided into ten-acre tracts; and two or more persons, or associations of persons, having contiguous claims of any size, although such claims be larger than ten acres each, may make joint entry therefor; but no location of a placer claim, made after the 30th day of July, 1870, shall exceed one hundred and sixty acres for any one person or association of persons, which location shall conform to the provisions of this chapter. Any location in this section contained shall defeat or impair any bona fide pre-emption or homestead claim upon agricultural lands, or authorize the sale of the improvements of any bona fide settler to any purchaser. [10 May, 1872, c. 152, §. 11, v. 17, p. 94.]

SEC. 2331. CONFORMANCE OF PLACER CLAIMS TO SURVEYS; LIMITATION OF CLAIMS.—Where placer claims are upon surveyed land, and conform to legal subdivisions, no further survey of the plat shall be required, and all placer claims made after the 10th day of May, 1872, shall conform to the same as practicable with the United States system of public-land surveys, and the rectangular subdivisions of such surveys, and no such location shall include more than twenty acres for each individual claimant; but where the placer claim cannot be conformable to legal subdivisions, survey and plat shall be made as on unsurveyed lands; and where by the segregation of mineral lands in any legal subdivision a quantity of agricultural land less than fifty acres remains, such fractional portion of agricultural land may

be entered by any party qualified by law, for homestead or pre-emption purposes. [10 May, 1872, c. 152, §. 10, v. 17, p. 94.]

SEC. 2332. WHAT EVIDENCE OF POSSESSION, ETC., TO ESTABLISH A RIGHT TO A PATENT.—Where such person or association of persons, or the receiver-general, shall be entitled to a patent for a period equal to the time prescribed by the statute of limitations for mining claims of the state or territory where the same may be situated, evidence of such possession and working of the claim for such period shall be sufficient to establish a right to a patent therefor under this chapter. In the absence of any adverse claim; but nothing in this chapter shall be deemed to impair any lien which may have attached in any way whatever to any mining claim or property thereto attached prior to the issuance of this chapter. [10 May, 1872, c. 152, §. 12, v. 17, p. 94.]

SEC. 2333. PROCEEDINGS FOR PATENT FOR PLACER CLAIM, ETC.—When the same person, association or corporation is in possession of a placer claim, and also a vein or lode included within the boundaries thereof, application shall be made for a patent for the placer claim, with the statement that it includes such vein or lode, and in such case a patent shall issue for the placer claim, subject to the provisions of this chapter, including such vein or lode, upon the payment of \$5 per acre for such vein or lode claim, and twenty feet of surface on each side thereof. The remainder of the placer claim, or any placer claim not embracing any vein or lode claim, shall be paid for at the rate of \$250 per acre, together with all costs of proceedings; and where a vein or lode claim, such claim is described in Section 2327, as known to exist within the boundaries of a placer claim, an application for a patent for such placer claim which does not include an application for the vein or lode claim shall be construed as a patent for the placer claim, and the same shall be subject to the right of possession of the vein or lode claim; but where the existence of a vein or lode in a placer claim is not known, a patent for the placer claim shall convey all valuable mineral and other deposits within the boundaries thereof. [10 May, 1872, c. 152, §. 13, v. 17, p. 94.]

SEC. 2334. SURVEYOR-GENERAL TO APPOINT SURVEYORS OF MINING CLAIMS, ETC.—The surveyor-general of the United States shall appoint and employ such persons as he may deem proper to survey mining claims, and shall apply for appointment to survey mining claims. The expenses of the survey of vein or lode claims, and the survey and subdivision of placer claims into smaller quantities than one hundred and sixty acres, together with the cost of publication of notices, shall be paid by the applicants, and they shall be at liberty to obtain the same at the most reasonable rates, and they shall also be at liberty to employ any United States deputy surveyor to make the survey. The commissioner of the general land-office shall also have power to establish the maximum charges for surveys and publication of notices under this chapter; and, in case of excessive charges for publication, he may designate any newspaper published in the land district in which the claim is located, or the publication of mining notices, such as district, and fix the rates to be charged by such paper; and, to the end that the commissioner may be fully informed on the subject, each applicant shall file with the register a sworn statement of all charges and fees paid by the applicant for publication of notices, together with all fees and money paid the register and the receiver of the land-office, which statement shall be transmitted, with the other papers in the case, to the commissioner of the general land-office. [10 May, 1872, c. 152, §. 14, v. 17, p. 95.]

SEC. 2335. VERIFICATION OF AFFIDAVITS, ETC. All affidavits required to be made under this chapter may be verified before any officer authorized to administer oaths within the land district where the claims may be situated, and all testimony and proofs may be taken before any such officer, and when duly certified by the officer taking the same, shall have the same force and effect as if taken before the register and receiver of the land-office. In cases of contest as to the mineral or agricultural character of any land, the testimony and proofs may be taken, as provided on personal notice of at least ten days to the opposing party; or if such party cannot be found, then by publication for at least once a week for thirty days in a newspaper, to be designated by the commissioner of the general land-office, in the land district where such land; and the register shall require proof that such notice has been given. [10 May, 1872, c. 152, §. 15, v. 17, p. 95.]

SEC. 2336. WHERE VEINS INTERSECT, ETC.—Where two or more veins intersect, or where a vein intersects a lode, or a lode and such prior location shall be entitled to all one or mineral contained within the space of intersection; but the subsequent location shall have the right of way through the space of intersection for the purpose of being converted for striking of a mine, or where two or more veins, or veins and lodes, or lode and prior location shall take the vein below the point of union, including all the space of intersection. [10 May, 1872, c. 152, §. 14, v. 17, p. 94.]

SEC. 2337. PATENTS FOR NON-MINERAL LANDS, ETC.—Where non-mineral land not contiguous to the vein or lode is used or occupied by the proprietor of such vein or lode for mining or milling purposes, such non-adjacent surface ground may be entered and included in an application for a patent for such vein or lode, and the same may be patented therewith, subject to the same preliminary requirements as to survey and notice as are applicable to veins or lodes; but no location hereafter made of such non-adjacent surface ground shall be patented for less than the same, must be made at the same rate as fixed by this chapter for the superficies of the lode. The owner of a quartz-mill or reduction-works, not owning a mine in connection therewith, may also receive a patent for his mill-site, as provided in this section. [10 May, 1872, c. 152, §. 15, v. 17, p. 95.]

SEC. 2338. WHAT CONDITIONS OF SALE MAY BE MADE BY LOCAL LEGISLATURE.—As a condition of sale, in the absence of necessary legislation by congress, the local legislature of any state or territory may provide rules for working mines, involving

ements, drainage and other necessary means to their complete development, and those conditions shall be fully expressed in the patent. [26 July, 1866, c. 262, s. 14, p. 252.]

**SEC. 2339. VESTED RIGHTS TO USE OF WATER FOR MINING, ETC.; RIGHT OF WAY FOR CANALS.**—Whenever, by priority of possession, rights to the use of water for mining, agricultural, manufacturing or other purposes have been vested and acquired, and the same are recognized and acknowledged by the local customs, laws and the decisions of courts, the possessors and owners of such vested rights shall be maintained and protected in the same; and no mining, manufacturing, agricultural, or other rights, for the purposes herein specified is acknowledged and confirmed, but whenever any person, in the construction of any ditch or canal, injures or damages the possession of any settler on the public domain, the party offending shall be liable for damages, and the party injured for such injury or damage. [26 July, 1866, c. 262, s. 14, p. 253.]

**SEC. 2340. PATENTS, PRE-EMPTIONS AND HOMESTEADS SUBJECT TO VESTED AND ACQUIRED WATER RIGHTS.**—All patents granted or pre-emptions or homesteads allowed shall be subject to any vested and acquired water-rights, or right, to ditches and reservoirs used in connection with such water-rights as may have been acquired under or recognized by the preceding section. [26 July, 1866, c. 262, s. 17, p. 253.]

**SEC. 2341. MINERAL LANDS IN WHICH NO VALUABLE MINES ARE DISCOVERED, OPEN TO HOMESTEADS.**—Whenever upon the lands heretofore designated as mineral lands, which have been included in the survey of the public lands and homesteads made by citizens of the United States or persons who have declared their intention to become citizens, which homesteads have been made, approved and used for agricultural purposes, and upon which there either have been no valuable mines or homesteads made by or under discoverers and which are properly agricultural lands, the settlers or owners of such homesteads shall have the right of pre-emption thereto and shall be entitled to purchase the same at the price of \$1.25 per acre and in quantity not exceeding one hundred and sixty acres, or less, and they shall be governed by the provisions of chapter 3 of this title relating to "Homesteads." [26 July, 1866, c. 262, s. 10, v. 14, p. 251.]

**SEC. 2342. MINERAL LANDS, HOW SET APART AS AGRICULTURAL LANDS.**—In case of the survey of the lands described in the preceding section, the secretary of the interior may designate and set apart such portions of the same as are clearly agricultural lands, which lands shall thereafter be subject to pre-emption and sale as other public lands, and all the laws and regulations applicable to the same. [26 July, 1866, c. 262, s. 11, v. 14, p. 251.]

**SEC. 2343. ADDITIONAL LAND DISTRICTS AND OFFICERS.**—THE PRESIDENT is authorized to establish additional land districts and to appoint the necessary officers under existing laws, wherever he may deem the same necessary for the public convenience in executing the provisions of this chapter. [26 July, 1866, c. 262, s. 7, v. 14, p. 251.]

**SEC. 2344. RIGHTS RESERVED TO THE UNITED STATES BY CERTAIN RIGHTS.**—Nothing contained in this chapter shall be construed to impair, in any way, rights or interests in mining property acquired under existing laws; nor to affect the provisions of the act entitled "An act granting to A. S. Hoff, the right of way and other privileges to aid in the construction of a draining and exploring tunnel to the Constock lode in the State of Nevada," approved July 25, 1866. [10 May, 1872, c. 172, s. 16, v. 17, p. 96, 1870, c. 255, s. 17, p. 251.]

**SEC. 2345. MINERAL LANDS IN CERTAIN STATES EXCLUDED.**—The provisions of the preceding sections of this chapter shall not apply to the mineral lands situated in the States of Michigan, Wisconsin and Minnesota, which are declared free and open to exploration and purchase, according to legal subdivisions, in like manner as before the 10th of May, 1872. Any bona fide entries of such lands within the States named since the 10th of May, 1872, may be patented without reference to any of the foregoing provisions of this chapter, such lands to be patented for public sale in the same manner, at the same minimum price and under the same rights of pre-emption as other public lands. [18 Feb., 1874, c. 159, v. 17, p. 465.]

**ARTICLE IV. LIST OF LANDS TO STATES OR CORPORATIONS NOT TO INCLUDE MINERAL LANDS.**—No act passed at the first session of the thirty-eighth congress, granting lands to states or corporations to aid in the construction of roads or for other purposes, and no act passed at the first session of the thirty-ninth of January, 1867, shall be so construed as to embrace mineral lands, which in all cases are reserved exclusively to the United States, unless otherwise specially provided in the act or acts making the grant. [30 Jan., 1867, Res. No. 10, v. 13, p. 567.]

#### REPEAL PROVISIONS.

##### TITLE LXV.

**SECTION 535. WHAT REVISED STATUTES EMBRACE.**—The foregoing seventy-three titles embrace the statutes of the United States general and permanent in their nature, in force on the 1st day of December, 1873, as revised and consolidated by committees appointed under an act of Congress, and the same shall be designated and cited as the Revised Statutes of the United States.

**SEC. 536. REPEAL OF ACTS EMBRACED IN REVISION.**—All acts of Congress passed prior to the 1st day of December, 1873, any portion of which is embraced in any section of said revision, are hereby repealed and the section applicable thereto shall be in force in lieu thereof; all parts of such acts not contained in such revised acts, having been revised, shall be in force as if they were not being general and permanent in their nature; Provided, that the incorporation into such revision of any general and permanent provision, taken from an act making appropriations or from an act containing other provisions of a private, local or

temporary character, shall not repeal or in any way affect any appropriation or any provision of a private, local or temporary character, contained in any of said acts, but the same shall remain in force; and all acts of Congress passed prior to said last-named day, in part of which are embraced in said revision, shall not be affected or changed by its enactment, but the same shall continue in force until they are repealed, amended or otherwise changed. The repeal of the several acts embraced in said revision shall not affect any act done or any right accruing or accrued or any suit or proceeding had or commenced in any civil cause before the said repeal, but all suits and proceedings under such acts shall continue and may be enforced in the same manner as if said repeal had not been made, nor shall said repeal in any manner affect the right to any office or change the form or tenure thereof.

**SEC. 537. PROSECUTIONS AND PUNISHMENTS.**—All offenses committed and all penalties or forfeitures incurred under any statute embraced in said revision prior to said repeal may be prosecuted and punished in the same manner and with the same effect as if said repeal had not been made.

**SEC. 539. ARTS OF LIMITATION.**—All acts of limitation, whether applicable to civil suits and proceedings or to the prosecution of offenses or for the recovery of penalties or forfeitures, embraced in said revision and covered by said repeal, shall not be affected thereby, but all suits, proceedings or prosecutions, whether civil or criminal, for causes arising or acts done or committed prior to said repeal, may be commenced and prosecuted within the same time as if said repeal had not been made.

**SEC. 540. ARTS NOT TO BE AFFECTED BY SECTION 537.**—The arrangement and classification of the several sections of the revision have been made for the purpose of a more convenient and orderly arrangement of the same, and therefore no interpretation of a provision of a construction is to be drawn by reason of the title under which any particular section is placed.

**SEC. 541. ACTS PASSED SINCE THE 1st, 1873, NOT AFFECTED.**—The said revised revision shall not affect or repeal any act of Congress passed since the 1st day of December, 1873, and all acts passed since that date are to have full effect as if passed after the enactment of this revision, and so far as such acts vary from or conflict with any provision contained in said revision, they are to have effect as subsequent statutes and as repealing any portion of the revision inconsistent therewith.

Approved July 22, 1874.

**AN ACT** to amend the act entitled "An act to promote the development of the mining resources of the United States," passed May 10, 1872.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the provisions of the fifth section of the act entitled "An act to promote the development of the mining resources of the United States," by which, by 1872, way to 1872, and all acts passed since that date are to have full effect as if passed after the enactment of this revision, and so far as such acts vary from or conflict with any provision contained in said revision, they are to have effect as subsequent statutes and as repealing any portion of the revision inconsistent therewith.

Approved June 6, 1874.

**AN ACT** to amend Section 2323 of the revised statutes, relating to the development of the mining resources of the United States.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That Section 2323 of the revised statutes be, and the same is hereby amended so that hereafter, in case of company lands, any person or company for the purpose of developing a lode or lodes owned by said person or company, the money so expended in said tunnel shall be taken and considered as expended on said lode or lodes, whether located prior to or since the passage of said act, and such person or company shall not be required to perform work on the surface of said lode or lodes in order to hold the same as required by said act.

Approved February 11, 1875.

**AN ACT** to exclude the States of Missouri and Kansas from the provisions of the act of Congress entitled "An act to promote the development of the mining resources of the United States," approved May 10, 1872.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That with respect to the States of Missouri and Kansas, no part of any lode or other mineral be and they are hereby excluded from the operation of the act entitled "An act to promote the development of the mining resources of the United States," approved May 10, 1872, and all lands in said States shall be subject to disposal as agricultural lands.

Approved May 5, 1876.

**AN ACT** authorizing the citizens of Colorado, Nevada and the territories to fell and remove timber on the public domain for mining and domestic purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That all citizens of the United States and other persons, bona fide residents of the State of Colorado or Nevada, or either of the Territories of New Mexico, Arizona, Utah, Wyoming, Dakota, Idaho or Montana, and of other mineral territories of the United States, shall be and are hereby authorized and permitted to fell and remove, for building, agricultural, mining or other domestic purposes, any timber or other trees growing or being on the public lands, said lands being mineral, and not subject to mineral entry, in the States and Territories of the United States, except for mineral entry, in either of said States, territories, or districts of which such citizens or persons may be at the time bona fide residents, subject to such rules and regulations as the secretary of the interior may prescribe for the protection of the timber and of the underground

growing upon such lands, and for other purposes: Provided, the provisions of this act shall not extend to railroad corporations.

SEC. 2. That it shall be the duty of the register and the receiver of any local land-office in whose district any mineral land may be situated to ascertain from time to time whether any timber is being cut or used upon any such lands, except for the purposes authorized by this act, within their respective land districts; and, if so, they shall report the quantity of the same to the general land-office of that fact; and all necessary expenses incurred in making such proper examinations shall be paid and allowed such register and receiver in making up their next quarterly accounts.

SEC. 3. Any person or persons who shall violate the provisions of this act, or any rules and regulations in pursuance thereof made by the secretary of the interior, shall be deemed guilty of a misdemeanor, and, upon conviction, shall be fined in any sum not exceeding \$500, and to which may be added imprisonment for any term not exceeding six months.

Approved June 3, 1878 (20 Stat., 881).

AN ACT to amend Sections 2324 and 2325 of the revised statutes of the United States concerning mineral lands.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That Section 2325 of the revised statutes of the United States be amended by adding thereto the following words: "Provided, that where the claimant for a patent is not a resident of or within the land district wherein the vein, lode, ledge, or deposit sought to be patented is located, the application for patent and the affidavits required to be made by the claimant for such patent may be made by his, her or its authorized agent, where said agent is conversant with the facts sought to be established by said affidavits. And provided, that this section shall apply to all applications now pending for patents to mineral lands."

SEC. 2. That Section 2324 of the revised statutes of the United States be amended by adding the following words: "Provided, that the period within which the work required to be done annually on all unpatented mineral claims shall expire on the 1st day of January succeeding the date of location of such claim, and this section shall apply to all claims located since the 10th day of May, Anno Domini 1872."

Approved January 22, 1880 (21 Stat., 61).

AN ACT to amend Section 2326 of the revised statutes relating to suits at law affecting the title to mining claims.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That if, in any action brought pursuant to Section 2326 of the revised statutes, title to the ground in controversy shall not be established by either party, the jury shall so find, and judgment shall be entered against the verdict. In such case costs shall not be allowed to either party, and the claimant shall not proceed in the land-office or be entitled to a patent for the ground in controversy until he shall have perfected his title.

Approved March 3, 1881 (21 Stat., 345).

AN ACT to amend Section 2326 of the revised statutes, in regard to the mineral lands, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the adverse claim required by Section 2326 of the revised statutes may be verified by the oath of any duly authorized agent or attorney-in-fact of the adverse claimant cognizant of the facts stated; and the adverse claimant, if residing or at the time being beyond the limits of the district wherein the claim is situated, may make oath to the adverse claim before the clerk of any court of record of the United States or the state or territory where the adverse claimant may then be, or before any notary public of such state or territory.

SEC. 2. That applicants for mineral patents, if residing beyond the limits of the district wherein the claim is situated, may make any oath or affidavit required for proof of citizenship before the clerk of any court of record, or before any notary public of any state or territory.

Approved April 26, 1882 (22 Stat., 431).

AN ACT to exclude the public lands in Alabama from the operation of the laws relating to mineral lands.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That within the state of Alabama all the lands, whether mineral or otherwise, shall be subject to disposal only as agricultural lands. Provided, however, That all lands which have heretofore been reported to the general land-office as containing coal and from shall first be offered at public sale. And provided further, That any bona fide entry under the provisions of the homestead law of lands within said state heretofore made may be patented without reference to an act approved May 10, 1872, entitled "An act to promote the development of the mining resources of the United States," in cases where the persons making application (for such patents have in all other respects complied with the homestead law relating thereto.

Approved March 3, 1883 (22 Stat., 487).

AN ACT providing a civil government for Alaska.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SEC. 1. That the United States shall hereafter create a land district, and a United States land-office for said district is hereby located at Sitka. The commissioner provided for by this act to reside at Sitka shall be ex officio register of said land-office, and the clerk provided for by this act shall be ex officio collector of public moneys, and the notary provided for by this act shall be ex officio surveyor-general of said district, and the laws shall

the United States relating to mining claims, and the rights incident thereto, shall, from and after the passage of this act, be in full force and effect in said district, under the administration thereof, as if the same had been provided for by regulations as may be made by the secretary of the interior, approved by the president: Provided, That the Indians or other persons in said district shall not be disturbed in the possession of any lands actually in their use or occupation, or now claimed by them, but the terms under which such persons may acquire title to such lands is reserved for future legislation by congress: And provided further, That parties who have located mines or mineral privileges therein and the lands attached thereto, applicable to the public domain, or who have occupied and improved, or have acquired ownership over such claims, shall not be disturbed therein, but shall be allowed to perfect their title to such claims by payment as aforesaid: And provided also, That the land, not exceeding six hundred and forty acres, at any station now occupied as missionary stations among the Indian tribes in said section, with the improvements thereon erected by or for such societies, shall be continued in the occupancy of the several religious societies, to which said missionary stations respectively belong, until action by congress. But nothing contained in this act shall be construed to put in force in said district the general land laws of the United States.

Approved May 17, 1884 (23 Stat., 24).

AN ACT making appropriations for sundry civil expenses of the government for the fiscal year ending June 13, 1891, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, \* \* \* \* \* No person who shall, after the passage of this act, enter upon any of the public lands with a view to occupation, entry or settlement under any of the land laws shall be permitted to acquire title to more than three hundred and twenty acres in the aggregate, under all of said laws, but this limitation shall not operate to curtail the right of any person who has heretofore made entry or settlement under any of the land laws, shall be permitted to acquire title to more than three hundred and twenty acres in the aggregate, under all of said laws, but this limitation shall not operate to curtail the right of any person who has heretofore made entry or settlement in violation of this act: Provided, That in all patents for lands hereafter taken up under any of the land laws of the United States or on entries or claims validated by this act, west of the one hundredth meridian, it shall be expressed that there is reserved from the lands in said patent described a right of way thereon for ditches or canals constructed by the authority of the United States.

Approved August 30, 1890 (26 Stat., 371).

AN ACT to repeal timber-secure laws, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the lands, towns and cities on the mineral lands of the United States, but no title shall be acquired by such towns or cities to any vein of gold, silver, cinnabar, copper or lead, or to any valid mining claim or possession located under existing laws, and no mineral vein are possessed within the limits of an incorporated town or city, and such possession is recognized by local authority or by the laws of the United States, the title to town lots shall be subject to such recognized possession and the necessary use thereof, and when entry has been made or patent issued for such town sites to such incorporated town or city, the possessor of such mineral vein may enter and receive patent for such mineral vein, and the surface ground appertaining thereto: Provided, That no entry shall be made by such mineral-vein claimant for surface ground where the owner or occupier of the surface ground shall have had possession of the same before the inception of the title of the mineral-vein applicant.

SEC. 17. That reservoir sites located or selected, and to be located and selected, under the provisions of "An act making appropriations for sundry civil expenses of the government for the fiscal year ending June 13, 1888, and for other purposes," and amendments thereto, shall be restricted to and shall contain only so much acreage as is actually necessary for the construction and maintenance of reservoirs, excluding so far as practicable lands occupied by actual settlers at the date of the location of said reservoirs, and that the provisions of "An act making appropriations for sundry civil expenses of the government for the fiscal year ending June 13, 1891, and for other purposes," which reads as follows, viz.: "No person who shall after the passage of this act enter upon any of the public lands with a view to occupation, entry or settlement, shall be permitted to acquire title to more than three hundred and twenty acres in the aggregate under all said laws," shall be construed to include in the maximum amount of lands the title to which is permitted to be acquired by one person only agricultural lands and town lots, the lands entered or sought to be entered under mineral land laws.

Approved March 3, 1891 (26 Stat., 1055).

MINERAL LANDS OPEN TO EXPLORATION, OCCUPATION AND PURCHASE.

1. It will be perceived that by the foregoing provisions of law the mineral lands in the public domain, surveyed or unsurveyed, are open to exploration, occupation, and purchase by the citizens of the United States and all those who have declared their intentions to become such.

STATUS OF LOBE CLAIMS LOCATED PRIOR TO MAY 10, 1872.

2. By an examination of the several sections of the revised statutes it will be seen that the status of claims located previous to the 10th of May, 1872, is not changed with regard to their extent along the lode or width of surface.

3. Mining rights acquired under such previous locations are, however, enlarged by such revised statutes in the following respect, viz.: The locators of all such previously taken veins or lodes, their heirs and assigns, so long as they comply with the provisions of the revised statutes, shall be entitled to extend their claims in no conflict therewith, governing mining claims, are invested with the exclusive possessory right of all the surface included within the lines of their locations and of all veins, lodes or ledges throughout the entire depth of the vein or lode, extending on both sides of such surface lines extended downward vertically, although such veins, lodes or ledges may so far depart from a perpendicular in their course downward as to extend outside the vertical side boundaries of their locations as defined in the statute provided, however, that the right of possession to such outside parts of said veins or ledges shall be confined to such portions thereof as lie between vertical planes drawn downward, as aforesaid, through the end-lines of their locations so continued in their own direction that such planes will intersect such exterior parts of such veins, lodes or ledges; no right being granted, however, to the claimant of such outside portion of a vein or lode to enter upon the surface location of another locator.

4. To be distinctly understood, however, that the law limits the possessory right to veins, lodes or ledges, other than the one named in the original location, to such as were not adversely claimed on May 10, 1872, and that where such other vein or lode was adversely claimed at the date of the original location, the one so adversely claiming is in no way impaired by the provisions of the revised statutes.

5. In order to hold the possessory title to a mining claim located prior to May 10, 1872, and for which a patent has not been issued, the law requires that \$10 shall be expended annually in labor or improvements on each claim of one hundred feet on the course of the vein or lode until a patent shall have been issued therefor; but where a number of such claims are held in common by the same or the same aggregate expenditure that would be necessary to hold all the claims, at the rate of \$10 per hundred feet, may be made upon any one claim; a failure to comply with this requirement in any one year subjecting the claim to sale under a statutory foreclosure of the parties. The same as if no previous location thereof had ever been made, unless the claimants under the original location shall have resumed work thereon after such failure and before such re-location. The first annual expenditure upon such claims of this class should have been performed subsequent to May 10, 1872, and prior to January 1, 1875. From and after January 1, 1875, the required amount must be expended annually until patent issues. By the revision of the law, the annual expenditures necessary to hold such claims are not required subsequent to entry, the date of issuing the patent certificate being the date contemplated by the statute.

6. Upon the failure of any one of several co-owners of a vein or lode, which has not been entered, to contribute his proportion of the expenditures necessary to hold the claim or claims so held in ownership in common, the co-owners who have performed the labor or made the improvements as required by said revised statute, may, at any time during the year, give such delinquent co-owner personal notice in writing or notice by publication in the newspaper published nearest the claim for at least once a week for ninety days; and if, upon the expiration of ninety days after such notice in writing or upon the expiration of one hundred and eighty days after the first newspaper publication of notice, the delinquent co-owner shall have failed to contribute his proportion to meet such expenditures or improvements, his interest in the claim by law passes to his co-owners who have made the expenditures or improvements as aforesaid. Where a claimant alleges ownership of a forfeited interest under the foregoing provision, the sworn statement of the publisher as to the facts of publication, giving dates and a printed copy of the notice published, should be furnished, and the claimant must swear that the delinquent co-owner failed to contribute his proper proportion within the period fixed by the statute.

#### EVENTS FOR VEINS OR LODES HERETOFORE ISSUED.

7. Rights under patents for veins or lodes heretofore granted under previous legislation of congress are enlarged by the revised statutes so as to invest the patentee, his heirs or assigns, with title to all veins, lodes or ledges which they have discovered, the top or apex of which lies within the end and side boundary lines of his claim on the surface, as patented, extended downward vertically, although such veins, lodes or ledges may so far depart from a perpendicular in their course downward as to extend outside the vertical side-lines of the claim at the surface. The right of possession to such outside parts of such veins or ledges to be confined to such portions thereof as lie between vertical planes drawn downward through the end-lines of their locations at the surface, so continued in their own direction that such planes will intersect such exterior parts of such veins or ledges; if being expressly provided, however, that all veins, lodes or ledges, the top or apex of which lies inside such surface locations, other than the one named in the patent, which were adversely claimed on the 10th of May, 1872, are excluded from such conveyance by patent.

8. Applications for patents for mining claims pending at the date of the act of May 10, 1872, and for which no final decision in the general land-office, and where no adverse rights are affected thereby patents will be issued in pursuance of the provisions of the revised statutes.

#### MANNER OF LOCATING CLAIMS ON VEINS OR LODES AFTER MAY 10, 1872.

9. From and after the 10th of May, 1872, any person who is a citizen of the United States, or who has declared his intention to become a citizen, may locate, record and hold a mining claim of fifteen hundred linear feet along the course of any mineral vein

or lode subject to location; or an association of persons, severally qualified as above, may make joint location of such claim of fifteen hundred feet, but in no event can a location of a vein or lode made subsequent to May 10, 1872, exceed fifteen hundred feet along the course of a vein or lode, whichever may be the number of persons composing the association.

10. With regard to the extent of surface ground adjoining a vein or lode and claimed for the convenient working thereof, the revised statute provides that the lateral extent of location of veins or lodes made after May 10, 1872, shall in no case exceed three hundred feet on each side of the middle of the vein at the surface, and that no such surface rights shall be limited by any mineral rights or claims, or to less than fifty feet from the middle of the vein at the surface, except where adverse rights existing on the 10th of May, 1872, may render such limitation necessary; the end-lines of such claims to be in all cases parallel to each other. Said lateral measurements cannot be taken of location of three hundred feet on either side of the middle of the vein at the surface, or such distance as is allowed by local laws. For example: Four hundred feet cannot be taken on one side and two hundred feet on the other. If, however, three hundred feet on each side are allowed, and by reason of prior claims but one hundred feet can be taken on one side, the locator will not be restricted to less than three hundred feet on the other side; and when the locator does not determine by exploration where the middle of the vein or lode lies, his discovery shaft must be assumed to mark such point.

11. By the foregoing it will be perceived that no lode claim located after the 10th of May, 1872, can exceed a parallelogram fifteen hundred feet in length by the lateral extent of location, whether surface ground of that width can be taken depends upon the local regulations or state or territorial laws in force in the several mining districts; and that no such local regulations or state or territorial laws shall limit a vein or lode claim to less than fifteen hundred feet upon the course thereof, whether the location is made by one or more persons, nor can surface rights be limited to less than fifty feet in width, unless adverse claims existing on the 10th of May, 1872, render such lateral limitation necessary.

12. It is provided by the revised statutes that the miners of each district may make rules and regulations not in conflict with the laws of the United States or of the state or territory in which such district may respectively situate, for the purpose of fixing the number of recording and amount of work necessary to hold possession of a claim. They likewise require that the location shall be so distinctly marked on the ground that its boundaries may be readily ascertained, and that the locator or locators shall not exercise too much care in defining their locations at the outset, inasmuch as the law requires that all records of mining locations made subsequent to May 10, 1872, shall contain the name or names of the locators, the date of their location, and such a description of the claim or claims located, by reference to some natural object or permanent monument, as will identify the claim.

13. The statutes provide that no lode claim shall be recorded until after the discovery of a vein or lode within the limits of the claim, and that the discovery of which vein or lode is to prevent the appropriation of presumed mineral ground for speculative purposes to the exclusion of bona fide prospectors, before sufficient work has been done to determine whether a vein or lode is in fact discovered.

14. The claimant should, therefore, prior to locating his claim, unless the vein can be traced upon the surface, sink a shaft or run a tunnel or drill, to a sufficient depth therein to discover and develop a mineral-bearing vein, lode or ore; he should determine, if possible, the general course of such vein in either direction from the point of discovery, by which direction he will be governed in marking the boundaries of his claim on the surface. His location notice should give the course and distance as nearly as practicable from the discovery shaft to the claim, to some permanent, well-known points or objects, such, for instance, as stone monuments, blazed trees, the confluence of streams, point of intersection of well-known gullies, ravines, or roads, or mining ditches, hills, etc., which may be in the immediate vicinity and which will serve to perpetuate and fix the locus of the claim and render it susceptible of identification from the description thereof given in the record of locations in the district, and as required by the statute.

15. In addition to the foregoing data, the claimant should state the names of adjoining claims or, if none adjoin, the relative positions of the nearest claims; should drive a post or erect a monument at each corner of the claim, and at the point of discovery or discovery shaft should fix a post, stake or board, upon which should be designated the name of the lode, the name or names of the locators, the number of feet claimed, and in which direction from the point of discovery the vein or lode is situated; that the location be filed for record, in addition to the foregoing description, should state whether the entire claim of fifteen hundred feet is taken on one side of the point of discovery, or whether it is partly upon one and partly upon the other side thereof, and in the latter case, how many feet are claimed upon each side of such discovery point.

16. Within a reasonable time, say twenty days, after the location shall have been marked on the ground or such time as is allowed by the local laws, notice thereof, accurately describing the claim in manner aforesaid, should be filed for record with the proper recorder of the district, who will thereupon issue the usual certificate of location.

17. In order to hold the possessory right to a location made since May 10, 1872, not less than \$10 worth of labor must be performed or improvements made thereon annually, until entry shall have been made. Under the provisions of the act of congress approved March 3, 1875, the first work, the first entry, and the due and must be performed during the calendar year succeeding that in which the location was made. Expenditure made or labor





Inasmuch as the surveyor-general has no duty to perform in connection with the entry of a placer claim of legal subdivisions, the proof of improvement must show their site and location as described, and that they were made by the applicant for patent or his grantors. The annual expenditure to the amount of \$100, required by Section 2324, revised statutes, must be made upon placer claims as well as lode claims.

Applicants for patent or placer claim, who are also in possession of a known vein or lode included therein, must state in their application that the placer includes such vein or lode. The published and posted notices must also include such statement. If veins or lodes are located within the area of the lode claim or other parties, the fact should be distinctly stated in the application for patent, and in all the notices. But in all cases whether the lode is claimed or excluded, it must be surveyed and marked upon the plat, the field-notes and plat covering the area of the lode claim or placer and the area of the placer separately. It should be remembered that an application which omits to include an application for a known vein or lode therein must be construed as a non-mineral land not contiguous thereto, for mining or mining purposes, not exceeding the quantity allowed for such purpose by Section 2337, United States revised statutes, or prior laws, under which the land was appropriated, the proprietors of such vein or lode may file in the proper land-office their application for a patent, under oath, in manner already set forth herein, which application, together with the plat and field-notes, may include, embrace and describe, in addition to the vein or lode, such non-contiguous mill-site, and after due proceedings as to notice, etc., a patent will be issued covering the same as one claim.

67. By Section 2330, it is declared that no location of a placer claim, made after July 9, 1870, shall exceed one hundred and sixty acres for any one person or association of persons, which location shall conform to the United States surveys.

68. Section 2331 provides that all placer mining claims located after May 10, 1872, shall conform as nearly as practicable with the United States surveys, and no such locations shall include more than twenty acres for each individual claimant.

69. The foregoing provisions of law are construed to mean that after the 30th day of July, no location of a placer claim can be made to exceed one hundred and sixty acres, whatever may be the number of locators associated together, or whatever the local regulations of the district may allow; and that from and after May 10, 1872, no location made by an individual claimant or any other party, and no location made by an association of individuals can exceed one hundred and sixty acres, which location of one hundred and sixty acres cannot be made by a less number than eight bona fide locators; and no local laws or mining regulations can restrict a placer location to less than twenty acres, although the locator is not compelled to take so much.

70. The regulations heretofore given as to the manner of marking locations on the ground, and placing the same on record, must be observed in the case of placer claims, and the same rules and regulations are applicable to the law requiring, however, that where placer claims are upon surveyed public lands the locations must hereafter be made to conform to legal subdivisions thereof as near as practicable.

The first duty in recognizing an application for patent upon a placer claim must be exercised in determining the exact classification of the lands. To this end the clearest evidence of which the case is capable should be presented.

If the claim be all placer, that fact must be stated in the application and corroborated by accompanying proofs; if of mixed placers and lodes, it should be so set out, with a description of all known lodes situated within the boundaries of the claim. A specific declaration, such as is required by Section 2323, revised statutes, must be furnished as to each lode intended to be claimed. All other known lode are, by the silence of the applicant, excluded by law from all claim by him, of whatever nature, possessory or otherwise.

71. Section 2385, revised statutes (Subdivision 7), requires the surveyor to "note in his field-books the true situation of all mines, salt licks, salt springs and mill-seats, which come to his knowledge;" also "all water-courses over which the lines he runs may pass." It further requires him to "note the quality of the lands." These descriptive notes are required by Subdivision 8 to be incorporated in the plat by the surveyor-general.

72. If these duties have been performed, the public surveys will furnish the requisite data to the district officers, and to claimants in prosecuting their applications. But experience has shown that great neglect has resulted from inattention to the law in this respect, and the regular plats are of very little value in the matter. It will, therefore, be required that all deputy surveyors shall, at their expense, and under the orders, make full examination of all placer claims surveyed by them, and duly note the facts as specified in the law, stating the quality and composition of the soil, the kind and amount of timber and other vegetation, the location and size of streams, and such other matters as may appear upon the surface of the claim. This examination should include the character and extent of all surface and underground workings, whether placer or lode, for mining purposes.

73. In addition to these data, which the law requires to be shown in all cases, the deputy should report with reference to the proximity of centers of trade or residence; also of well-known dens of population; and the district officers should also report as to the use or adaptability of the claim for placer mining; whether water has been brought upon it in sufficient quantity to mine the same, or whether it can be procured for that purpose; and, finally, what works or improvements have been made by the claimant or his grantors for the development of the claim, and their situation and location with respect to the same as applied for.

74. This examination should be reported by the deputy under oath to the surveyor-general, and duly corroborated; and a copy of the same should be furnished with the application for patent to the claim, constituting a part thereof, and included in the oath of the applicant.

75. Applications for awaiting entry, whether published or not, must be made to conform to these regulations, with respect to examination as to the character of the land. Entries already

made will be suspended for such additional proofs as may be deemed necessary in each case.

#### MILL-SITES.

64. Section 2337 provides that "where non-mineral land not contiguous to the vein or lode is used or occupied by the proprietor of a vein or lode for mining or milling purposes, such non-adjacent surface ground may be embraced and included in an application for a patent for such vein or lode, and the same may be patented therewith, subject to the usual mining requirements, as to survey and notice, and application, and so on; but no location hereafter made by a party for such purpose shall exceed five acres, and payment for the same must be made at the same rate as fixed by this chapter for the superficies of the lode. The owner of a quartz-mill or reduction-works, not owning a lode, in connection therewith, may also receive a patent for his mill-site, as provided in this section.

65. To avail themselves of this provision of law, parties holding the possessory right to a vein or lode, and to a piece of non-mineral land not contiguous thereto, for mining or milling purposes, not exceeding the quantity allowed for such purpose by Section 2337, United States revised statutes, or prior laws, under which the land was appropriated, the proprietors of such vein or lode may file in the proper land-office their application for a patent, under oath, in manner already set forth herein, which application, together with the plat and field-notes, may include, embrace and describe, in addition to the vein or lode, such non-contiguous mill-site, and after due proceedings as to notice, etc., a patent will be issued covering the same as one claim.

66. In making the survey in a case of this kind, the lode claim should be described in the plat and field-notes as "Sur. No. 37, A," and the mill-site as "Sur. No. 37, B," or whatever may be its appropriate number and designation, and the corner of the mill-site to a corner of the lode claim to be invariably given in such plat and field-notes, and a copy of the plat and notice of application for patent must be conspicuously posted upon the mill-site as well as upon the vein or lode. The statutory period of sixty days. In making the entry no separate receipt or certificate need be issued for the mill-site, but the whole area of both lode and mill-site will be embraced in one entry, the price being \$5 for each acre and fractional part of an acre embraced by such lode and mill-site claim.

67. In case the owner of a quartz-mill or reduction-works is not the owner or claimant of a vein or lode, the law permits him to make application therefor in the same manner prescribed herein for such claims, and to file his plat and field-notes, and a patent, in the absence of a valid adverse filing, to enter and receive a patent for his mill-site at said price per acre.

68. In every case there must be satisfactory proof that the land claimed is a mill-site, and that the same is not a lode claim, which proof, where the matter is unquestioned, consist of the sworn statement of two or more persons capable from acquaintance with the land to testify understandingly.

#### POSSESSORY RIGHT.

69. With regard to the proofs necessary to establish the possessory right to a mining claim, Section 2332 provides that "where such person or association, they and their grantors, have held and worked the claims for a period equal to the time prescribed by the statute of limitations for mining claims of the state or territory where the same may be situated, evidence of such possession and working of the claims for such period shall be sufficient to establish the right to a patent therefor under this chapter, in the absence of any adverse claim."

70. This provision of law will greatly lessen the burden of proof, more especially in the case of old claims located many years since, the records of which, in many cases, have been destroyed by fire, or lost in other ways during the lapse of time, but concerning the possessory right to which all controversy or litigation has long been settled.

71. When an applicant desires to make his proof of possessory right under the provisions of law, he will not be required to produce evidence of location, copies of conveyances or abstracts of title, as in other cases, but will be required to furnish a duly certified copy of the statute of limitation of mining claims of the state or territory where the claim is located, and a statement giving a clear and succinct narration of the facts as to the origin of his title, and likewise as to the continuation of his possession of the mining ground covered by his application; the area thereof; the nature and extent of the mining that has been done thereon; whether there has been any opposition to his possession or litigation with regard to his claim, and, if so, when the same ceased; whether such cessation was caused by compromise or by judicial decree, and any additional facts which the claimant may know or have known, and which he may desire to submit in support of his claim.

72. There should likewise be filed a certificate, under seal of the court having jurisdiction of mining cases within the judicial district embracing the claim, that no suit or action of any character whatever involving the right of possession to any portion of the claim applied for is pending, and that there has been no litigation of any kind or character affecting the title to said claim or any part thereof for a period equal to the time fixed by the statute of limitations for mining claims in the state or territory as aforesaid, other than that which has been finally decided in favor of the claimant.

73. The claimant should support his narrative of facts relative to his possession, occupancy and improvements by corroborative testimony of any disinterested person or persons of credibility who may be cognizant of the facts in the case, and are capable of testifying truthfully in the premises.

74. As a condition for the making of application for patent according to Section 2325, there must be a preliminary showing of



work or expenditure upon each location, either by showing the full amount sufficient to the maintenance of possession under Section 2324 of the pending year, or, if there has been failure, it should be shown that work has been resumed so as to prevent re-location by adverse parties after abandonment.

The "pending year" means the calendar year in which application is made, and has no reference to showing of work at date of the final entry.

75. This preliminary showing may, where the matter is unquestioned, consist of the affidavit of two or more witnesses familiar with the facts.

#### PROOF OF CITIZENSHIP OF MINING CLAIMANTS.

76. The proof necessary to establish the citizenship of applicants for mining patents must be made in the following manner: In case of an incorporated company, a certified copy of their charter or certificate of incorporation must be filed. In case of an association of persons unincorporated, the affidavit of their duly authorized agent, made upon his own knowledge or upon information and belief, setting forth the residence of each person forming such association, must be submitted. This affidavit must be accompanied by a power of attorney from the parties forming such association, authorizing the person who makes the affidavit of citizenship to act for them in the matter of their application for patent.

77. In case of an individual or an association of individuals who do not appear by their duly authorized agent, you will require the affidavit of each applicant, showing whether he is a citizen or a naturalized citizen, when and where born and his residence.

78. In case an applicant has declared his intention to become a citizen and has been naturalized, his affidavit must show the date, place and the incorporator's company, a certified copy of their charter from which his certificate of citizenship issued, and present residence.

79. The affidavit of the claimant as to his citizenship may be taken before the register or receiver, or any other officer authorized to administer oaths within the land district; or, if the claimant is residing beyond the limits of the district, the affidavit may be taken before the clerk of any court of record or before any notary public of any state or territory.

80. If citizenship is established by the testimony of disinterested persons such testimony may be taken at any place before any person authorized to administer oaths, and whose official character is duly verified.

#### ADVERSE CLAIMS.

81. Section 2326, and the act of April 26, 1882, provide for adverse claims, fix the time within which they shall be filed to have legal effect, and set forth the manner of their adjustment, etc.

82. An adverse mining claim must be filed with the register and receiver of the land office where the application for patent was filed, or with the register and receiver of the district in which the land is situated at the time of filing the adverse claim. It must be set on oath by the claimant, and may be verified by the oath of any duly authorized agent or attorney-in-fact of the adverse claimant, cognizant of the facts stated.

83. Where an agent or attorney-in-fact verifies the adverse claim, he must distinctly state that he is such agent or attorney, and accompany his affidavit by proof thereof.

84. The agent or attorney-in-fact must make the affidavit in verification of the adverse claim within the land district where the claim is located.

85. The adverse notice must fully set forth the nature and extent of the interference or conflict; whether the adverse party claims as a purchaser for valuable consideration or as a locator; if the former, a certified copy of the original location, the original conveyance, a duly certified copy thereof, or an abstract of title from the office of the proper recorder should be furnished; or if the transaction was a merely verbal one he will narrate the circumstances attending the purchase, the date thereof, and the amount paid, which facts he must verify by the affidavit of one or more witnesses, if any were present at the time, and if he claims as a locator he must file a duly certified copy of the location from the office of the proper recorder.

86. In order that the "adverse party" of the claim may be shown, it will be incumbent upon the adverse claimant to file a plat showing his entire claim, its relative situation or position with the one against which he claims and the extent of the conflict. This plat may be made from a direct survey by a United States deputy surveyor, who will officially certify thereon to its correctness; and in addition there must be attached to such plat of survey a certificate or sworn statement by the surveyor as to the approximate value of the labor performed or improvements made upon the claim by the adverse party or his predecessors in interest, and the plat must indicate the position of any shafts, tunnels or other improvements, if any such exist, upon the claim of the party opposing the application; and if such improvements were made from the plat, they will be filed by the application for patent describing the claim by legal subdivisions, the adverse claimant, if also claiming by legal subdivisions, may describe his adverse claim in the same manner without further survey or plat.

87. Upon the foregoing being filed within the sixty days as aforesaid, the register, or in his absence the receiver, will give notice in writing to both parties to the contest that such adverse claim has been filed, and inform them that the application for the adverse claim will be required within thirty days from the date of such filing to commence proceedings in a court of competent jurisdiction to determine the question of right of possession and mining the same with reasonable diligence to final judgment and that should such adverse claimant fail to do so, his adverse claim will be considered waived and the application for patent be allowed to proceed upon its merits.

88. When an adverse claim is filed as aforesaid, the register or receiver will indorse upon the same the precise date of filing and indorse a record of the date of notifications issued thereon, and thereafter all proceedings on the application for patent will be suspended, with the exception of the completion of the publication and posting of notices and plat and the filing of the necessary proof thereof, until the controversy shall have been determined by the court or the adverse claim waived or withdrawn.

89. Where an adverse claim has been filed and suit thereon commenced within the statutory period and final judgment determining the right of possession rendered in favor of the applicant, it will be incumbent upon the register or receiver to issue a certificate of the clerk of the court, setting forth the facts as to such judgment, but he must, before he is allowed to make entry, file a certified copy of the judgment, together with the other evidence required by Section 2329, revised statutes.

90. Where such suit has been dismissed, a certificate of the clerk of the court to that effect or a certified copy of the order of dismissal will be sufficient.

91. In no case will a relinquishment of the ground in controversy or other proof, filed with the register or receiver, be accepted in lieu of the evidence required.

92. Where an adverse claim has been filed, but no suit commenced against the applicant for patent within the statutory period, a certificate to that effect by the clerk of the state court having jurisdiction in the case, and also by the clerk of the circuit court of the United States for the district in which the claim is situated, will be required.

93. No entry can be made by an applicant for patent under Section 2325, revised statutes, or the assignee of such applicant, is not entitled to make entry under said section and in no case will the name of such party be inserted in the certificate of entry. This requirement has no reference to certificates under Section 2325.

94. Any party applying to make entry as trustee must disclose fully the nature of the trust and the name of the cestui que trust; and such trustee, as well as the beneficiaries, must furnish satisfactory proof of citizenship and the names of local clerks, as well as that of the trustee, must be inserted in the final certificate of entry.

95. No entry will be allowed until the register has satisfied himself by a careful examination that proper proofs have been filed, and that the points indicated in official regulations in force and that they show a sufficient bona fide compliance with the laws and such regulations.

96. The administration of the mining laws as prescribed by the regulations shall be, so far as applicable, adopted for and extended to Alaska.

(1) The ex-officio register, receiver and surveyor-general, while acting as such, and their clerks and deputy surveyors, will be exempt from the laws and regulations governing the official conduct and responsibilities of similar officers and persons under general statutes of the United States.

(2) The commissioner of the general land-office will exercise the same general supervision and control over the laws as is or may be exercised by him in other mineral districts.

#### APPOINTMENT OF DEPUTY SURVEYORS OF MINING CLAIMS—CHARGES FOR SERVICES AND PUBLICATIONS—FEES OF REGISTERERS AND RECEIVERS, ETC.

97. Section 2334 provides for the appointment of surveyors of mineral claims, authorizes the commissioner of the general land-office to establish the rates to be charged for surveys and for newspaper publications.

Under this authority of law the following rates have been established as the maximum charges for newspaper publications in mining cases:

(1) Where a daily newspaper is designated, the charge shall not exceed \$7 for each ten lines of space occupied; and where a weekly newspaper is designated as the medium of publication \$5 for the same space will be allowed. Such charges shall be accepted as full payment for publication in each issue of the newspaper for the entire period required by law.

It is expected that these notices shall not be so abbreviated as to curtail the description essential to a perfect notice, and the said rates established upon the understanding that they are to be in the usual body-type used for advertisements.

(2) For the publication of citations in contests or hearings involving the character of lands, the charges shall not exceed \$8 for five publications in weekly newspapers or \$10 for publications in daily newspapers for thirty days.

98. The surveyors-general of the several districts will, in pursuance of said law, appoint in each land district as many competent deputies for the survey of mining claims as may seek such appointment, it being distinctly understood that all expenses of these notices and surveys are to be borne by the mining claimant and not by the United States; the system of making deposits for mineral surveys, as required by previous instructions, being strictly adhered to, and regarding the law, the claimant having the option of employing any deputy surveyor within such district to do his work in the field.

99. With regard to the platting of the claim and other office-work in the office of the surveyor-general, the claimant may make an estimate of the cost thereof, which amount the claimant will deposit with any assistant United States treasurer or designated depository in favor of the United States treasurer, to be passed to the credit of the final creation of the claim, and depositing the same with the public lands, and file with the surveyor-general duplicate certificates of such deposit in the usual manner.

100. The surveyors-general will endeavor to appoint mineral deputy surveyors, so that one or more may be available in each district, and the greater extent of the work.

101. The usual oaths will be required of these deputies and their assistants as to the correctness of each survey executed by them.

The duty of the deputy mineral surveyor ceases when he has executed the survey and returned the field-notes and preliminary plat thereof with his report to the surveyor-general. He will not be allowed to receive claims for the same until he has given his support of an application for patent or otherwise perform the duties of an attorney before the land-office in connection with a mining claim.

The surveyors-general and local land-officers are expected to report any infringement of this regulation to this office.

102. The law requires that each applicant shall file with the register and receiver a sworn statement of all charges and fees paid him for publication of notice and for survey, together with all fees and money due the register and receiver, which sworn statement is required to be transmitted to this office for the information of the commissioner.

103. Should it appear that excessive or exorbitant charges have been made by any surveyor, or any publisher, prompt action will be taken with the view of correcting the abuse.

104. The fees payable to the register and receiver for filing and acting upon applications for mineral land patents are \$5 to each officer, to be paid by the applicant for patent at the time of filing, and the like sum of \$5 is payable to each officer by an adverse claimant at the time of filing his adverse claim. (Section 228, revised statutes, paragraph 9.)

105. All fees or charges under this law may be paid in United States currency.

106. The register and receiver will, at the close of each month, forward to this office an abstract of mining applications filed and a register of receipts, accompanied with an abstract of mineral lands sold and abstract of adverse claims filed.

107. The fees and purchase money received by registers and receivers must be placed to the credit of the United States in the receiver's monthly and quarterly account, charging up in the disbursing account the amount of the register and receiver, who must be respectively entitled as fees and commissions, with limitations in regard to the legal maximum.

#### PROCEEDINGS BEFORE THE REGISTER AND RECEIVER AND SURVEYORS-GENERAL IN CONTESTS AND HEARINGS TO ESTABLISH THE CHARACTER OF LANDS.

108. The rules of practice in cases before the United States district land-offices, the general land-office, and the department of the interior, approved August 13, 1885, will, as far as applicable, govern in all cases and proceedings arising in contests, and hearings to determine the mineral or non-mineral character of lands.

109. The only tracts of public lands that will be withheld from entry as agricultural land on account of its mineral character will be such as are returned by the surveyor-general as mineral; and even the presumption which is supported by such return may be overcome by testimony at a regular hearing.

110. Hearings to determine the character of land, as practically distinguished, are of two kinds:

(1) Where lands which are sought to be entered and patented as agricultural are alleged by affidavit to be mineral, or when sought as mineral their non-mineral character is alleged.

The proceedings relative to this class are in the nature of a contest between two or more known parties.

(2) When lands are returned as mineral by the surveyor-general.

When such lands are sought to be entered as agricultural, notice must be given by publication for thirty days, with posting in the local office for the same period.

111. At the hearings under either of the aforesaid classes, the claimants and witnesses will be thoroughly examined with regard to the character of the land; whether the same has been thoroughly prospected; whether or not there exists within the tract or tracts claimed any lode or vein of quartz or other rock in place, bearing gold, silver, emerald, lead, tin or copper, or other valuable deposit which has ever been claimed, located, recorded or worked; whether such work is entirely abandoned or whether occasionally resumed; if such does exist, by whom claimed, under what designation, and in which subdivision of the land it lies; whether any placer mine or mines exist upon the land; if so, what is the character thereof—whether of the shallow surface description or of the deep rock-bed, lode or gravel deposits; to what extent mining is carried on when water can be obtained, and what the facilities are for obtaining water for mining purposes; upon what particular top-acre subdivisions mining has been done, and at what time the land was abandoned for mining purposes, if abandoned at all.

112. The testimony should also show the agricultural capacities of the land, what kind of crops are raised thereon, and the value thereof; the number of acres actually cultivated for crops of cereals or vegetables, and the number of acres actually used in division such crops are raised; also which of these subdivisions embraces the improvements, giving in detail the extent and value of the improvements, such as house, barn, vineyard, orchard, fencing, etc., and mining improvements.

113. The testimony should be as full and complete as possible; and in addition to the leading points indicated above, where an attempt is made to prove the mineral character of lands which have been entered under agricultural pretenses, it should be stated at what date, if at all, valuable deposits of mineral were first known to exist on the lands.

114. When the case comes before this office, such decision will be made as the law and the facts may justify; and in cases where a survey is necessary to a part of the mineral from the agricultural land, the necessary instructions will be given to enable the proper party, at his own expense, to have the work done, at his option, either by United States deputy, county or other local surveyor. The survey, in cases where the mineral is vein or lode claims, must be executed in such manner

as will conform to the requirements in Section 2324, United States revised statutes, as to length and width and parallel end-lines.

115. Such survey when executed must be properly sworn to by the surveyor, either before a notary public, officer of a court of record or before the register or receiver; the deponent's character and credibility to be properly certified to by the officer administering the oath.

116. Upon the filing of the plat and field-notes of such survey, duly sworn to as aforesaid, you will transmit the same to the surveyor-general for his verification and approval; who, if he finds the work correctly performed, will properly mark out the same upon the original township plat in his office, and furnish such plat, together with a description on both the original and local land-office, and to this office, to be affixed to the duplicate and triplicate township plats respectively.

117. With the copy of plat and description furnished the local office and this office as aforesaid, you must send a diagram, verified by the surveyor-general, showing the claim or claims segregated, and designating the separate fractional agricultural tracts in each forty-acre legal subdivision by the proper lot number, beginning with No. 1, in each section, and giving the area in each lot, the same as set forth in Paragraph 45, in the survey of mining claims on surveyed lands.

118. The fact that a certain tract of land is decided upon testimony to be mineral in character is by no means equivalent to an election to a mineral right, and is not to be construed to give sixty days' publication of notice, and posting of diagrams and notices, as a preliminary step; and then, before he can enter the land, he must show that the land yields mineral; that he is entitled to the necessary right by such publication, in compliance with local customs or rules of miners or by virtue of the statute of limitations; that he or his grantors have expended, in actual labor and improvements, an amount of not less than \$500 thereon, and that the claim is one in regard to which there is no controversy or opposing claim. After all these proofs are met, he is entitled to have a survey made at his own cost where a survey is required, after which he can enter and pay for the land embraced by his claim.

119. Blank forms for proofs in mineral cases are not furnished by the general land-office.

THOMAS H. CARTER, COMMISSIONER.

Approved December 10, 1891.

JOHN W. NOBLE, Secretary.

#### DECISIONS OF THE SECRETARY OF THE INTERIOR.

##### MINING CLAIM—PUBLICATION OF NOTICE.

1. The notice of application for mineral patent must be published in the newspaper issued nearest to the claim, and notice by publication should be strictly observed in order to give jurisdiction.

2. A case cannot properly be referred to the board of equitable adjudication for settlement where no legal notice has been given of the application for patent, and such omission is complained of. Had been given protestants to assert their rights, if they have any. [Rendered February 5, 1892.]

##### MINING CLAIMS—MILL-SITE IMPROVEMENTS.

1. The erection and maintenance in good faith of dwelling-houses for the occupancy of workmen employed for purposes in connection with a mill for the reduction of ores is sufficient to constitute entry of the land and will justify the granting of a mill-site.

2. The erection of such houses is clearly a substantial use and improvement of the land. They become a part of the realty and would pass by a conveyance of the land, and when such houses are erected for the accommodation of workmen employed in connection with the mill the land is used for milling purposes. [Rendered February 11, 1892.]

##### ADVERSE PROCEEDINGS.—REGULATIONS.

1. The department of the interior, in the exercise of its discretion, may suspend the regulations in order to avoid the perpetration of an act of injustice.

2. The failure of an adverse claimant, who appears as a transferee, to furnish an abstract of title, will not defeat his right to be heard where he has, in good faith, complied with the regulations so far as he is responsible for doing so.

3. The omission to file an abstract should be treated as an irregularity and not as a defect that vitiates the adverse claim. Where no one is injured by the omission it would be extremely technical to treat it as a good cause for rejecting the claim.

4. The non-compliance in this case was with the requirement of a rule and not a statute, and the rule should not be so strict as to require an impossibility or to work an injustice.

5. A court may, under certain circumstances, avoid an act of injustice by the suspension of its rules, when its discretion may be fairly exercised. [Rendered July 18, 1892.]

##### SURVEY. OFFICIAL CIRCULAR DEC. 4, 1884.

1. In the survey of a mining claim the end-line must terminate at the point where the mineral lode, in its onward course or "strike," intersects an older or senior location, and the regulations of December 4, 1884, to this effect are not in conflict with statutory provisions.

2. The right of location upon the mineral lands of the United States is a privilege granted by congress, but it can only be exercised within the limits prescribed by the grant. A location can only be made where the law allows it to be done. Any attempt to go beyond that will avail nothing. Hence a re-location on lands actually covered at the time by another valid and subsisting location is void, and this not only in regard to a prior location, but against all the world, because the law allows no such thing to be done. [Rendered July 18, 1892.]

# DIGESTS OF CORPORATION, LIEN AND MINING LAWS OF THE STATES AND TERRITORIES OF THE UNITED STATES

1892

COMPILED EXPRESSLY FOR THE MIXING DIRECTORY

## ALABAMA

Compiled by PHILASS, TORREY & HANAW, Attorneys at Law,  
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### CORPORATIONS.

(Code of Alabama, Secs. 457 et seq.)

Corporations may be formed by two or more persons, who shall file in the office of the judge of probate of the county wherein said corporation shall have its place of business, a declaration signed by each of them, stating:

1. Names and residences of subscribers.
2. Name and style of the proposed corporation.
3. The amount of capital stock and the number of shares in which it is divided.
4. The general purposes of the corporation and the nature of the business proposed.
5. The principal place of business of the corporation.
6. Such other matters as the incorporators may deem it desirable to state.

**COMMISSIONERS ISSUED.** On the filing of the declaration above mentioned the judge of probate must issue a commission to two or more subscribers, who are then authorized to open books of subscription.

**SUBSCRIPTIONS TO STOCK.** All subscriptions must be payable in money, but the commissioners may receive subscriptions payable in money, the subscriber reserving at the time the privilege of discharging the same in the rendition of services or labor for the corporation at the reasonable value thereof, or of such property as the corporation has the capacity to acquire and hold, at the reasonable value thereof, provided the nature and character of the property and when it is to be transferred or conveyed be stated in the subscription.

**ORGANIZATION.** When fifty per cent. of the capital stock has been subscribed in good faith by subscribers of whose solvency the commissioners are satisfied, they shall call the subscribers together at a time and place fixed by them for the election of directors and officers. The directors must consist of not less than three or more than nine stockholders, who had offer for twelve months, at such organization meeting an officer must be designated to receive from the commissioners the subscription for stock, and such officer shall thereupon require payment in cash of twenty per cent. of such subscription from each subscriber who has not reserved the privilege of discharging such subscription in stipulated services or conveyance of property; and from the subscribers who have reserved the privilege of discharging their subscriptions in services or property, contracts in writing binding them to the rendition of the services or to make transfer of the property at such times as the board of directors may appoint.

The proceedings of the meetings must be reduced to writing, signed by the subscribers and delivered to the commissioners, who must return and file the same with the judge of probate. The officer designated to receive the subscriptions must make a copy thereof, verified by his affidavit, stating in such affidavit from which of the subscribers he has received the cash payment and from which he has received contracts as above mentioned. This copy must also be filed in the office of the judge of probate. Upon the filing of these papers the judge of probate issues a certificate of incorporation.

**POWERS OF CORPORATIONS.** 1. To have succession by the corporate name for the period expressed in the declaration; and, if a period of time be not expressed, perpetually. 2. To sue and be sued, and, if deemed necessary, to have a corporate seal, and the same to alter at pleasure. 3. To hold, purchase, dispose of and convey such real and personal property as the nature of its business and the purposes for which it is formed may require. 4. To appoint such officers and agents as may be deemed necessary for the transaction of its business and the management and control of its affairs and property. 5. To make all needful by laws, rules and regulations for the transaction of its business, the

management and control of its affairs, and the uses and disposition of its property and for the transfer of its stock, and for the creation and preservation of a lien upon the shares of its stockholders for the payment of any debt or liability they may incur to the corporation. 6. To carry on the business or accomplish the purposes expressed in the declaration. 7. To borrow money, and to mortgage or otherwise convey or pledge its property, real or personal, and its franchises, to secure the payment of the money so borrowed, or any other debt contracted by it; but it has not power to borrow a sum exceeding its capital stock, or at a rate of interest exceeding eight per cent., payable semi-annually; nor must such mortgage, conveyance or pledge be made otherwise than by the consent of the holders of the larger part in value of the capital stock, expressed by vote, at a meeting of the stockholders called for that purpose, of the time and place of which meeting, and of the purpose for which it is called, thirty days' notice is given each stockholder personally, whose residence is known, and by publication for four consecutive weeks in the newspaper published nearest the place of business of the corporation.

**ADDITIONAL POWERS.** Such corporation, when duly organized, has, in addition, power to locate, construct and operate, to and from its mines, furnaces, mills, factories, quarries or other works, railways, tramways, canals or roads, or to acquire by purchase railways, tramways, canals or roads, whereby a connection may be made to and with the principal place of its business, its mines, furnaces, mills, factories, quarries, other work, and any public highway, turnpike, macadamized, plank or other graded road, or railroad, or navigable waters, or to or with its mines, ore-beds, coking or cooling grounds, or timber lands; or equals or equivalents to and from its mills, or factories, or furnaces, or quarries, and any waters or water-courses; and such corporation has also power to transport, as a common carrier, persons or property on any railroad, or other road, or on any canal or aqueduct, constructed or purchased by it, taking reasonable compensation. If necessary in the construction of such canals, aqueducts, railways, tramways or roads, the corporation has power to condemn lands, or an interest or easement therein, private property, for a way and right of way, in the mode prescribed by law, such way and right of way not exceeding one hundred feet in width throughout the whole length of such canal, aqueduct, railway, tramway or road; and without the consent of the owner of the land, the same must not be constructed through the yard, garden, orchard, stable-yard, chicken-house, barn or through the eutridge of a dwelling-house; and such corporation has power to erect, at such place as may be deemed convenient for its uses, depots, or other buildings, or structures, or wharves; or any other buildings, or structures, or wharves, or boats, or other vessels, or boats, for the transportation of its products or property; and may aid in the construction of railroads, or in the establishment of lines of vessels or boats, running to and from such depots, or other buildings, or structures, or wharves; but the owner of any land which may be taken under the provisions of this section shall have the right to have all his property, of like kind with that transported by the corporation, carried by such corporation over or upon such canal, railway or tramway, upon the payment of a just and reasonable compensation for such carriage.

**CROSSING PUBLIC ROADS, STREETS, NAVIGABLE WATERS.**—Corporations, in construction of their railways, tramways or roads, may cross public highways or roads, but must place same in satisfactory condition. They may likewise cross any navigable streams, but must not impair navigation.

**CONSOLIDATION OF MINING AND QUARRYING CORPORATIONS.** Any two or more may consolidate, upon recommendation of the boards of directors of each corporation, a majority voted by a majority in value of capital stock. When the proposition of consolidation has been adopted and the agreement therefor reduced to writing under the corporate seals, stating the consolidated name to be in the course of the stockholders, and its terms and conditions, such agreement must be recorded in the office of the judge of probate where such corporations are located, and such consolidation is thereby completed.

**NAME AND CHARTER OF NEW CORPORATION.**—The consolidated corporation may adopt the name and charter of either corporation, and may make such changes as to amount of stock and directors as may be deemed proper.

**PRIORITY RIGHTS.**—The **CHARTER** of a new corporation. The consolidated corporation is entitled to all the property and rights of each, and liable for the debts of each, and pending suits shall proceed in the name of the consolidated corporation.

**BOARD OF DIRECTORS.**—Are elected annually by the stockholders. Vacancies are filled by the board of directors.

**INCREASE OF CAPITAL STOCK.**—Capital stock may be increased to a sum not exceeding ten million of dollars, but the stockholder holding the larger amount in value of the capital stock. Thirty days' notice of a meeting called for this purpose must be given each stockholder personally, and by publication in a newspaper published in the place where the corporation is located. The proceedings of the meeting, signed by the president, must be filed and recorded in the office of judge of probate. Stockholders are entitled to a preference in taking the increased stock.

**MAY ALTER OR AMEND THE CHARTER.**—Corporations may, at a vote of not less than three-fourths of the stockholders, holding not less than two-thirds in value of the stock, alter or amend the charter by filing, in the office of the judge of probate where the original declaration is filed, a declaration in writing, signed by one or more of the signers, stating that the statements of the affidavit are true, and that the signers sign the same, and by the presence of an attorney, or of an agent, or of a person authorized by the filing of such declaration, the judge of probate issues a certificate authorizing the corporation to do business under the amended declaration. (Acts of Alabama, 1888-89, p. 29.)

**MAY HOLD STOCKHOLDERS' AND DIRECTORS' MEETINGS IN OTHER STATES OF THE UNION.**—Meetings may be held in other states by a vote, at a meeting of the directors or stockholders, whenever all of the Alabama stockholders concur in writing, and provided such corporation shall keep an office, agent and place of business within the state, and within thirty days after such meeting shall deposit with such agent a certified copy of the proceedings of such meeting, which certified copy shall be received in writing in all courts in this state, in lieu of the original, and which certified copy shall at all times be subject to inspection by any person lawfully entitled to demand such inspection. Failure to keep such certified copy on deposit is cause for proceedings to dissolve the corporation. The proceedings must also be filed in the office of the judge of probate in the county where its agent and principal place of business are kept, a declaration showing the name and style of such agent, and the place where certified copies of its records are kept. Section 76. Process on such application may be decreed and taken as service of process on the corporation. (Acts of Alabama, 1888-89, page 76.)

**LEGAL SERVICE OF PROCESS** is obtained against a corporation by leaving copy of process in the hands of its agent or other head thereof, secretary or agent. (Code of Alabama, Sec. 2657.)

Stockholders are personally liable only for amount of unpaid subscription on stock. (Constitution of Alabama, p. 47, Sec. 8.)

**FOREIGN CORPORATIONS.**—No foreign corporation shall do any business in this state without having at least one known place of business and an authorized agent or agents therein, and such corporation may be sued in any county where it does business by service of process upon an agent anywhere in this state. (Constitution of Alabama, p. 47, Sec. 4.)

An instrument in writing under the seal of the company, signed officially by the president and secretary, designating at least one known place of business, and an authorized agent, must be filed in the office of the secretary of state at Montgomery, and changes of agents must in like manner be filed. Any person acting for such corporation before compliance with this act is subject to a penalty of \$500, and any company so transacting business within this state before compliance with this act is subject to a penalty of \$1,000. (Acts of Alabama, 1886-87, p. 102.)

## LIENS.

Liens of mechanics and material-men, under Sec. 3018, code of Alabama, et seq., and as amended by acts of 1880-91, page 578, are governed as follows:

**LIENS DECLARED.**—Every mechanic, firm, association, corporation or other person furnishing labor or material for any building or improvement or utility on land by contract with the owner, his agent or contractor or sub-contractor, has a lien on such and on the land improved thereby to the extent of the interest of the owner. The lien on the land extends only to a work or material such shall extend only to the unpaid balance due the contractor. If the owner shall before payment demand a list of the persons furnishing labor or materials, with the terms and price thereof, which the contractor may, and such payment shall be a proper credit on the contract. Failure to demand such list subjects the property to a lien for the full amount due to material-men and employes from the contractor. Failure by the contractor to furnish such list may, as a condition of his contract, be punished for obtaining money under false pretenses.

**LIEN FILED.**—Statement of the amount due for labor or materials furnished must be filed in the office of judge of probate within ninety days from the last day on which labor was performed or material furnished, and suit to enforce the lien must be brought within six months thereafter.

**NOTICE TO OWNER.**—A person having a lien under this statute shall give notice to the owner, ten days before filing his

lien, that he looks to the building or improvement for the payment of his claim.

**PRIORITY OF LIEN.**—Such lien has a priority over all other liens, mortgages or incumbrances on the land subsequently created, and as to buildings or improvements shall have priority whether such mortgage or incumbrance was subsequently created or existing at the time of the performance of the labor or furnishing of material, and it may be enforced by the sale of such building or improvement, which may be removed by the purchaser.

**HOW SUITS ARE BROUGHT.**—In suits brought to enforce a lien the owner shall contain a description of the property on which the lien is claimed, and such other facts necessary to entitle the plaintiff to the lien and the enforcement thereof. Publication shall be made as to non-residents upon whom process cannot be served, as in attachment cases. The lien may be enforced either in the circuit or other court of like jurisdiction, or chancery court, except liens under \$100, which must be enforced in justice court.

**ENFORCEMENT OF JUDGMENTS.**—Judgments establishing liens are enforced by writs of fieri facias or venditioni exponas. **LIEN MAY BE ASSIGNED.**—The lien may be assigned, and the assignee is thereby invested with all the rights and remedies of the original holder.

**COSTS AND ATTORNEYS' FEES.**—The lien when enforced by suit covers all costs and an attorney's fee, in the discretion of the court, not exceeding \$25.

## MILLDAMS.

The laws relating to dams for mills, gins and factories, under Secs. 3184 et seq., code of Alabama, are as follows:

**ERRATA.**—A dam or mill, gin or factory, on a mill, sawmill, gin or factory to be operated for the public may be erected across any water-course, not a navigable stream, by the owner in fee of both sides, or of one side.

**APPLICATION.**—Application in writing for such erection must be filed in the office of judge of probate, and must be verified by affidavit. If land on both sides is the property of applicant, application must be made in county where the dam is to be erected; if by owner of one side only it must be made in the county opposite where proposed site of the dam lies. The application must set forth the right of applicant to make same, the purpose of the dam, description of the land by sectional division and subdivision, township and range, and name of stream if it has one, and location of the dam, name of owner of opposite side and residence if known, and who such owner is of sound mind and of full age.

**WRIT OF AD QUOD DAMNUM.**—When such application is filed the judge of probate issues summons for seven disinterested freeholders to meet at the office of the judge of probate within ten days or more than thirty days from the filing of the application, to inquire touching the matters contained therein.

**NOTICE TO OPPOSITE OWNER.**—Ten days' notice must be given to opposite owner, which may be served upon his agent or agent of a non-resident, and may be given by publication for three weeks in nearest newspaper.

**MODE OF EXECUTING WRIT; CHARGE TO AND DUTIES OF JURY.**—The sheriff and the jury must attend on the day appointed, and after the jury are sworn by the sheriff to discharge their duties fairly and to the best of their ability, they must be charged by him:

1. To examine the land above and below belonging to others which may probably be overflowed or injured, and ascertain and assess the damages resulting from the erection of such dam to the several owners of such lands.
2. To ascertain whether the residence of any of such owners or of the out-houses, inclosures, gardens or orchards thereto immediately belonging will be overflowed.
3. To ascertain whether the health of the neighborhood will probably be endangered.
4. To ascertain whether any other mill, gin, factory or water-work will be overflowed.

**WRIT OF ONE ACRE OF LAND ON OPPOSITE SIDE TO BE ASSIGNED.**—If the applicant is not the owner of the land on both sides of the stream, the jury must also be charged to ascertain and assess the value of one acre of land on the opposite side of the stream where the applicant would abut his dam, and to locate and circumscribe the same by metes and bounds, having due regard to the interest of all parties.

**PARTIES SUMMONED.**—On the return of the inquest the owner of the land to be assessed, and also owners of lands found by the inquest to be liable to damage, are summoned to show cause why the application should not be granted. Ten days' notice to such parties must be given by personal service if they are within the county, or if not by posting up a copy at a conspicuous place on the several tracts of those who cannot be found.

**APPLICATION REJECTED, WHEN.**—The application must not be granted if it appears from the inquest or evidence that the residence, out-houses, inclosures, garden or orchard of any owner will probably be overflowed, or that the health of the neighborhood will probably be endangered, or that any other mill, gin, factory or water-works will be overflowed. If such results will not probably ensue, the application must be granted.

**PAYMENT OF ASSESSMENT.**—If the application is granted, the applicant must within three months thereafter pay the several owners, or to the judge of probate for their use, the sums assessed. Failure to so pay operates as a rescission of the application. **CONFESSION OF ASSESSMENT.**—On making such payment, the applicant is vested with a qualified estate in fee to the acre of land located and circumscribed by the jury, to become absolute on performance of the following conditions: First, that the dam, gin or factory be commenced within one and finished within three years from the date of the grant; second, that whenever the dam or mill, gin or

STATE DIGESTS]

factory is destroyed or materially impaired, the same must be repaired or rebuilt within three years thereafter; but if the owner of such dam is an infant or person of unsound mind, he is allowed the same length of time after the removal of such disability, to commence, finish, rebuild or repair.

**WHEN CANAL IS NECESSARY FOR THE ERECTION OF MILL, GIN OR FACTORY.**—The same proceedings are necessary as when it is proposed to erect a dam.

**REVERSION AND REVOCATION OF GRANT.** Failure to comply with the conditions required by law operates as a revocation by the grantor, and the land reverts to his former owner or his heirs, of the grant, and the land reverts to his former owner making affidavit that he is interested, and giving security for costs, may become a party and contest such application.

**WHO MAY OBTAIN AFRANCHISEMENT.** Any person making affidavit that he is interested, and giving security for costs, may become a party and contest such application.

**LIABILITY FOR BUILDING OR RAISING DAM WITHOUT AUTHORITY.**—Any person building a dam authorized by law, is liable in respect of damages to the party injured thereby.

**APPEALS.**—Any land-owner, if dissatisfied with the assessment of damages made or had, may appeal within twenty days to the circuit court of the county, on giving security for costs.

ALASKA

The United States mining laws are the laws in force and relating to mining in the district of Alaska. See "Organic act," an act of congress approved May 17, 1884, Section 8, entitled "An act providing a civil government for Alaska." There is no special statute relating to quarries, but under the rulings of the courts "quarries" are classed as mineral claims, and quarries may be located and patented as placer mining or stone quarries. The patentee owns all minerals found within its bounds, except known lodes. And doubtless he owns to the same extent under a location before patent. (See Frazer's Discovery, 21 Pac. 20; Morrison's Mining Rights, 7th ed., page 132.) The aforementioned "organic act" provides in Section 7 "that the general laws of the state of Oregon now in force are hereby declared to be the law in said district, so far as the same be applicable and not in conflict with the provisions of this act or the laws of the United States"; hence the laws of Oregon in force on May 17, 1884, are the laws of Alaska relating to liens.

ARIZONA

Compiled by FRANCIS J. HENNE, Attorney at Law,  
Tucson, Ariz.

[The ambiguities, bad grammar and worse punctuation contained in the following digest are due to literal transcription of sections of the code which have not as yet been construed by our courts.—F. J. H.]

CORPORATIONS.

**MINING FORMATION OF.**—Any number of persons may associate themselves together and become incorporated for the transaction of any lawful business. Articles of incorporation must contain:

1. Names of corporators, name of corporation and principal place of transacting business.
2. General nature of the business proposed to be transacted.
3. Amount of capital stock authorized and times when and conditions upon which it is to be paid in.
4. The time of commencement and termination of corporation.
5. By what officers or persons affairs of corporation are to be conducted and times at which they are to be elected.
6. Highest amount of indebtedness or liability to which the corporation is at any time to be exempt from corporate debts. Unless so exempted stockholders are liable for debts of the corporation, in the proportion which their stocks bears to the whole capital stock.

Every corporation shall be organized in the county in which its principal place of business is located or works established, if there be one, and, if not, then in some newspaper having a general circulation in such county, a copy of its articles of incorporation.

Corporations for the transaction of any work of internal improvement may be formed to endure for fifty years; those formed for any other purposes shall not exceed thirty-five years in duration, but in either case they may be renewed from time to time for a period not greater than was at first permissible, when three-fourths of the votes cast at any regular election held for that purpose shall be in favor of such renewal.

Before commencing any business, except that of their own organization, they must be acknowledged by them, as deeds are required to be acknowledged, and recorded in a book for that purpose, in the office of the county recorder of the county where the principal place of business is to be. The corporation may commence business as soon as the articles are filed for record in the office of the county recorder, and their acts shall be valid if the publication in a newspaper is made, and the copy filed in the

office of the secretary of the territory where such filing is necessary, within three months from such filing in the recorder's office. No change in any of the foregoing provisions shall be valid unless recorded and published as provided in this act, in any manner which would be inconsistent with the provisions of this act.

The corporation shall not be dissolved prior to the period fixed upon in the articles of incorporation, except by majority of stock of its members, unless a different rule is adopted in the articles. And no such premature dissolution shall take place until its organization, created by the newspaper publication, is refused to comply substantially with the articles of incorporation shall be a misdemeanor, and, upon indictment and conviction in a court of competent jurisdiction, the party or parties so offending shall be punished by a fine of not less than \$100, nor more than one year, or a fine and imprisonment both, for three months nor more than one year, and any person who has sustained injury from any such fraud may also recover damages therefor against the books or accounts by any corporation intentionally kept of false books or accounts by any corporation whereby anyone is injured shall be a misdemeanor on the part of those concerned therein, and they upon trial and conviction of those concerned therein, and they upon trial and conviction shall be fined any sum not less than \$100 nor more than \$1,000.

Transfers of the stock shall not be valid, except as between the parties thereto, until the same are regularly entered upon the books of the company so as to show the names of the persons by whom and to whom the shares and the date of the transfer, or other designation of the stock, shall be so kept as to show intelligently the original stockholders, their respective shares, and the amount which has been paid therefor, so far as they relate to such books as are mentioned in this section, shall at all times be subject to the inspection of any stockholder desiring the same.

Any corporation organized or attempted to be organized in accordance with the provisions of this act shall cease to exist by non-compliance of its franchisees for five years at any one time; but such body shall not forfeit its franchisees by reason of any such non-compliance, if the franchisees, at any time preceding the expiration to elect officers or to hold meetings, or to amend their charter, by the by-laws. Corporation organized or attempted to be organized in accordance with the provisions of this act shall nevertheless, continue to act for the purpose of closing up the business, but for no other purpose.

Nothing herein shall exempt the amount of the unpaid installment from individual liability of the amount of the unpaid installment on the stock owned by them or transferred to them for the purpose of defrauding creditors; and an execution against the corporation to that extent may be levied upon the private property of such individual.

For the purpose of making repairs, building or enlarging or extending works, or to meet contingencies, or for the purpose of providing a sinking fund for the payment of debts, the corporation may establish a fund and loan the same out from time to time, taking in any case a good and sufficient security for the payment of the same.

In any proceeding by or against a corporation, the court shall have the power to compel the officers of the corporation, or the motion of either party, upon proper cause being shown, to produce the books of the corporation, and when so produced either party may use the same in evidence.

Persons acting as a corporation under the provisions of this act shall be presumed to be legally organized until the contrary is shown, and no such franchise shall be declared to be actually null and forfeited, except in a regular proceeding brought for that purpose, or persons acting as a corporation under the provisions of this act shall be permitted to set up or rely upon the provisions of a legal organization as a defense to any action brought against them as a corporation, but shall any person who may be sued on a contract made with such corporation or sued for an injury done to its property, or for a wrong done to its interests, be permitted to rely upon such want of legal organization in his defense.

No corporation organized under the provisions of this act for the purpose of doing a mining or manufacturing business shall have power to construct or operate any railroad, tramway, turnpike or canal, except such as may lead from its principal place of business to some public stream or to some existing place of business, or to some public highway.

**INCORPORATIONS.** Any company organized under the laws of any other state or territory for any enterprise, business, pursuit or occupation whatsoever to be carried on, or the principal office or place of business of which is proposed to be within this territory, shall make and file certified and duly authenticated copies of their articles of incorporation with the secretary of this territory and the county recorder of the county in which the principal office or place of business is located, such company or a company organized in a foreign country for like company, or a company organized in a foreign country, and the purpose, shall file with the secretary of this territory and the county recorder of such county the laws and appointment of an agent upon whom all notices and processes, including service of legal papers, may be served, and when so served shall be deemed and held to be a lawful personal service for all purposes and intents, and the appointment of such agent shall be signed by its president, manager or secretary, and shall contain the name and residence of the agent, and should any agent so appointed be absent from the county in which his appointment is made for a period of two months consecutively, and no other agent be appointed for such corporation within four

months after the commencement of such absence of such agent, the right to transact business by the corporation represented by such agent shall cease, and all acts or contracts performed or made thereafter shall, at the option of any person interested, be declared null and void. Compliance with the provisions contained in the full rights of possession enjoyed by any company organized under the territorial laws; provided that a corporation organized under the laws of any foreign country shall take, receive, possess, hold, acquire or own at any one time not more than five hundred acres of real estate, exclusive of any claims to mine and mineral lands and land necessary or convenient for milling, smelting, reducing or working ores, or for manufacturing or commercial purposes.

#### LIENS.

All persons who may labor or furnish material of any kind in the construction and repair of canals, water-ditch, canal, water-ditch, flume or aqueduct or reservoir, bridge, fence or other structure or improvement, and to whom money or wages are due or owing therefor, shall hereafter have a lien upon the same for such sums as are unpaid. All miners, owners and persons who may lease and all persons who may furnish material of any kind designed or used in or upon any mine or mining claim, and to whom wages are due for such labor or material, shall have a lien upon the same for such sums as are unpaid. The wages agent as used in this act shall be construed to include all contractors, sub-contractors, architects, builders and persons who have the charge or control of any mine, mining claim, canal, water-ditch, flume, aqueduct, reservoir, fence, bridge, mill, manufactory, hoisting-works or other property, thing or structure, and who have performed or furnished material furnished. The liens provided for in this act are preferred to all liens, mortgages and other encumbrances which shall have attached upon the property subsequent to the time when the labor was commenced, or the material conveyed to be furnished. Also to all liens, mortgages and other encumbrances of which the lien-holder had no notice, either actual or constructive, at the time he commenced the labor or commenced to furnish the material.

No lien created by this act shall continue for a longer period than six months after the filing thereof in the county recorder's office of the proper county, unless said lien is brought within such period in the proper court to enforce the same. In suits for such liens all lien-holders interested may be joined as plaintiffs where their interests do not conflict, and in case of conflict of interests a part may be joined as plaintiffs and a part may be made defendants. The assignee of any contract or account for material furnished or labor performed may defend, file, record and enforce the same as if he had been the original owner or holder thereof.

The procedure to enforce the lien provided in this act shall be the same as in other civil cases.

#### MIXING.

The mining districts heretofore or hereafter created in the several counties of this territory are hereby authorized and empowered to make all necessary rules and regulations for the location, siting and working of mines therein, provided that all locations and registrations of mines and mineral deposits heretofore made shall be filed with the county recorder for record within sixty days after the same shall have been located. Size of claim, manner of location and annual work required to be done thereon are regulated solely by United States statutes.

**DRAINAGE.**—Whenever adjacent or contiguous mines, whether worked upon the same or separate lodes, have a common ingress or common drainage, they shall bear their proportionate share of such drainage expense to prevent the flowing of water upon neighboring mines. In case of failure to drain whereby occupants of adjacent or contiguous mines are compelled to provide for water from their own lodes, the parties in default shall pay their proportion of actual and necessary cost of providing for said water, to be recovered by action. Common interests may unite in draining such mines, in a corporation, with all the rights, incidents and liabilities of a corporation, so far as the same may be applicable. Failing to agree as above indicated, one or more of said parties, after reasonable notice to others interested, may drain, dividing and recovering by action the proportionate expense thereof. In an action to recover such expense, examination of the mines may be had before trial under order of court upon at least three days' notice, provided defendant has refused plaintiff or his agent the privilege to make said examination. These provisions do not apply to corporate and unincorporated companies.

**MINES, HOW SOLD BY PROBATE COURT.**—Mines or interests therein belonging to estates of decedents may be sold by order of probate court having jurisdiction of the estate, upon petition by heirs in interest, and the same shall be sold to all persons interested in the estate of order to show cause, etc.

#### WATER-RIGHTS.

The common-law doctrine of riparian rights is abolished. All rivers, creeks and streams of running water are public and applicable to the purposes of irrigation and mining. Rights in aqueducts, or irrigating canals, heretofore established shall not be disturbed, nor the course of such aqueducts be changed without the consent of the proprietors of such established rights. Right to irrigate shall be preferable to all others, and shall not be obstructed or impeded by the erection of any dam, mill, machinery, or by any sluice or dyke, except for mining purposes or reduction of metals as hereinafter provided. When retraction-works or other mining apparatus shall be placed upon lands previously

held for agricultural purposes the holder thereof shall be entitled to a remuneration to be fixed by appraisement of damages.

**EMINENT DOMAIN.**—The right of eminent domain may be exercised in behalf of canals, ditches, flumes, aqueducts and pipes, for any transportation, supplying ditches and mining neighborhoods with water, etc.; roads, flumes, ditches, flumes, pipes, and dumping places for working mines; also outlets, natural or otherwise, for the flow, deposit or conduct of tailings or refuse matter from mines; also, an occupancy in common by the owners or possessors of different mines, or any place for the flow, deposit or conduct of tailings or refuse matter from their several mines.

## ARKANSAS

Compiled by C. B. MOORE, Attorney at Law, Little Rock, Ark.

#### CORPORATIONS.

There are no constitutional or statutory provisions especially relating to mining or quarrying companies. They are incorporated under a general law, provided for all incorporated companies, by filing articles of incorporation in the office of the secretary of state. There is no system of official examination, and no reports are made, except statement required to be made to assessor for the purpose of taxation.

An annual statement is required to be filed in the office of the county clerk by every corporation, showing its financial condition. There are no forms prescribed by the law for incorporation of such companies. The corporation may be formed by three or more persons entering into articles of association for that purpose. The directors must be at least three in number and chosen annually. They elect the president who must be one of their number and the other officers. The articles of association, with a certificate, sworn to by the directors, must be filed with the secretary of state and clerk of the county where the corporation is to have its place of business. The corporation may, of course, issue and sell stock. The capital stock has to be divided into shares of \$25 each, and the number of shares fixed in the articles of the association, but may be increased at a meeting of the stockholders called for the purpose. The stock can only be transferred on the books of the corporation in such form as the directors prescribe. A certificate of such transfer must be deposited with the county clerk and be noted by him in a book kept for that purpose. The duty of each stockholder is to pay for the stock in full to the amount of his stock. His liability ceases at the date of the date of the transfer of his stock. It is not necessary to advertise sale of stock in order to be relieved of liability.

#### LIENS.

All laborers, including miners in this state, who perform work under a written or verbal contract, have an absolute lien on the production of their labor and for materials furnished, which is unpaid for the same. To avail themselves of such lien they must file a sworn statement in the court having jurisdiction of the amounts, showing amount due, with list of land, property, crops or other production of labor and materials furnished. This sworn statement answers the place of an attachment. Such proceedings must be commenced within eight months after the work is done. Summons issues and trial is had as in ordinary suits, if served thirty days before day of trial in circuit court and ten days before a justice of the peace.

#### MILLDAMS.

Milldams may be erected at will across non-navigable streams, by the owner of the land or stream, unless likely to cause damage to the property or health of others. If likely to so damage others, a petition must be filed in the circuit court and a writ of abatement damnum issues, and a jury of inquest is appointed to ascertain and report whether the dam can be erected so as not to materially injure health and not to obstruct the passage of fish and if it may be erected, to assess damages to owners of adjacent lands. Provision is also made for condemning as such as one acre of land for abatement of the dam if the builder owns only one side of the stream. Milldams not made in compliance with the law shall be deemed public nuisances and dealt with accordingly.

#### MIXING.

The constitution provides for such laws as will foster and aid the agricultural, mining and manufacturing interests of the state; and for the health and safety of persons employed in a mine. Under these provisions a bureau has been established, which is superintended by the commissioner of mines, manufactures and agriculture. His duties, so far as mines are concerned, is to keep a record of all individuals, companies and corporations engaged in mining for coal, manganese, silver, lead, copper and other minerals, and of all persons and companies quarrying marble, granite, etc.; and to elect from such persons and companies information as to extent of deposit, output, cost of production, and to obtain information as to location, character of mineral lands, as to locality, character of minerals, facilities for working and transportation, etc. He is required also to methodically arrange all such statistics, so as to furnish useful information to immigrants and persons seeking to invest capital in the state.

## CALIFORNIA

## CORPORATIONS.

Compiled by GEORGE A. JOHNSON, Attorney at Law, 44 Sansome St., San Francisco, Cal. (State Attorney-General).

Private corporations may be formed by the voluntary association of five or more persons, a majority of whom shall be citizens, and for any purpose for which individuals may lawfully associate themselves.

1. Articles of incorporation must set forth—
  - a. The name of the corporation.
  - b. The purpose for which it is formed.
  - c. The place where its principal business is to be transacted.
  - d. The term for which it is to exist, not exceeding fifty years.
  - e. The number of its directors or trustees, which shall not be less than five nor more than eleven, who must be members of the corporation, and the names and residences of those who are appointed for the first year.
  - f. The amount of the capital stock, and the number of shares into which it is divided.
  - g. If there is a capital stock, the amount actually subscribed, and by whom.

Upon filing the articles of incorporation in the office of the county clerk of the county in which the proposed business of the company is to be transacted, and a copy thereof, certified by the president, secretary or treasurer named in the articles, that the purpose of the corporation is not actually or ostensibly to defraud the secretary of state must issue to the corporation a certificate that a copy of the articles containing the required statement of facts has been filed in his office, and thereupon the persons named in the articles and their associates and successors shall be a body politic and corporate. A copy of my articles so filed and certified by the secretary of state must be received in all the courts and other places as prima facie evidence.

2. A law, or laws, which are above mentioned, must, within one month after their filing, articles of incorporation, adopt a code of by-laws for its government, not inconsistent with the constitution and laws of the state. The written consent of the holders of two-thirds of the stock shall be essential to adopt a code of by-laws without a meeting for that purpose.

A corporation may by its by-laws provide for—

1. The time, place and manner of calling and conducting its meetings, and may dispense with notice of all regular meetings of stockholders or directors.
2. The mode of voting by proxy.
3. The mode of voting by proxy.
4. The qualifications and duties of directors, the time of their annual election, and the mode and manner of giving notice thereof.
5. The compensation and duties of officers.
6. The manner of election and the tenure of office of all officers other than the directors.
7. Suitable penalties for violation of by-laws not exceeding, in any case \$100 for any one offense.

Whenever notice is provided for, for publishing all notices of the meetings of stockholders or board of directors, notice of which is required to be published, must be some newspaper published in the county where the principal place of business is, or if none is published therein then in a newspaper published in an adjoining county. When all the stockholders of a corporation are present at any meeting, however called or notified, and sign a written consent thereto on the record of such meeting, the doings of such meeting are valid. All by-laws must be certified by a majority of the directors and the secretary of the corporation, and signed in the "book of By-Laws." The by-laws may be repealed or amended as prescribed.

**ELECTIONS.**—The directors of a corporation must be elected annually by the stockholders, and if no provision is made in the by-laws for the time of election, the election must be held on the first Tuesday in June. All elections must be by ballot, and every stockholder shall have the right to vote in person or by proxy in many persons, and give as many proxies as he may desire, to vote as many shares and give as many proxies as many votes as the number of directors multiplied by the number of his shares of stock shall equal, or to distribute them among as many candidates as he shall think fit. Immediately after the election, the winning party must organize by electing a president, who must be one of their number, a secretary and a treasurer. At all elections or votes had for any purpose there must be a majority of the subscribed capital stock, represented either in person or by proxy in voting.

**DIRECTORS.**—A majority of the directors constitute a quorum, and every decision of a majority of a quorum is valid as a corporate act. The directors of corporations must not make any debt, except for the necessities of the corporation, or incur any withdrawal or pay to the stockholders any part of the capital stock, nor must they create debts beyond the subscribed capital stock. For a violation of the above, the directors (except those who caused the dissent to be recorded, or who were not actually present) are in their individual and private capacity jointly and severally liable to the corporation, and to the creditors thereof, in the event of its dissolution, to the full amount of the capital stock so divinely withdrawn, paid out or reduced, or debt contracted, and no statute of limitations is a bar provided, however, that where a corporation has been or may be formed for the purpose among other things of acquiring, holding and selling real estate, water and water-rights, the directors of such corporation may, with the consent of stockholders representing two-thirds of the capital stock, given at a meeting called for that purpose, divide among the stockholders the land, water or water-rights so by such corporation held, in the proportions to which their holdings of such stock at the time of the division would entitle them, all conveyances to be subject to the debts. Nothing shall prohibit a division and distribution of the capital stock which re-

mains upon the payment of the debts, upon the dissolution of the corporation or the expiration of its term of existence.

**MEETINGS.**—The meetings of the stockholders and board of directors of a corporation may be held in its office or principal place of business. Every corporation that has been or may be created may change its principal place of business from one place to another in the same county, or from one city or county to another city or county within the state. Before such change is made, notice in writing of holders of two-thirds of the capital stock must be filed in the office of the corporation, and when this is done, notice of the intended removal or change must be published for three successive weeks in some newspaper published in the county in which the principal place of business there is one published therein; if not, in a newspaper of adjoining county, giving the name of the county or city where it is situated, and to which it is intended to remove it. (See also statutes of 1861-62, page 76, in respect to mining companies changing their principal place of business.)

**LIABILITY OF STOCKHOLDERS.** Each stockholder of a corporation is individually and personally liable for such portions of its debts and liabilities as the amount of stock or shares owned by him bears to the whole of the subscribed capital stock or shares of the corporation, and for a like proportion of each debt against the corporation. Any creditor may institute joint or several actions against any of its stockholders, for the proportion of the claim recoverable by each, or against the corporation, and a several judgment must be rendered against each defendant, in conformity therewith. If any stockholder pays his proportion of any debt due from the corporation, mentioned in the articles of incorporation, or against the corporation, for such debt, the liability of each stockholder is determined by the amount of stock or shares owned by him at the time the debt or liability was incurred; and such liability is not released by any subsequent stock transfers, or by the dissolution of the corporation formed under the laws of any other state or territory, or of any foreign country, and doing business within this state, shall be the same as the liability of a stockholder of a corporation in this state. Whenever a corporation is formed, or any corporation is divided into shares, and certificates therefor are issued, such shares are personal property, and may be transferred by indorsement of the owner, or his attorney or legal representative, and delivery of the certificate, but such transfer is not valid in excess of the amount thereon, until the transfer is entered upon the books of the corporation, showing the names of the parties by and to whom transferred, the number or designation of the share, and the date of the transfer.

Whenever a corporation is formed, or any corporation formed or existing under the laws of this state, after one-fourth of its capital stock has been subscribed, may, for the purpose of paying expenses, conducting business, or paying debts, levy and collect a tax upon the subscribers of the stock, or upon the stock assessment must exceed ten percent of the amount of capital stock named in the articles of incorporation except as follows: If the whole capital of a corporation has not been paid up, and the corporation is not in default of its liabilities, no such tax shall be levied on creditors, the assessment may be for the full amount unpaid upon the capital stock, or for a less amount, if sufficient. No assessment must be levied while any portion of a previous one remains unpaid, except in cases specified. Every order levying an assessment must specify the amount thereon when, to whom, and where payable; fix a day on which the unpaid assessments shall be delinquent, not less than thirty nor more than sixty days from the time of making the order levying the assessment, and a day for the sale of delinquent stock, not less than fifteen nor more than sixty days from the day the stock is declared delinquent. Upon making the order, the secretary is to publish a notice thereon.

The notice must be personally served upon each stockholder, or, in lieu of this, must be sent through the mail addressed to each stockholder at his place of residence, if known, and be published once a week for four successive weeks at places stated. If any portion of assessment mentioned in the notice remains unpaid on the day specified thereon for the sale of delinquent stock, the secretary, unless otherwise ordered by the directors, must publish in the same papers a notice, which must specify every certificate of stock, the number of shares it represents, and the amount which is delinquent, and the date of the stock sale, and be published for ten days, excluding Sundays and holidays, previous to the day of sale, and when published in a weekly it must be published in each issue for two weeks previous to the day of sale. The first publication of all delinquent calls must be on a week-day, fifteen days prior to the day of sale, and the second publication is that which is necessary to pay the assessments due and costs of sale. The sale must be in public auction, to the highest bidder for cash. If payment is made in advance the time fixed for sale, the party paying is only required to pay the amount of the stock sold, in addition to the assessments. The person offering at such sale to pay the assessment and costs for the smallest number of shares or fraction of a share is the highest bidder, and the stock purchased must be sold to him on the day of sale, and he must pay thereon on payment. If no bidder offers the necessary amount, the same may be bid in by the corporation for the assessment, costs and charges, and entry of the transfer must be made on the books, which is the same as if the person offering the stock had been an assessor, nor must any dividend be declared thereon. The stock so purchased is subject to the control of the stockholders. No assessment is invalidated by a failure to make publication of the notice. No dividend shall be paid on any stock sold for delinquent assessments, upon the ground of irregularity in the assessment, irregularity or defect of the notice of sale, or defect or irregularity in the sale, unless the party seeking to maintain such dividend first pays to the corporation, or other party holding the stock sold, the sum for which the stock was sold, together with all subsequent assessments paid thereon, with interest; and such action must be commenced by the filing

of a complaint and the issuing of a summons within six months after such sale. At any time before the sale of delinquent stock, the board of directors may elect to waive further proceedings for the collection of delinquent assessments, and may elect to proceed by action to recover the amount of the assessment and costs and expenses.

**CORPORATE POWERS.**—The general powers are stated. If a corporation does not organize and commence the transaction of its business or the construction of its works within one year from the date of its incorporation, its charter or contract of incorporation shall issue stock or bonds except for money paid, no labor done or property actually received, and all fictitious increase of stock or indebtedness is void. Every corporation may increase or diminish its capital stock, create or cancel shares, and bonded indebtedness, in an amount less than the indebtedness of the corporation. No corporation shall acquire or hold any more real property than may be reasonably necessary for the transaction of its business, or the construction of its works, except as otherwise specially provided.

Provision is also made for amending the articles of incorporation, for keeping a record of all their business transactions, for keeping a stock and a transfer book, which are to be open to the inspection of any stockholder or creditor. The legislature may at any time amend or repeal the above, and dissolve all corporations created thereunder, but such amendment or repeal does not, nor shall the dissolution of such corporation take away or impair any remedy given against any such corporation, its stockholders or officers, for any liability which has been previously incurred.

The dissolution of corporations is provided for, which may be either voluntary or involuntary. Unless other persons are appointed by the court, the directors or managers of the affairs of such corporations at the time of their dissolution are trustees of the creditors and stockholders, and have full power to settle the affairs of the corporation.

**SERVICE ON FOREIGN CORPORATIONS.**—By a statute continued in force, a corporation created by the laws of any other state, and doing business here, shall, within sixty days from the time of commencing to do business in this state, designate some person in the county in which the principal place of business is, upon whom process may be served, and within the time aforesaid shall file such designation in the office of the secretary of state, and a copy of such designation, duly certified by said officer, shall be evidence of such appointment, and it shall be lawful to serve on such person any process. Such service shall be made on such person in such manner as shall be prescribed in case of service to be made on a defendant in a civil action. The designation in this state acting as the agent of said corporation or doing business for them.

#### MINING.

**SPECIAL PROVISIONS IN REGARD TO MINING CORPORATIONS.**—Any corporation organized in this state for the purpose of mining or carrying on mining operations in or without this state may establish and maintain agencies in other states of the United States for the transfer and issuing of their stock; and a transfer or issue of the same at any such transfer agency, in accordance with the provisions of its by-laws, is valid and binding as fully as if made on the books of such corporation at its principal office within this state. The agencies must be governed by the by-laws and the directors of the corporation, and all stock of any such corporation issued at a transfer agency must be signed by the president and secretary of the corporation, and countersigned at the time of its issue by the agent having charge of the transfer agency. No stock must be issued at a transfer agency unless the certificate of stock in lieu of which the same is issued is at the time surrendered for cancellation.

Two or more corporations, under the laws of this state, for mining purposes, which own or possess mining claims or lands adjoining each other, or lying in the same vicinity, may consolidate their capital stock, debts, property, assets, and liabilities as may be agreed upon by the boards of directors of each, but such consolidation shall not take place without the written consent of the stockholders representing two-thirds of the capital stock, and shall not relieve the stockholders or the companies from any and all liabilities, and in case of such consolidation, due notice shall be given by advertising for one month as prescribed. When the consolidation is complete, certificates are to be filed in the county clerk's office, and in the office of the secretary of state, and after the first Monday of each month the board of directors of each of the consolidated companies is to be chosen by the stockholders for the year then ensuing.

By a statute continued in force it is made the duty of the secretary of every mining corporation formed in this state to keep a complete set of books containing all receipts and expenditures, sources and objects, and all transfers of stock, during business hours, open to the inspection of any bona fide stockholder, who is entitled to be accompanied by an expert, who can make copies of the books, and also to be accompanied by a disinterested third party, to make a balance sheet for the previous month, embracing a full statement of receipts and disbursements, showing sources of receipts and for what and to whom paid out, also all indebtedness or liabilities and for what and to whom paid out, and the balance of money on hand, to be verified under oath by the president and secretary and posted conspicuously in the office of the company. It is made the duty of the superintendent on the first Monday of each month to file with the secretary an itemized account, verified, showing all receipts and disbursements in kind for the previous month, and for what disbursements were made; also a weekly statement, verified, showing the number of men under him, and for what purpose, and the rate of wages; also to report under oath

the work done in the mine, the amount of ore extracted, from what part of the mine taken, the amount sent to mill for reduction, its assay value, amount of bullion received, amount shipped, and amount, if any, retained by the superintendent; also to forward to the company a report, verified, showing the value of all ores or minerals, including quartz made in said mine, together with assay value, all to be kept in some conspicuous place in the office, and to be open to the inspection of all stockholders. Any bona fide stockholder is entitled to view and examine the books and accounts of the mine at any time, and may see it; and when he shall make application to the president, he shall cause the secretary to deliver to him an order commanding the superintendent to exhibit such parts of the mine as may be desired by him, and to accompany him in person or detaining someone who is familiar with the mine. A penalty is provided for disobedience by superintendent or by the president, and also in case of the failure of the directors or by the reports and accounts noted.

**A MINING CLAIM IS REAL PROPERTY.**—Real or unmovable property consists of: 1. Land; 2. That which is affixed to land; 3. That which is incidental or appurtenant to land; 4. That which is unmovable by law. Shutes-boxes, flumes, hose, pipes, railway cars, blacksmith shops, mills and all other machinery or tools used in making or developing a mine are to be deemed affixed to the mine. A thing is deemed to be incidental or appurtenant to land when it is by right of a water-course, or of a passage for light, air or heat from or across the land of another. Every kind of property that is not real is personal.

**MINING CUSTOMS.**—In actions respecting mining claims, proof may be admitted of the customs, usages or regulations established and in force at the bar or diggings embracing such claim; and such customs, usages or regulations, when not in conflict with the laws of this state, must govern the decision of the court.

#### DECEDENTS' ESTATES.

When the inventory of the estate of a decedent discloses that his estate consists of any mine or interest in a mine, the same may be sold as follows: The executor or administrator, or the heir or creditor, or any partner or member of any mining company, may file in the court having jurisdiction a petition in writing, setting forth the facts of the estate being then in due course, which it is desired to sell, and condition and situation of the mine, interests, or of the mining company, and the grounds upon which the sale is asked. The court must make a order of sale, at a certain time and place, not less than four or more than ten weeks from the time of the order, to show cause why the order should not be granted. A copy of the order to show cause must be personally served on all persons interested in the estate, and also by newspapers at least four successive weeks in such newspapers as the court or judge shall specify. If all persons interested signify their assent to the sale, the notice may be dispensed with, except in the hearing on an order for the sale, after the order is made, all further proceedings must be in accordance with the provisions regarding the sale of real estate belonging to decedents.

#### EMINENT DOMAIN.

**THE RIGHT OF EMINENT DOMAIN FOR MINING PURPOSES AND RIGHT OF WAY.**—The right of eminent domain may be exercised in behalf of the following public uses: Wharves, docks, piers, ditches, booms, forges, bridges, toll-roads, by-roads, plank roads, canals, locks, aqueducts, electric and horse railroads; canals, ditches, flumes, aqueducts and pipes for public transportation, supplying mines and farming neighborhoods with water and draining and reclaiming lands, and for the flow of water, and for the construction of tunnels, ditches, flumes, pipes and dumping places for working mines; also outlets, natural or otherwise, for the flow, deposit or conduit of tailings or refuse matter from mines; also an occupancy in common by the owners or possessors of different mines, or of any mine, of the flow, deposit or conduit of tailings or refuse matter from their several mines. A fee simple is taken for public buildings or grounds, or for permanent buildings, for reservoirs and dams, and permanent conduits or outlets therefrom, or for an outlet, flow or a place for the deposit of debris or tailings of a mine, an easement for any of the above purposes, or for any mine shall be so situated that it cannot be conveniently worked without a road thereto, or a ditch to convey water thereto, or a ditch or cut to drain water from it, or without a flume or tunnel, or for an outlet, flow or a place for the deposit of debris or tailings of a mine, or a ditch or drain or such flume or tunnel shall necessarily pass over, across or through or under, and such place of deposit be upon mining claims or other lands owned or occupied by others, then a right of way or a right of flume or tunnel over, across or through or under or to such place of deposit upon such other mining claim or lands as follows: Whenever the owner of any mine or claim shall be unable to work the same, it is necessary, in order that he may be able to do so conveniently, that he should have a right of way for any of the purposes mentioned above, or that he should have a place for dumpage and deposit of tailings as mentioned above, and such right of way or place of deposit shall not be a permanent easement between him and the owner of interest of the claim or land over,



across, under or upon which he seeks to establish such right of way or place of deposit, then it shall be lawful for him to present to the court, or judge if the court be not in session, of the county where such claim is situated, a petition, praying that such right of way or place of deposit be awarded to him, his petition to be on oath and to contain a particular description of the mine or claim of petitioner and of the claim or land to be affected by such right of way or privilege, with the name of the owner or occupant thereof, and to state that a right or privilege has not been acquired by private agreement between the respective parties, and to ask for the allowance thereof by the court or judge and the appointment of three commissioners to assess the damages. Upon the filing of such petition (which shall be on oath) the court or judge shall issue a summons. After hearing the allegations and proofs, if the court or judge is satisfied of the truth of the petition, he shall make an order agreeably to the petition, and appoint three disinterested persons to assess the damages. The court or judge shall proceed to examine the mine or claim of the petitioner, as well as the claim or land to be affected; may hear testimony relative to the damages, and report in writing, designating the course or line and dimensions of the road, ditch, drain, flume or tunnel, or the place of deposit prayed for, also the value of the lands to be appropriated for such right of way or place of deposit and the damages which each owner or occupant shall suffer. For cause shown the report may be set aside and a new commission appointed, which shall proceed as the first. If no motion to set aside the report, or if it be denied, the same shall be final. Upon payment of the damages, then petitioner shall be entitled to the right of way or place of deposit as designated in the report, and upon making payment may proceed to erect such works and make such excavations as may be necessary for said use. Whenever the owner of any claim is desirous, in working the same, to carry off the tailings and other refuse matter through any stream, or to discharge the same by ravine or natural outlet, which in whole or in part is occupied by others for mining or other purposes, then said first owner may proceed as before stated to have such right or privilege awarded to him, providing he is not already in possession of such right, unless the court or judge is satisfied that the right can be enjoyed without special injury to those owning or occupying along or upon such water-course, ravine or outlet. All costs and expenses to be paid by the party applying.

When a mine owner, company or corporation having performed the labor and made the improvements required by law for the location and ownership of mining claims or lodes, shall file within thirty days after the time limited for performing such labor or making such improvements, a report to the county recorder, in the county in which the mine is, an affidavit particularly describing the services and the value, which shall be prima facie evidence. Upon the failure of any claimant or mine owner to comply with the provisions of this act, or to file such report, or on the making of improvements, the claim or mine upon which such failure occurred shall be open to re-location as if no location had ever been made. But if, before re-location, the original locators, or their heirs or assigns, or their heirs or assigns, or their heirs or assigns, with reasonable diligence until the required labor has been performed or improvements made, and the required affidavit as above is filed with the county recorder, then the claim shall not be subject to re-location. In the failure to file the required affidavit to continue his portion of the expenditures required, the co-owners who are not in default may, at the expiration of the year, give such delinquent co-owner personal written notice, or by publication in the newspaper published nearest the claim, for at least one week for ninety days; and if, at the expiration of ninety days after such notice in writing or publication, the delinquent shall fail to contribute his portion, his interest in the claim shall become the property of his co-owners. A copy of such notice, with an affidavit stating the service, when filed or recorded with the recorder, shall be evidence of the acquisition of such title. When a person or company has or may claim a tunnel or cuts in good faith for the purpose of developing a lode or claim owned by said person or company, and the tunnel or cuts are not to be considered as expended on said lode or claim, provided said lode or claim shall be distinctly marked on the surface as provided by law. All mining claims and locations shall be subject to a reservation of the right of way through the same, for the purpose of roads, ditches, roads, canals, cut, tunnel and other easements for the purpose of working other mines, provided that the damage shall be assessed and paid for as the cases of property taken under the right of eminent domain.

There is an act continuing in force making it unlawful for any corporation or owner of any quartz mine within the state, where as many as twelve men are employed, to sink down into such mine any perpendicular shaft or incline beyond a depth from the surface of three hundred feet, and to connect such shaft or incline with a drift at a depth of not less than one hundred feet from the surface, and providing also for the recovery of damages in case of accident.

There is a statute continued in force in reference to corporations organized in this state for the purpose of mining out of this state, and whose business office is in this state, authorizing them to be assessed for the same as other corporations, and to have the debts of said corporation, or to carry on the business of said corporation, provided the same shall be equal and uniform, and at no one time exceed five per cent. of the capital stock.

#### WATER-RIGHTS.

The right to the use of running water flowing in a river or stream, or under a culvert or ravine, may be acquired by appropriation. This may be done for some useful, beneficial purpose, and the appropriator or his successor in interest ceases to use it for such a purpose, the right ceases. The person entitled to the use may

change the place of diversion, if others are not injured by such change, and may extend the ditch, flume, pipe or aqueduct by which the diversion is made to places beyond the first use. The water appropriated may be turned into the channel of another stream and mixed with its water, and the water so reclaimed, or which retaining it the water already appropriated by another must not be eliminated. As between appropriators, the one first in time is the first in right. A person desiring to appropriate must post a notice in writing, at a conspicuous place in the main body of the diversion, stating therein: First, that he claims the water there flowing to the extent of (giving the number) inches, measured under a four-inch pressure; second, the purposes for which he claims it, and the place he intends to divert it; and the size of the flume, ditch, pipe or aqueduct in which he intends to divert it. A copy of the notice, within ten days after it is posted, must be recorded in the recorder's office of the county in which it is posted. Sixty days after the notice is posted the claimant must commence the excavation or construction of the works in which he intends to divert the water, and must prosecute the work diligently and uninterruptedly until completion, unless temporarily interrupted by snow or rain. Completion means conducting the water to the place of intended use. By a compliance with the above the claimant's right to the use of the water relates back to the time the notice was posted, but a failure deprives the claimant of the right as against a subsequent claimant who complies.

#### LIENS.

Miners and persons and laborers of every class, performing labor upon or furnishing materials to be used in the construction, alteration, addition to or repair of any building, wharf, bridge, ditch, flume, aqueduct, tunnel, fence, machinery or other structure, or to the improvement of the property for which the labor is done and materials furnished; and any person who performs labor in any mining claim has a lien upon the same, and the works owned and used by the owners for reducing the ores from such claim to market, and the work done and materials furnished, if done or furnished at the instance of the owner or his agent; and every contractor, sub-contractor, architect, builder or other person having charge of any mining or of the construction, alteration, addition to or repair of any building or other improvement is held to the extent of the contract for the work done or the work, between the reputed owner and his contractor, the lien shall extend to the entire contract price, and such contract shall operate as a lien in favor of all persons, except the contractor, to the extent of the contract price, and such contract shall be satisfied then by a lien for any balance of the contract price in favor of the contractor. All such contracts shall be in writing when the amount to be paid exceeds \$1,000, and the contract, so far as it relates to the amount of all payments, a description of the property, the general character of the work to be done, the total amount to be paid and the amounts of all partial payments, when they become due and payable, shall, before the work is commenced, be filed of record in the county in which the property is situated; otherwise the contract shall be void; and in such case the labor done and materials furnished by all persons except the contractor shall be deemed to be furnished at the personal instance of the owner. In case of a contract for the value thereof. No part of the contract price shall be payable in advance, but the same shall be made payable in installments after the commencement of the work or on the completion of the whole work, provided that at least twenty-five per cent. of the whole contract price shall be made payable at least thirty days after the final completion of the contract. No payment made prior to the time when the same is due shall be void for the purpose of defeating any lien in favor of any person except the contractor, but as to such liens such payments shall be deemed as if not made. As to all liens, except that of the contractor, the whole contract price shall be payable in money, and shall not be diminished by any prior or subsequent indebtedness in favor of the contractor or against the contractor. The filing of such contracts and alterations do not conform to the above, the labor done and materials furnished by all persons except the contractor shall be deemed to be furnished at the personal instance of the owner. The contractor, or any person who contracted with the contractor, and any of the persons mentioned, except the contractor, may at any time give to the reputed owner a written notice that they have performed labor or furnished materials to the contractor, or that they have agreed to do so, and the amount in value of what is already done or furnished, and of the whole agreed upon. The notice may be delivered to the owner, or be left at his residence or place of business with some person in charge, or delivered to his architects, or left at the residence or place of business of some person in charge, or be posted in a conspicuous place upon the mining claim or improvement. Upon such notice being given, it shall be the duty of the person who contracted with the contractor to withhold from the contractor, or from any person in charge of such required owner, and to whom, by said notice, said labor or materials, or both, have been furnished, or agreed to be furnished, sufficient money due or that may be due to the contractor, or other person who contracted with the contractor, and to retain the same for record, including counsel fees not exceeding \$10 in each case, and costs. The liens provided for are preferred to any lien, mortgage or other incumbrance which may have attached subsequent to when the labor done or materials furnished, or to be furnished, work done or materials were commenced to be furnished, also to any other lien or incumbrance of which the lien-holder had no notice, and which was unrecorded when the work was commenced. The materials were commenced to be furnished by the contractor, or any person who contracted with the contractor, and every person except him within thirty days after the completion of any building, improvement or structure,

or after the completion of the alteration, addition to or repair thereof, or the performance of any labor in a mining claim, must file for record with the county recorder of the county in which such property or some part is situated a claim containing a statement of his demand, after deducting just credits and offsets, with the name of the owner or reputed owner, if known, and also the name of the person who was employed by the contractor, and he furnished the materials, with a statement of the terms, time given and conditions of his contract and also a description of the property to be charged with the lien, sufficient for identification, which claim must be filed against the owner or reputed owner or other person, or acceptance of the said improvement, or cessation from labor for thirty days upon any unfinished contract, shall be deemed equivalent to a completion. In every case in which one claim is filed against two or more buildings, mining claims or other improvements owned by the same person, including such claim must, at the same time, designate the amount due him on each, otherwise the lien of such claim is postponed to other liens. The lien of such claimant does not extend beyond the amount designated, as against other creditors having liens by judgment, mortgage or otherwise, upon either of such buildings or other improvement, or upon the land upon which the same are situated. No lien binds for a longer period than ninety days, unless proceedings be commenced within that time to enforce the same, or, if a credit be given, than ninety days after the expiration of such credit; but no lien continues in force for a longer time than two years from the time the work is completed, by any agreement to the contrary. The recorder of the county in which any lands with the knowledge of the owner, or the person claiming any interest therein, shall be deemed to have been constructed at the instance of such owner or person, and the interest shall be subject to a lien filed as above, unless such owner or person shall, within three months after the time the person doing such work or intended construction, give notice that he will not be responsible for the same, by posting a notice in some conspicuous place upon said land, or improvement situated thereon. The contractor shall be entitled to recover on a lien filed by him so much as may be due him, after deducting all claims of other parties for work done and materials furnished; and in all cases where a lien shall be filed for work done or materials furnished to any contractor, he shall defend any action thereon at his own expense, and during the pendency of such action, the owner may withhold from the contractor the amount of the lien; and in case of judgment against the owner or his property upon the lien, he shall be entitled to deduct from any amount due to be levied due by him to the contractor the amount of such judgment and any amount due the amount shall exceed the amount due by him to the contractor, or if the owner shall have settled with the contractor in full, he shall be entitled to recover back from the contractor any amount so paid by him, either before or after the time of such judgment, in the following order: 1. All persons performing manual labor; 2. Persons furnishing materials; 3. Sub-contractors; 4. Original contractors. And the proceeds of the sale must be applied to each lien in the class of liens in the following order: 1. Original contractors; 2. Sale of the property there is a deficiency of proceeds, judgment may be docketed for the deficiency.

Any number of persons claiming liens may join in the same action, and when they do, the court may cause them to be consolidated there. The court must allow as a part of the costs the money paid for filing and recording the lien, and reasonable attorney's fees in the superior and supreme courts, such costs and attorney's fees to be allowed each lien claimant whose lien is established, whether he be plaintiff or defendant, or whether they all join in one action or separate actions are consolidated. Whenever materials are furnished, such materials shall not be subject to attachment, execution or other legal process, to enforce any debt due by the purchaser, except a debt due for the purchase money, so long as in good faith the same are about to be applied to the construction, alteration or repair of such building, mining claim or other improvement. Nothing herein shall affect the right of any person to maintain a personal action to recover such debt against the person liable therefor. Any person who willfully gives a false notice of his claims to the owner, forfeits his lien. Any person who shall willfully or negligently include in his contract or materials not done or furnished for the property described, or who shall, as the owner and contractor shall conspire to or agree that the written contract filed shall appear to show the contract price to be less than it really is, and it shall so show, then such contract is void; and in such case the labor and materials furnished by all persons, except the contractor, shall be deemed to have been done and furnished at the instance of the owner. Any bond which may be given by the contractor to the owner, for the faithful performance of his contract, shall be filed with the county recorder's office, or be void, and shall inure to any person who performs labor for or furnishes materials to the contractor; and any such person shall have an action to recover upon said bond against the principal contractor, or either of the subcontractors, for the value of such labor and materials, not to exceed the amount of the bond, but such action shall not affect the liens, except that there shall be but one satisfaction. Nor shall any alteration in the contract, or deviation in the work, or any delay in payments, release the sureties from their liability, except to the owner.

**LIENS FOR SALARIES AND WAGES.**—In all assignments by any person to trustees or assignees, on account of the inability of the claimant, at the time, to pay his debts, or in proceedings in insolvency, the wages of all clerks and materials furnished by all clerks or laborers employed by such person, to the amount of \$100 each, and for services rendered within sixty days previously, are preferred claims, and must be paid before any other creditor of the assignor, or trustee, or any creditor of such person, except the miner and other persons above named, for services rendered within the sixty days next preceding the death, not exceeding \$100, rank in priority next after the funeral expenses, expenses

of the last sickness, expenses of administration and the allowance to the widow and infant children, and must be paid before any other creditor, in cases of insolvency. Any writ or writs issued against any person, except for claims for labor done, by any miners, mechanics, salesmen, servants, clerks and laborers, who have claims against the defendant for labor, may give notice of such claims to the amount of the writ or writs to the claimant, to the creditor and the officer executing such writ, at any time before the actual sale of property levied on; and unless such claim is disputed by the debtor or a creditor, such officer must pay to such person, out of the proceeds of the sale, the amount each is entitled to for services rendered within the sixty days next preceding the levy, not exceeding \$100. If any or all of such claims are disputed, the person presenting the same must commence an action within ten days for the recovery thereof, and prosecute the same until a judgment is rendered, such action taking priority, and the officer shall retain sufficient from the proceeds of the sale to satisfy such claim until the determination of the action. The debtor or creditor intending to dispute shall within ten days after receiving such notice serve upon the claimant and the officer a statement in writing, sworn to by him, setting forth that no part of said claim, or not exceeding a specific sum, is due from the debtor to the claimant for services within the sixty days next preceding the levy of the writ. If the claimant fails to recover a sum exceeding that which is admitted to be due, he shall not recover costs.

#### MINING.

**MINING PARTNERSHIPS.**—A mining partnership exists when two or more persons who own or acquire a mining claim for the purpose of working it and extracting the mineral actually engage in a mining partnership. No partnership is to be considered necessary. The relation of partners arises from the ownership of shares or interests in the mine and working the same for the purpose of extracting the minerals. A member of a mining partnership is the professional partner, whose interest in the mine and the interest or share he owns in the mine bears to the whole partnership capital or whole number of shares. Each member of a mining partnership has a lien on the partnership property for the debts due the creditors thereof, and for money advanced by him for its use. This lien exists notwithstanding an agreement among the partners to the contrary. The mining ground owned and worked by partners in mining, whether purchased with partnership funds or not, is partnership property. One of the partners in a mining partnership may, without notice to the other partners, purchase the mining ground of the partnership, in the mine and business without dissolving the partnership. The purchaser, from the date of his purchase, becomes a member of the partnership. A purchaser of an interest in the mining ground of a mining partnership is not subject to the debts of the partnership, or is liable for debts due all creditors thereof, or advances made for the benefit of the partnership, unless he purchased in good faith, for a valuable consideration, without notice of such lien. A purchaser of the interest of a partner in a mine where the partnership is engaged in working it takes with notice all liens resulting from the relation of the partners to each other and to the creditors of the partnership. No member of a mining partnership or other agent or manager thereof can by a contract in writing dissolve the partnership, except by express authority given by the members thereof. The decision of the members owning a majority of the shares or interests in a mining partnership binds it in the conduct of its business.

#### CONSTITUTIONAL PROVISIONS.

Each stockholder of a corporation or joint-stock association shall be individually and personally liable for such proportion of all its debts and liabilities contracted or incurred during the time he was a stockholder as the amount of stock or shares owned by him bears to the whole of the subscribed capital stock or shares of the corporation or association. The directors or trustees of corporations and joint-stock associations shall be jointly and severally liable to the creditors for stock subscriptions, if such subscriptions are embodied or unappropriated by the officers of such corporation or joint-stock association during the term of such director or trustee.

No corporation shall engage in any business other than that expressly authorized in its charter or the law under which it may have been or may hereafter be organized; nor shall it hold for a longer period than five years any real estate, except such as may be necessary for carrying on its business.

In all elections of directors or managers of corporations, every stockholder shall have the right to vote, in person or by proxy, the number of shares of stock owned by him, for as many persons as there are directors or managers to be elected, or to cumulate said shares and give one candidate as many votes as the number of directors or managers to be elected, provided that the number of shares of stock shall be equal, or to distribute them, on the same principle, among as many candidates as he shall think fit; and such directors or managers shall not be elected in any other manner, except that members of stock societies may vote on all questions affecting such societies and manufacturing purposes may vote on all questions affecting such societies in manner prescribed by law. Every corporation, other than religious, educational or benevolent, organized or incorporated in this state, shall have the right to sell the stock of the place in this state for the transaction of its business, where transfers of stock shall be made, and in which shall be kept for inspection by every person having an interest therein, and legislative

committees, books in which shall be recorded the amount of capital stock subscribed and by whom; the names of the owners of its stock, and the amounts owned by them respectively; the amount of stock paid in, and by whom; the transfers of stock; the amounts of its assets and liabilities, and the names and places of residence of its officers.

Corporations may be formed under general laws, but shall not be created by special act. All laws now in force that relate to concerning corporations, and all laws that may be hereafter passed pursuant to this section, may be altered from time to time or repealed.

**Mechanics, material-men, artisans and laborers of every class shall have a lien upon the property upon which they have bestowed labor or furnished material, for the value of such labor done and material furnished; and the legislature shall provide by law for the speedy and efficient enforcement of such liens.**

## COLORADO

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### CORPORATIONS.

Corporations may be formed for any lawful purpose. The corporate name must conform with the word "Trust" and end with the word "Corporation," "Company" or "Association," etc. Corporations are formed by three or more persons, who must make, sign and acknowledge a certificate of incorporation and file an officer complaint with the clerk of the county. This certificate must contain the corporate name of the company, a statement of the objects for which it was created, the amount of its capital stock, the term of its proposed existence (not to exceed twenty years except in life insurance corporations), the number of shares of stock, the number of directors or trustees, the names of the directors or trustees for the first year of its existence, the name of the town or county in which the principal business office is to be located, and the name of the county or counties in which the principal business is to be carried on. This certificate must be filed in the office of the secretary of state and with the recorder of the county or counties in which the principal business is to be carried on. If business is to be carried on beyond the limits of the state, the certificate must so state. Unless the certificate expressly authorizes, meetings of the directors may not be held beyond the limits of this state. The fee for filing such certificate with the secretary of state is \$10, and in counties where the amount of capital stock exceeds \$100,000, shares of stock shall not be less than \$1 nor more than \$100 each.

Corporations are required to keep a book containing the names of all persons alphabetically arranged, who are stockholders of the corporation, showing their place of residence, number of shares of stock held by them respectively and the time when they respectively became owners of such shares and when they ceased to be such stockholders, and the amount of stock actually paid in and what proportion has been paid in cash.

The stockholders are liable for the debts of the corporation to the extent of the amount that may be unpaid upon the stock held by them, and may be proceeded against for such unpaid balance in a regular suit.

The president and a majority of the directors after the payment of the last installment of capital stock are required to make a certificate to that effect and record the same with the secretary of state and the recorder of the county wherein the business of the company is carried on. Corporations are not allowed to purchase their own stock except such as may be forfeited for the non-payment of assessments thereon. Corporations may purchase mines, manufacturing plants, or other property, and issue stock for the amount of the value thereof in payment therefor. If the certificate of fully-paid stock has not been filed, every corporation shall annually, within sixty days from the 1st of January, make a report, stating the amount of its capital and the proportion thereof actually paid in, and the amount of existing debts, which report shall be verified and filed with the recorder of deeds of the county where the business of the company is carried on; and unless said report is filed, all directors and trustees are jointly and severally liable for all debts the company that shall be contracted during the year next preceeding the time when such report should have been made and filed and until such report shall be made.

The directors, trustees, or other agents of any corporation shall declare and pay any dividend when such corporation is insolvent, or any dividend which diminishes the amount of its capital stock, all directors are jointly and severally liable for the debts of such corporation, and are jointly and severally liable while the capital remains so diminished. Any corporation allowing any execution to remain unsatisfied for ten days after demand is liable to dissolution.

**MINING CORPORATIONS.**—The certificate of incorporation of mining companies, in addition to other matters required to be stated therein as above set forth, must contain a statement that the stock of said company is either assessable or non-assessable, and each certificate of stock issued by such company shall have printed on its face thereon the words "assessable" or "non-assessable," as the case may be. Mining companies may be organized with assessable stock by so stating in the certificate of incorporation, but no one assessment shall exceed five per cent of the par value of the stock, and no assessments shall be levied oftener than once in three months. Assessments can be voted only by a majority of the stock in a special meeting called for that purpose, after a thirty days' publication of notice of

said meeting and a personal or mailed notice to each stockholder, and no assessment shall be due and payable in less than thirty days from the date thereof. If any assessment shall remain unpaid for ten days after the date of the same, the stock or any of the company may advertise such shares for sale at public auction, after giving ten days' daily or two weeks' notice, which notice shall be personally served upon the delinquent stockholder, and selling for the same or less than the sum so advertised and the amount of the assessment remaining overdue and unpaid.

Mining companies shall be managed by not less than three nor more than nine directors, who shall respectively be stockholders in said company, who shall be elected by the stockholders, or annually elected by the stockholders, a notice of which election shall be published not less than ten days in a newspaper published at the place of the principal office of the company. Any mining, tunneling or reducing companies may be consolidated under one organization by calling stockholders' meetings of each corporation to approve the joint certificate of incorporation.

**FOREIGN CORPORATIONS.**—Foreign corporations shall, before they are authorized or permitted to do any business in this state, make a certificate signed by the president and secretary and duly acknowledge and file the same with the secretary of state and recorder of the county where the business is carried on, designating the principal place where the business of this corporation shall be carried on in this state, and designating an authorized agent residing at such principal place of business upon whom process may be served.

No foreign corporation shall be permitted to mortgage, pledge or otherwise encumber its real or personal property situated in this state to the injury or exclusion of any resident or corporations of this state who are creditors of said foreign corporation, and no mortgage by any foreign corporation given to secure any debt or liability of another state or foreign corporation, or any citizen or corporation of this state until all its liabilities due to any person or corporation in this state at the time of recording such mortgage have been paid and extinguished.

Foreign corporations shall, before they are authorized to do any state a copy of their charter of incorporation, or, if incorporated under a general law, a copy of their certificate and of such general incorporation law, authenticated by the proper authority of such foreign state, kingdom or territory, and a failure to comply with the above requirements shall render the president or stockholder of said corporation jointly and severally personally liable on any and all contracts of such company made within this state during the time this corporation is so in default.

**Devisees and legatees of real estate, or of any interest therein, or corporate, who shall be entitled to hold real estate, shall be authorized to convey the same by deed. Livery of seisin is not necessary. There is no joint tenancy unless so expressed in deed, except in cases of trust, and conveyances by deed are of full and simple absolute, not being possessed of the legal estate, who shall thereafter become so possessed, shall hold the same in trust for the grantee. Lands not in possession may be conveyed, or conveyed, by contract, where by contract, but may not be seized for his or her natural life only and the remainder shall pass in fee simple absolute. Every estate is deemed a fee simple estate of inheritance unless expressly otherwise limited. Conveyances of real estate, whether by deed or otherwise, are void, and of warranty run with the land. No right of action exists against a warrantor until the party claiming the possession of the grantee shall have commenced legal proceedings and the warrantor shall have refused to defend said action. Powers of attorney must be acknowledged and recorded.**

All deeds, conveyances and agreements in writing affecting the title to real estate take effect as to subsequent bona fide purchasers and encumbrancers after filing with the recorder of the county wherein such real estate is situated, and not before. A certified copy of recorded deeds or conveyances may be read in evidence without additional proof of the execution thereof, provided the same have been duly acknowledged, recorded, and the copy thereof certified by the recorder of the proper county, upon affidavit of the party desiring to use the same that the original thereof is not in his possession or power to produce.

Private corporations are authorized to convey real estate by deed, and to execute and record the same, by their president or other head officer, or by their lawfully authorized attorney. The legislative act of 1887 providing statutory forms of deeds and mortgages has been repealed. The use of a seal or scroll is not necessary, and a femme covert may make a deed without her husband joining.

### LIENS.

**ATTORNEYS' LIENS.**—Attorneys at law have a lien upon any money or property in their hands, and upon judgments obtained, for any fees for professional services in any court in this state. This lien may be enforced by civil action.

**LIENS UPON REAL AND PERSONAL PROPERTY.**—A perpetual lien upon such property until fully paid.

**BUILDERS AND MATERIAL-MEN.** whether skilled or unskilled, have a lien for all work done by them, or for the cost of contract, express or implied, with the owner of any land for improvements made thereon. Sub-contractors in the first degree are those who do work or furnish material under contract with the principal contractor, and all such have equal rights of lien with the principal contractor in the second degree, those engaged under a sub-contractor, and are likewise protected. Limitation of lien, six months.

**GENERALLY.**—Railroads, tramways, wagon-roads, toll-roads, and all other public highways, ferries, bridges, and dikes, and mining claims are each subject to like liens for all work and material used in their building, repair or workings. Surveyors, civil and mining engineers are entitled to like liens for their

services in and about property. Ranchmen, farmers, herdors of cattle, boarding-houses, keepers of tavern-keepers, liverymen, com-  
modore carriers and warehousemen each have a lien upon the prop-  
erty or stock in their possession for all claims of rent, hire, board,  
and such other property. Also, the mechanics of every grade and  
class have the right of lien for making or repairing property.

**STATE LIENS.**—The state has a lien upon all the property of  
persons convicted of a crime for the fine and costs of prosecution.  
**EXERCISES** are a lien upon the property of the judgment  
debtor from the time such execution is delivered to the  
sheriff.

**JUDGMENT LIENS** are for six years upon the real estate of  
every person against whom judgment is rendered in a court  
of record, from the time a transcript of the judgment is filed with  
the county recorder.

#### EMINENT DOMAIN.

Private property shall not be taken or damaged for public or  
private use, except upon payment of just compensation. Land  
may be condemned when necessary for the construction of roads,  
bridges, ferries, tunnels, ditches, reservoirs, railroads, etc. The  
amount of compensation is determined by a board of three com-  
missioners or, where the owner demands it, by a jury of from six  
to twelve freeholders. If the parties cannot agree upon, or if the  
owner is unknown or under disability, may file his petition in the  
district or county court, setting forth the facts and asking the  
amount of compensation to be assessed, and the court thereupon  
issues and is served personally or by publication as in other cases,  
and a trial of the issues had. Upon the finding of the jury or  
board of commissioners, as to the amount to be paid, and upon  
the payment thereof, the court enters a rule describing the property,  
the compensation paid, etc., a certified copy of which rule, filed in the  
recorder's office, vests the fee simple title to such lands in the  
petitioner, except as to veins or deposits found therein. Appeals  
and writs of error lie as in other cases.

#### WATER-RIGHTS.

It is provided in Article 16 of the state constitution that the  
water of every natural stream not appropriated before March 14,  
1876, is the property of the public and dedicated to the use of the  
people, subject to appropriation as provided by law. The right  
to divert unappropriated waters of any natural stream to be used  
for a beneficial use shall not be taken or destroyed. Priority of appropriation shall  
be the better right as between those using the water for the  
same purpose. In case of an insufficient supply of water, domes-  
tic and manufacturing rights shall have preference over agricultural  
rights. Right to divert water for the construction of ditches,  
manufacturing and domestic purposes, for the conveying of water for domestic pur-  
poses, for irrigation of agricultural lands, for mining and man-  
ufacturing purposes, and for drainage, is had upon payment of just  
compensation. (See *Eminent Domain*, supra.)  
The priority of rights to water is adjudicated by the district  
court, and based upon the date of actual application to beneficial  
use. Where any ditch is not entitled to its full supply, the water  
actually received shall be divided pro rata among all the con-  
sumers of water thereunder.

Owners of reservoirs have the same right of condemnation and  
right of way as ditch-owners, and may store therein any unap-  
propriated water not needed for immediate use, and may conduct  
water therefrom into and about the courses of such streams and take the  
same out again at any desired point. In case ditches are con-  
structed for the carriage of water to be sold, the board of county  
commissioners is empowered to fix the maximum rate at which  
such water shall be sold.

The state is divided into numerous "water districts," each un-  
der the supervision of a water commissioner appointed by the  
governor. These commissioners divide the water among the sev-  
eral ditches according to the priorities of each water right. All  
ditches used for the purpose of irrigation and not deriving a bene-  
fit from the sale of water are free from taxation.

It is the duty of the state engineer to make careful measure-  
ments of the maximum and minimum flow of every natural stream  
in which water is drawn for irrigation, and collect facts and  
make reports as to a system of storage reservoirs, all of which is  
published in his annual report.

#### MINING.

(Citations are as follows:—A. C., Acts of Congress; G. S., Gen-  
eral Statutes of Colorado, 1888; M. A. S., Mills' Annotated Statutes  
of Colorado; R. S., Revised Statutes United States; S. L., Session  
Laws Colorado.)

**ALIENS.**—Constitution of Colorado (Sec. 27 of Art. II) provides  
that aliens who are born in this state may acquire, hold and  
dispose of property the same as native-born citizens.

**ANNUAL LABOR.**—Annual labor, commonly called "assess-  
ment," was required by district rules prior to May 10, 1872. Since  
that time state legislation agrees with the act of congress. One  
hundred dollars' worth of labor must be performed or improve-  
ments made on each claim during each calendar year. (R. S.,  
Sec. 2324; A. C., Jan. 22, 1880.) Within six months thereafter, the  
person for whose benefit the same was performed, and the  
recorder of the county where the mine is situated an affidavit  
showing performance of the same, and describing lode and stating  
at whose expense same was performed. This affidavit or a certi-  
fied copy of same becomes prima facie evidence of the perform-  
ance of such labor or improvements. (S. L., 1889, p.  
232; M. A. S., Sec. 316.) A neglect to file such affidavit does not  
of itself leave a claim open to re-location.

**APEX AND DIP.**—The location or location certificate of any  
lode claim shall be construed to include all the surface ground

within the surface-lines thereof and all lodes and ledges through-  
out their entire depth, the top or apex of which lies inside of such  
lines extended downward, vertically, with such parts of all lodes  
or ledges as continue by dip beyond the side-lines of the claim,  
and such any portion of such lodes or ledges beyond  
the end-lines of the claim or the end-lines continued, whether by  
dip or otherwise, or beyond the side-lines in any other manner  
than by the dip of the lode. (G. S., Sec. 308.)

If the top or apex of a lode is in its longitudinal course extended  
beyond the exterior lines of the claim at any point of the surface  
or as extended vertically downward, such lode may not be fol-  
lowed in its longitudinal course beyond the point where it is in-  
tersected by the exterior line. (G. S., Sec. 308.)

**ASSAYERS.**—There are no official assayers, but professors in  
the school of mines at Golden may make and certify assays. (G.  
S., Sec. 3113; M. A. S., Sec. 4087.)

**HULLON.**—See "Dre Bayers."

**COAL MINES.**—A board of examiners appoints inspectors whose  
duty it is to inspect all coal mines employing more than ten men,  
and see that the provisions of the statute relating to ventilation,  
escape-shafts, boilers, signals, hoisting machinery and inspection  
by skilled bosses are enforced. Severe penalties, both criminal  
and civil, are provided for non-compliance with these laws.  
**CRIMES.**—There are penal laws concerning the keeping or us-  
ing of fraudulent gold-dust scales, mill scales or assay scales; the  
sale or passing of debased gold dust; fraudulent unmediation  
of ores or overvaluation of same; malicious mischief; dispossession or  
"jumping" claims by stealth or violence where two or more persons as-  
sociate together for that purpose.

**DIP.**—See "Apex."

**DISCOVERY-SHAFT.**—Must be on the claim and on public do-  
main at least ten feet deep, show gravel, and be sunk within  
the claim. See "Lode," "Location," etc.

**DRAINAGE.**—Owners of contiguous or adjacent mines having a  
common ingress of water are obliged to provide for their prop-  
tionate share of drainage thereof, and, failing to do, the cost of  
such drainage may be recovered if performed by neighboring  
mine, and party suing is entitled to inspection of mine so drained.  
This act applies only to developed mines. Party hoisting water  
loses control and use of same as soon as it flows in a natural way  
into the mine, and the owners having a common interest in  
drainage may form a corporation for that purpose. (G. S., Secs.  
2416-2434; M. A. S., Secs. 3172-3181.)

**FORCEFUL ENTRY.**—Forceful entry, forcible in S. L., 1885, 1887  
and 1888, and forcible in A. C., 1889, is defined in S. L., 1887  
and 1888, and justifies a writ of the peace and the county and district  
courts have jurisdiction to try the same and grant writs of restitu-  
tion.

**IMPROVEMENTS.**—It has been held that buildings, to be an im-  
provement on annual labor, must be made for benefiting the claim.  
See "Annual Labor."

**JUMPING CLAIMS.**—See "Crimes."

**LAND OFFICERS.**—United States land-officers are established at  
Denver, Aurora, Pueblo, Greenwood Springs, Durango, Gunnison,  
Del Norte, Montrose, Lamar, Hugo, Akron, Sterling and  
Central City.

**LEASE.**—For more than a year must be in writing and should  
be recorded. (G. S., Sec. 207; M. A. S., Sec. 1317.)

**LIENS.**—All persons who do work or furnish materials for the  
working, preservation or development of any mine, lode, mining  
claim or deposit, or upon any shaft, tunnel, incline, adit or other  
excavation designed for the purpose of draining or working the  
same shall have a lien upon the same for the amount and value of  
the work done or materials so furnished, to the extent of the  
interest or claim of such owner thereto at the time of the com-  
mencement to do such work or furnish such materials. This lien  
attaches to title subsequently acquired. Where several lodes or  
deposits are worked through a common shaft, they are considered  
one mine for the purpose of this act. (G. S., Sec. 2337; M. A. S.,  
Sec. 2873.) The act does not now apply to work done for a lease, but  
did from July 18, 1889, to July 18, 1891, unless owner avoided the same  
by filing a notice that mine was being worked under a lease. Said  
lien attaches to rights of water and rights of way appertaining to property  
in lien attached. The purchaser of a mining claim is not entitled to  
lien. Miners' liens are enforced by filing statement and bringing  
suit as in mechanics' liens.

**LIMITATIONS.**—Every person in the peaceable and undisputed  
possession of a mining claim, and color of title, made in good faith,  
shall for five consecutive years continue in such possession and shall also,  
during said time, pay all taxes legally assessed on such mining claim,  
shall be entitled and adjudged to be the legal owner of his or her proper title. Persons hold-  
ing under such possession by purchase, devise or descent before  
said five years shall have expired, and who shall continue such  
possession and continue to pay the taxes assessed for the term  
aforesaid, shall be entitled to the benefits of above. (G. S., Sec.  
238; M. A. S., Sec. 2323.) The above applies only to possessory  
rights of lands owned by the United States. Actions for trespass  
and of replevin are barred in six years. (G. S., Sec. 2163; M. A. S.,  
Sec. 270.)

**LOCATION.**—No location of a mining claim shall be made until  
the discovery of the vein or lode within the limits of the claim  
located. The discoverer of a lode shall, within three months after  
the date of discovery, record his claim in the office of the recorder  
of the county in which such claim is situated, by a location certi-  
ficate which shall contain, first, the name of the lode; second,  
the name of the locator; third, the date of location; fourth,  
the number of feet in length claimed; fifth, the general course of the  
lode as near as may be. (G. S., Sec. 2389; M. A. S., Sec. 3150.)

Before filing such location certificate the discoverer shall locate his claim by: First, sinking a discovery-shaft upon the lode to a depth of at least ten feet from the lowest part of rim of such shaft at the surface, or deeper if necessary to show a well-defined ore vein; second, by posting on the side of the shaft at the surface a plain sign or notice containing the name of the lode, the name of the locator and the date of discovery. (G. S., Sec. 240; M. A. S., Sec. 312.)

Such surface boundaries shall be marked by six substantial posts hewn or marked on the side or sides which are in toward the claim, and sunk in the ground, to wit: One at each corner and one at the center of each side-line. (G. S., Sec. 240; M. A. S., Sec. 312.)

Any open cut, cross cut or tunnel which shall cut a lode at the depth of ten feet below the surface shall hold such lode the same as if a discovery-shaft were sunk thereon, or an adit of at least ten feet in along the lode shall be equivalent to a discovery-shaft. (G. S., Sec. 240; M. A. S., Sec. 314.)

The discoverer shall have sixty days from the time of uncovering or disclosing a lode to sink a discovery-shaft thereon. The discovery-shaft must be sunk upon unoccupied public land, that is to say, it must be on the side of the lode which is toward the valid location, and there must be a separate discovery for each claim. Where one lode crosses, runs into or unites with any other lodes, priority of title shall determine the rights to all ore or mineral contained within the claim, and the locator, or his assigns, the locator of any mining claim heretofore or hereafter located, or his assigns, shall apprehend that his original location certificate was defective, erroneous, or that the requirements of the law had not been complied with, and that he is entitled to the same by changing the surface boundaries or taking in any part of an overlapping claim which has been abandoned, he may file an additional certificate, provided such re-location does not interfere with existing rights of others, at the time of such re-location. (G. S., Sec. 240; M. A. S., Sec. 312.)

An abandoned lode claim may be re-located by sinking a new discovery-shaft or sinking the original shaft ten feet deeper, and the re-located claim shall be treated as a new location as abandoned property. (G. S., Sec. 241; M. A. S., Sec. 312.)

The discoverer of a placer claim shall, within thirty days from the date of discovery, record his claim in the office of the recorder of the county in which such claim is situated, by a location certificate which shall contain, first, the name of the claim, designating it as a placer claim; second, the name of the locator; third, the date of discovery; fourth, the number of acres or feet claimed; fifth, a description of the claim, and the name of the patented objects or permanent monuments as shall identify the claim.

Before filing such location certificate the discoverer shall locate his claim, first, by posting upon his claim a plain sign or notice containing the name of the claim, the name of the locator, the date of discovery, and the number of acres or feet claimed; second, by marking the surface boundaries with substantial posts sunk in the ground, to wit, one at each angle of the claim. It will be noted that the notice on stake must contain the date of discovery, which the location certificate must contain the date of location. See also "Lodes," "Placer," "Apex."

**LODES.** Lodes cannot exceed fifteen hundred feet in length. In Gilpin, Clear Creek, Boulder and Summit counties the width is one hundred and fifty feet and in all other counties three hundred feet, which width is to be evenly distributed on each side of the center of the vein or vein. Under the decisions in this state it seems that the lode should be in place in the discovery shaft, but the discovery shaft need not be at the point where the lode was first discovered or disclosed. Each claim must have a separate discovery-shaft. Known lodes within limits of a placer are excluded by the patent unless the lode belongs to claimant and is especially designated in the application. Where lodes cross, or intersect, the one with prior title is entitled to the ore or mineral contained in the space of intersection, but subsequent location has a right of way through the intersection for the purpose of mining.

**MAXIMUS WRIT.** The district court has power to issue writs of injunction for all claims, and for the purpose of effect of a writ of restitution, restoring any person to the possession of any mining property from from which he may have been ousted by fraud, force or violence, or from which he is kept out of possession by threats, or where the party has taken any delivery of such ore, or a legal holiday or while temporarily absent therefrom; the granting of such writ extends only to the right of possession, leaving the parties to their legal rights on all other questions as though no such writ had been issued; the writ shall be enforceable except upon five days' written notice to the adverse party, and after a hearing.

**NOTICE, LOCATION.**—The requirement of a location notice is absolute both on lode and placer claims. Location certificates and notices on wells are not required to keep their product from emptying into any natural water-course.

**OPEN CUTS.** A discovery by means of an open cut is equivalent to a shaft. See "Location."

**ORE BUYERS.** Persons or corporations engaged in mining, sampling, concentrating, reducing, shipping or purchasing ore in the state of Colorado shall keep a book showing the name of the party on whose behalf such ore is delivered, the name of the buyer and when of the day and by what train delivered such ore, the weight and amount of each such lot of ore, the name and location of the mine or claim from which it shall be stated that the same has been mined or procured, and the date of delivery of any and all parcels of ore, which book shall be examined by any party in interest, after affidavit made by him before some magistrate that ore has been stolen from him. The buyers of gold dust, amalgam, bullion, gold specimens, silver nuggets and silver bullion shall be required to keep a book showing the name of the party to whom the owner or entitled to the possession of any mining claim in possession of other parties mining who are shipping ore there-

from may render the purchasers of such ore liable for the value thereof by serving upon said purchasers a notice to that effect, provided that within five days after serving such notice he commences an action to join the party unlawfully in possession from so disposing of said ore.

**PARTNERSHIP.**—Mining partnerships exist where several owners cooperate in the working of a mine. A member of such a partnership may assign his interest without consent of the other partners, and the partnership dissolved by the death of a partner. The power of a member of a mining partnership to bind the firm is limited strictly to the scope of the business, to what is necessary and usual in like concerns. A mining partner cannot exercise a firm promissory note or employ counsel. A general partnership may be formed for mining purposes.

**PLACER.**—Stone quarries, oil land, kaolin, borax beds and asphaltum may be located as placers. A placer location must have a name. As to requirements of certificate see "Location." (G. S., Sec. 240.) An indefinite record is void. There must be a separate certificate for each claim. (G. S., Secs. 240, 242; M. A. S., Secs. 312, 313.)

**RELINQUISH.**—See "Location."

**RIGHT OF WAY.**—Every miner shall have the right of way across any and all claims for the purpose of hauling quartz from his claim. All mining claims are subject to right of way of any ditch or flume for mining purposes, or of any trestle or park trail, provided such right of way shall not be exercised against any prior existing valid location, without consent of the owner, except by condemnation as in case of land taken for public highways. (G. S., Sec. 240.)

**SEPARATE.**—The right to mine is separate from ownership or right of occupancy to the surface, the owner or rightful occupant of the surface may demand security from the miner, and if refused may enjoin such miner from working until such security is given. The order of injunction shall fix the amount of bond. (G. S., Sec. 248; M. A. S., Sec. 319.)

**TAXATION OF MINES.**—Under the constitution mines were not the subject of taxation for ten years from March 14, 1876, but only the right to process and surface improvements thereof. But in 1881 an act was passed providing that all mines and mining property should be assessed and taxed, and sold for delinquent taxes, as other property. All mines, claims and possessory rights, which are not processed and surface improvements thereof, shall be assessed upon a valuation not exceeding one-fifth of the gross proceeds for the year, to be ascertained by the assessor. If the proceeds are from a group of contiguous claims, the valuation shall be based upon the value of the most productive patented claims assessed, and the right of possession sold for delinquent taxes. It is the duty of the assessors to give on their rolls the mineral survey numbers of claims patented or entered for patent. It has become customary in many counties to assess unproductive patented claims on the basis of the value of \$200.

**TUNNEL.**—A territorial act in 1861 gave the right to locate and record tunnel sites with right to two hundred and fifty feet way from said tunnel on each lode discovered, and such tunnel has a right of way through any lode discovered or in its course. This act conflicts with the congressional acts, and is probably inoperative in part, but the grant of a right of way relieves the tunnel owner from liability for a technical trespass. (See "Right of Way.")

## CONNECTICUT

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### CORPORATIONS.

Any three persons, by written agreement, stating the name, purpose, location, capital stock and the names and shares of each stockholder, may form a joint-stock corporation for any lawful business in this state, "and out of this state, whatever business may be conducted, but the business shall not be banking, insurance, trust, insurance, buying and selling real estate, banking or trading in bonds, notes or other evidences of indebtedness, or trafficking in letters patent or patent rights. The name must begin with "The" and end with "Company," "Incorporation" or "Association." The shares must be of the par value of \$100, \$20 or \$25.

The articles of association must be published at full length in a newspaper published in the county of location, and a copy thereof, with a certificate of its publication, the names and residences of the stockholders, the stock taken by each, the amount actually paid in cash, and the amount in property, with schedules thereof, must be made, signed and sworn to by a majority of the directors and recorded in the offices of the secretary of state and of the town clerk in the town of location.

No business can be done until the entire stock is subscribed, and at least twenty per cent, paid in cash.

Annual reports showing stock paid in, value of real estate, value of the stockholders' shares, debts, assets, credits, income, residence, and number of shares of each stockholder, must be filed with the town clerk and secretary of state. (Rev. St. 1888, §§ 1944-1948.)

No application to the general assembly for a charter for a corporation to perform its principal business outside the state shall be heard until the applicants have paid to the treasurer of the state \$100; and before beginning business they shall pay such further sum, not less than \$100, when \$1000 shall be determined by the general assembly. This is in lieu of all franchise tax but not of tax on property or on the shares of stockholders within this state. (Rev. St. 1888, §§ 1922-1930.)

## LIENS.

Any person furnishing materials or rendering services in the construction or repair of any building to a value exceeding \$25 may, by lodging with the town clerk a sworn certificate in form prescribed by the statute, within sixty days from ceasing to so render services or furnish material, obtain a lien on the building and the land on which it stands, which will take precedence over any incumbrance arising after the commencement of such service or furnishing of material.

Sub-contractors can take advantage of this statute only by notifying the owner in writing of their intention to claim a lien within sixty days from the commencement of their claim. This notice, with return of service, must be recorded in the town clerk's office. (Rev. St. 1888, §§ 3018-3021.) Sub-contractors' liens are subject to all rights of the owner for payments made in good faith, before receipt of notice.

Chattel mortgages are invalid without actual delivery of possession to and retention by the mortgagee; but mortgages of "any manufacturing or mechanical establishment together with the machinery, engines or implements situated or used therein," or of such personal property, without the real estate, or of several other classes of chattels expressly enumerated, may be valid without delivery of possession if executed and recorded like deeds of real estate. (Rev. St. 1888, § 3016.)

Contracts of conditional sale are held valid, though possession is taken by the vendee, and the vendee has the right of using or selling the goods; the attitude of the courts being one of great liberality to conditional sales and of great strictness toward chattel mortgages. (49 Conn., 141; 31 Conn., 500.)

## MINING.

There is almost an entire absence of either legislation or judicial decision in regard to mining and quarrying in Connecticut. Non-resident aliens who (except citizens of France) are incapable of holding real estate for other purposes, may acquire and hold real estate for the purpose of quarrying, mining, dressing or storing ores, or for entering the products of such quarries and mines into articles of trade or commerce;" but shall forfeit their title if such land ceases for ten consecutive years to be used for such purposes. (Rev. St. 1888, § 16.)

**WATER RIGHTS.** Any owner or intending owner of a mill is given the right of eminent domain, to be exercised by petition to the superior court and appointment of an appraising committee, to flow the land of others by a dam on his own land or to dig ditches to conduct water to his mill, or discharge ditches from the same over the land of others, or to deepen existing ditches. Rights of existing mills are fully protected from injury by such proceedings.

The damage to be paid is that found by the appraising committee, plus fifty per cent. (Rev. St. 1888, §§ 126-127.)

## DELAWARE.

## CORPORATIONS.

**HOW FORMED.**—Corporations are chartered by the legislature of the state by the passage of a law creating such corporation. No corporation can be chartered except by the concurrence of two-thirds of each branch of the legislature.

**DURATION.**—Corporations chartered by the legislature cannot continue for a longer period than twenty years unless a renewal act be passed by the legislature.

**REVOCATION.**—By the constitution of the state the legislature has reserved to it the power to revoke any corporation charter.

**POWER.**—Corporations have the usual power given to all corporations, such as suing and being sued, having contracts, and appointing officers, making by-laws, determining the time and place of their meetings, and such other powers as are necessary to the carrying out of the objects of the corporation.

**SALE OF.**—The franchise of a corporation may be taken and sold on execution for a money judgment rendered against the corporation, the same as the property of the corporation may be levied on and sold.

## LIENS.

Whoever furnishes materials to an amount in excess of \$25 in value on any house, building, structure or vessel, under a contract with the owner or contractor, has a lien which attaches to the property for which it was furnished, and also to the land on which it stands and sufficient of the land surrounding for the reasonable use of the building. This lien takes precedence over all incumbrances attaching to the property, and is not extinguished by the death of the contractor. The contractor must file his statement under oath, with name of owner, description of property on which the lien is claimed, kind and value of materials furnished, amount due and the time when the work was commenced and finished, stated to be furnished. This statement is filed in the office of the prothonotary of the superior court of the county where the building is situated, or, in case of a vessel, of that in which the materials were furnished. Sub-contractors must file within ninety days after furnishing material, and contractors cannot file until ninety days after the building is completed, and must file within thirty days thereafter. In case of a vessel the statement must be filed within four days after the vessel is launched and ready for sea. There is no priority among lienholders if property is not sufficient to pay all; they share pro rata. The lien is enforced by attachment. For materials furnished to a tenant the lien attaches only to the leasehold interest held by the tenant.

## FLORIDA.

Compiled by HORATIO DAVIS, Attorney at Law, Gainesville, Fla.

## CORPORATIONS.

The constitution of the state provides:

1. That the state cannot pledge or loan its credit to, or become a joint owner or stockholder in, any company, corporation or association, and that companies, citizens or associations incorporated in this state cannot stockholders in, obtain or appropriate money for, or loan their credit to, any corporation, association or institution.

2. That neither private property nor the right of way shall be appropriated to the use of any corporation until full compensation therefor shall be first made to the owner, or first secured to him by deposit of money; which compensation, irrespective of any benefit from any improvement proposed by such corporation, shall be ascertained by a jury.

3. That the property of corporations, except that of the corporation which shall construct a ship or barge canal across the peninsula of Florida, shall be subject to taxation unless such property be held and used exclusively for religious, scientific, municipal, educational, literary or charitable purposes.

4. That the legislature shall provide by general law for incorporating such educational, agricultural, mechanical, mining and other useful companies or associations as may be deemed necessary.

## GENERAL CORPORATION LAW.

**NUMBER OF INCORPORATORS.**—Any three or more persons may associate themselves and become incorporated for the transaction of any lawful business.

**REQUIREMENTS OF PROPOSED CHARTER.**—It must be subscribed by three or more persons, and acknowledged by at least three of the subscribers, before some officer authorized to take acknowledgment of deeds. It must set forth name of corporation and place of business, the general nature of the business to be transacted, the amount of capital stock authorized, and the number and par value of the shares into which it is divided, and the terms and conditions upon which it is to be paid in; the term for which it is to exist, by what officers the business of the company is to be conducted, and the times at which they will be elected, the stockholders of the first election shall be qualified; the highest amount of indebtedness or liability to which the corporation can subject itself, and the names and residences of the subscribers.

**NOTICE OF INTENTION TO APPLY FOR LETTERS PATENT.**—The proposed charter, with notice of intention to apply to the governor for letters patent thereon, shall be published once a week for four successive weeks in some newspaper published in the county where the place of business is to be located, which notice shall be signed by at least three of the subscribers. The state during the four weeks of publication.

**ISSUE OF LETTERS PATENT.**—The proposed charter, with proof of publication of notice, shall be presented to the governor. If in proper form and for an object authorized by law, and notice has been given, patent will issue incorporating the subscribers, their associates and successors, into a body corporate. The secretary of state shall annex to the letters patent a certified copy of the charter, retaining the original, and before delivering the letters patent shall record them in a book kept for the purpose. He shall receive from the corporation before such delivery a charter fee of \$100; besides such other fees as are allowed by law.

The letters patent, with the certified copy of the charter, shall be recorded in the office of the clerk of the circuit court of the county wherein the place of business is to be located, and there shall also be filed with said clerk, and in the office of the secretary of state, a duplicate affidavit by the treasurer of the company, that ten per cent. of the capital stock has been subscribed and paid. If the corporation transacts any business before complying with above requirements, its stockholders shall be personally liable for the same, as if they were members of a general partnership.

**STOCK.**—The stock of corporations shall be deemed personal estate; shall be divided into shares of not less than \$10 each; shall be paid for in lawful money of the United States unless otherwise expressly stated in the charter or by-laws; be forever prescribed in the by-laws. The property of a stockholder shall be exempt from the debts and liabilities of a corporation contracted in its corporate capacity except the stock of said stockholder in said corporation, and that only to an extent equal to what remains unpaid upon the subscription to said stock.

**INHERENT POWERS OF CORPORATIONS.**—To have succession for period limited in its charter, and, when no period is limited, perpetually; to sue and be sued; to file and adopt contracts, and to be bound by them; to sell and alienate, at their pleasure; when special provision is not made by law or otherwise, to hold, buy, convey or mortgage such personal or real estate as purposes of corporation shall require; also to take, hold and convey such other real and personal property as shall be necessary for the corporation to acquire in order to obtain or secure the payment of any indebtedness or liability to it; to appoint such subordinate officers and agents as affairs of the corporation shall require, and to allow them to file and prosecute suits in law or equity; to be dissolved or dissolved by vote of its members, cast as by-laws may direct, the number of directors, managers or trustees, so, however, that the number shall not be less than three nor more than thirteen.

**OFFICERS.**—Business of the corporation shall be managed by a president, a board of directors, a treasurer or cashier, and such other officers as the corporation may authorize. A majority of the whole number of directors shall be chosen to constitute a quorum. One of the directors shall be chosen president.

**QUORUM.**—A majority of the stock shall constitute a quorum. At stockholders' meetings, each stockholder shall be entitled to one vote on each share of stock held by him, but no stockholder whose liability for unpaid assessments is past due shall be allowed to vote.

Corporations may increase or reduce their capital stock and amend their charter by complying with the directions set out in the general corporation laws.

**ASSOCIATION.**—The equity court, on petition of a majority in interest of the stockholders, may decree a dissolution of a corporation.

#### LIENS.

Liens prior in dignity to all others may exist in favor of the following persons:

**FOR LABOR ON BUILDINGS AND STRUCTURES.**—In favor of any mechanic, laborer or other person who shall perform by himself or others any labor upon or in the construction or repair of any building or other work of structure, or of additions to, or upon any fixtures therein or thereon—lien upon such building, work or structure and the land upon which it stands.

**FOR LABOR ON RAILROADS AND TELEGRAPH LINES.**—In favor of any person performing by himself or others any labor upon any railroad, canal, telegraph or telephone line, wharf, mill, distillery or other manufactory, whether in the construction, repair or operation thereof, lien upon such line, wharf, mill, distillery or other manufactory, any and all franchises, machinery and equipments connected therewith or thereon, and on the land upon which they stand.

**FOR LABOR ON FARMS, ETC.**—In favor of any person performing by himself or others any labor upon or in any farm, orchard, grove, garden, park or other grounds, whether in clearing, up, fencing, ditching or draining, or in maintaining, improving or cultivating the same—lien upon such farm, orchard, grove, garden, park or other grounds.

**FOR MATERIALS FURNISHED.**—In favor of any person who shall furnish any building material for the construction, repair or use of any building, railroad, canal or telegraph line, wharf, bridge, mill, distillery or other manufactory work of structure, lien upon the said buildings, uses or other property, and the land upon which they stand.

Liens prior in dignity to all others may exist upon personal property: For labor in and with machines, tools, for labor in laces and timber; for labor as bookkeeper, clerk, etc.; for labor in raising crops; for labor on or for vessels; for manufacturing and repairing articles; for furnishing articles to be manufactured; for furnishing locomotives, machinery, etc.; for furnishing material for vessels; for care and maintenance of horses; for boarding and lodging at hotels.

The statute prescribes in favor of whom and upon what personal property the lien may exist.

**LIENS ON REAL PROPERTY.**—If the labor shall be done or the materials furnished by the procurement of the owner of the property or his agent, or of a person contracting with him to have the work done or materials furnished, the lien shall be in the interest of such owner, by the procurement of one having less than the absolute interest, or of his agent, or of any person contracting with him to have the work done or materials furnished, the lien shall be only upon the limited interest of such person.

The statute prescribes how the liens shall be acquired: First, as against the owner or person deriving through his death, or against purchaser, or creditors with notice. Second, as against purchaser, and creditors of such owner without notice.

**ENFORCEMENT OF LIENS.**—Where the law requires lien to be recorded, suit must be brought within twelve months from the time of such record; where it is not required to be recorded, suit must be brought within twelve months from the performance of the work or the furnishing of the materials.

#### MINING.

An act of the legislature, approved, June 9, 1891, provides for a board of phosphate commissioners to control and manage the phosphate interests of the state in the beds of her navigable rivers, and authorizes the board to enter into contracts with persons desiring to mine phosphate in such waters.

This is the only statute of the state concerning mines and mining.

## GEORGIA

### CORPORATIONS.

**BY WHOM CREATED.**—The power to create corporations rests in the general assembly and the courts.

**FOREIGN CORPORATIONS.**—Foreign corporations are recognized in our courts only by equity. They are allowed to own lands in the state, but when the amount reaches as much as five thousand acres they shall be incorporated under the laws of Georgia, and on their failing to do so the state of Georgia will not consent to the said corporation owning lands in its territory, not exceeding twenty years, for which they desire to be incorporated.

**FORMATION UNDER ORDER OF COURT.**—A private corporation, for any purpose whatever, except banking or insurance, may be created in this state by complying with the following provisions: Any persons desiring to incorporate may file a petition with the superior court of the county in which they desire to transact business a petition specifying the objects, the business, their corporate name, the amount of the capital stock, the amount of capital actually paid in, the place of incorporation, and the date, not exceeding twenty years, for which they desire to be incorporated. Said petition is published once each week for one month before

the court shall pass upon said application. 2. If the application is legitimately within the purview of the code, upon hearing the judge shall pass an order declaring said application granted. A certified copy of this petition and order, under the seal of the court, shall be filed in the office of such county clerk as may exist in this state. 3. The incorporators must commence to exercise the power granted by the act of incorporation and pay in ten per cent of the capital stock within two years, to give said charter any force and effect; and in case of failure to do so the stockholders shall be bound in their own capacity as any creditor of said incorporation for the amount of stock subscribed for by them. 4. Corporations thus created may exercise all corporate powers necessary to the purpose of their organization, but shall make no contract or purchase or hold any real property, except as may be necessary for legitimately carrying into effect such purpose, or for securing debts to the company. They have continuous succession during the time limited by their charter. If the charter is silent as to its continuance, such charter shall expire the end of thirty years from the date of its grant. They have the right to sue and be sued, have and use a common seal, make by-laws binding on their own members, not inconsistent with the laws of this state and the laws of the United States; receive donations, to purchase and to hold such property as is necessary for the purpose of their organization.

Judges of the superior courts, in their discretion, may hold special terms of their courts for the purpose of granting charters to corporations.

**SUITS AGAINST CORPORATIONS, MINING, OR JOINT-STOCK COMPANIES.**—Any corporation, mining or joint-stock company may be sued on contracts in that county in which the contract was made and was to be performed, or if it has an office and transacts business there, suits for damages may be brought in the county where the cause of action originated. Service may be had by leaving a copy of the writ with the agent of the defendant, or at the place of business.

#### LIENS.

The following liens are established in this state: Liens in favor of the state, counties and municipal corporations for taxes; creditors by judgment and decree; laborers, landlords, mortgagees, merchants, factors and others furnishing necessities, as hereinafter provided; mechanics, plumbers, carpenters, painters, contractors, material-men, machinists and manufacturers of machinery, certain creditors against steamboats and other water craft, proprietors of sawmills and planing-mills, and other similar establishments; lumbermen, boarding-house keepers, carriers, innkeepers, stable keepers, pawnbrokers, depositors, judges, factors, acceptors and attorneys at law.

**GENERAL LIEN OF LABORERS.**—Laborers shall have a general lien upon the property of their employers, liable to levy and sale of their labor when it is heretofore used, for labor in laces and timber, except liens for taxes; the special liens of landlords upon yearly crops, and such other liens as are declared by law to be superior to them. They shall have a special lien on the products of their labor, superior to all other liens, except liens for taxes and special liens of landlords upon yearly crops.

**LIENS OF MECHANICS.**—All mechanics, to work done and materials furnished in building, repairing or improving any real estate of their employer; all contractors, material-men and persons furnishing material for the improvement of real estate and building factories; all machinists and manufacturers of machinery who may furnish or put up in any county of this state any steam mill or other machinery, or who may repair the same, and all contractors to build railroads, shall have a special lien upon such real estate, factories and railroads, which shall attach upon the real estate improved upon, and shall serve written notice to the owner stating the amount claimed, before he settles with or pays such contractor or employer. They shall also have a special lien on the personally, which may be asserted by retention of such property, or the mechanic may surrender such personal property and give credit. Such lien shall be superior to all other liens but liens for taxes, and such other lien as the mechanic may have had actual notice of before work was done or material furnished.

**LIENS OF PAWNERS, ETC.**—Pawnbrokers, bailors, factors and acceptors shall have liens inferior to the liens for taxes, liens of which such persons had actual notice before becoming creditors, superior to liens of personal property, liens of real estate, by judgment, and other general liens reduced to execution and levied.

**LIENS OF DEPOSITORIES.**—Depositaries shall have liens occupying the same position as mechanics and attorneys at law. Attorneys at law shall have a lien on all papers of any of their clients in their possession to be returned to them, and may apply such money to the satisfaction of such claims.

**ENFORCEMENT OF LIENS ON REALTY.**—Liens on real property, other than mortgages, shall be foreclosed, first, by a judgment against such property is situated, and then, by the entry of judgment of his claim of lien within thirty days after the completion of the work, or within three months after material or machinery is furnished, in the office of the clerk of the superior court in the county in which such property is situated, and then, by the entry of a writ of an action for recovery within twelve months from the time the same becomes due. The claimant must set forth his lien and the premises on which he claims it; if the claim of lien be disputed in the process, or decree, an issue shall be ordered and tried as in other causes.

**ENFORCEMENT OF LIENS ON PERSONALTY.**—There must be a demand on owner, agent or lessee, a refusal to pay on such demand, and refusal must be averred. It must be prosecuted within the year after the debt is due, supported by an affidavit before a judge of the superior court, or the ordinary of the county in which the personal property may be, showing all the

facts necessary to constitute a lien under the code. If the defendant contests the amount of the claim, he shall file his affidavit of the fact, setting forth such denial, which shall file with form an issue to be returned to the court and tried as other causes.

#### MUNING.

**RIGHTS OF WAY FOR PERSONS ENGAGED IN MINING.**—Any person or corporation engaged in mining, needing for the successful prosecution of such business a right of way for a railroad, turnpike or common road across the lands of others, or where it is necessary to divert any water-course from its usual channel, it shall be lawful to organize a board of arbitrators, who shall determine as to the necessity, who are damaged, and how much. It shall be the duty of the arbitrators to summon before them all the parties interested and such witnesses as are necessary, and return their award to the superior court on the first day of the term held thereafter; and at such time all of the parties affected thereby shall have the right of appeal to said superior court.

**PRIVILEGES INCIDENTAL TO MINING.**—The owner of any mine shall have the right to enter upon any land intervening between the mine and the water-course, small stream, main stream, dependent, and to cut thereon such ditch, canal or tunnel, or construct such flume or other aqueduct, and build such dam, as may be necessary to control said power; provided, he shall first have the damages assessed, and shall pay to the owner of the land so intervening the damages which may be assessed in the matter hereinafter provided. He shall give to the owner of the land at least five days' notice of his intention to make application, present to the ordinary of the county his written application, which application shall describe the land to be entered on, the privileges desired thereon, and the name of the owner; and the owner of the mine shall thereupon select one freeholder, the owner of the land another freeholder, and the ordinary of the county shall appoint a third freeholder. The said three freeholders shall survey the premises and make an award of the damages, which award shall be returned to the ordinary of the county and filed in his office; and such award, unless appealed from as hereafter provided, shall be final. But no right of entry shall accrue until the damages assessed are first paid. The fees of the ordinary and of the freeholders for said services shall be \$2 each, which shall be paid by the applicant.

Draining privileges are obtained under and according to the provisions and requirements specified above, all of which are hereby extended to the owners of mines desiring to drain their mines and to carry off the water and tailings through or over the lands of others.

### IDAHO CORPORATIONS.

**HOW FORMED.**—To create a corporation a paper is drawn up and signed, called articles of incorporation. This paper must contain the name of the corporation, the purpose for which it is formed, the place where its principal business is transacted, the term for which it is to exist, not exceeding fifty years, the number of directors and the names and residences of those appointed for the first year, the amount of its capital stock and number of shares in which it is divided, the amount of capital stock actually subscribed and the names of the subscribers. These articles of incorporation must be signed and acknowledged by at least five persons, a majority of whom must be residents and freeholders. If the corporation be for the construction of a railroad, telegraph line or wagon road, and the same is to be constructed, the articles subscribed for each mile intended to be constructed. These articles of incorporation are filed for record with the county recorder of the county where the principal place of business for the company is. A certified copy of these articles made by the county recorder is filed with the secretary of state, and the secretary of state, as county recorder then issues a certificate showing that these papers have been filed in his office; and upon the issuance of this certificate the organization becomes a corporation by the name stated in its articles for the term therein stated, not exceeding fifty years.

**BY-LAWS.**—Every corporation must adopt a code of by-laws within one month after filing its articles of incorporation. These by-laws must not be inconsistent with the law, and must be passed by a majority of all the stockholders after a meeting called for that purpose, of which due notice has been given.

**OFFICERS.**—The directors of a corporation must be elected every year. If the by-laws contain no provision for the time of election, then the election must be on the first Tuesday in June. The board of directors cannot be more than eleven nor less than five in number, and a majority of them must be citizens and residents of the state.

**POWERS.**—Corporations may make their own by-laws, elect their own officers, own property, sue and be sued, and generally do any business which private individuals might lawfully do.

**DISSOLUTION OF.**—Corporations are dissolved by the district court of the county upon voluntary application, and in no other way. This application must be in writing; must state that at a meeting of the stockholders was agreed to by two-thirds of all the stockholders by vote, and that all claims and demands against the corporation have been satisfied and discharged. This application must be signed by a majority of the board of directors and filed in the court. If the application is filed, that the application is in form, he orders it filed and directs the

clerk to give thirty days' notice by publication in some newspaper. Any person may appear and object, and if any objections are made the court hears and determines the matter, and if the statements of the application are found to be true he enters a judgment dissolving the corporation.

**DEBTS.**—Corporations may not incur debts beyond the amount of the subscribed stock.

**FOREIGN CORPORATIONS.**—If a foreign corporation shall appoint a person residing in this county at which the principal place of business of such corporation in Idaho is, as the person upon whom legal process may be served, and file such appointment with the secretary of state and in the office of the clerk of the county where the court of record is, such foreign corporation may sue and be sued in the courts of this state on the same terms, including the right of eminent domain; and such foreign corporation also becomes subject to the laws of the state applicable to like domestic corporations.

#### LIENS.

Liens are given for material furnished in the construction or repair of any building, mining claim, bridge, fence, machinery, railroad, wagon-road, or aqueduct to create hydraulic power, by virtue of contract with the owner or his contractor. The lien attaches to the improvement and to enough adjacent land for its convenient use, and is superior to any other incumbrance created after the first of the material is furnished. To secure the lien the contractor must within sixty days from the completion of the contract, and the sub-contractor within thirty days, file notice and claim of lien in the county recorder's office. The lien is foreclosed by a suit in the district court, begun within ninety days from the filing of the notice.

#### MINING.

**WIDTH OF CLAIMS.**—Mining claims hereafter located upon veins or lodes of quartz or other rock in place, or any metals or other valuable deposits, may extend to three hundred feet on each side of the middle of the vein or lode. The locator of any lode or mining claim must at the time of making the location place a substantial stake, post or monument, not less than four inches in diameter, at each end of the ground claimed, as near as practicable to the middle, and also a similar mark at each corner of the location, such marks to be at least four feet high and must be marked distinctly with the name and location of the claim.

**NOTICE.**—The notice of location must be conspicuously attached to one of said center end posts so that it may be easily read, or it must be posted on the main end post. The notice must contain the date of location, names of locators, name of claim, ledge or lode and quantity in feet claimed along the ledge or lode, the width claimed from the middle of the vein, and must also contain such describing words and locality as refer to natural landmarks as to render the situation of the same reasonably certain from the notice itself.

**WHEN TO BE RECORDED.**—Every claim must be recorded within fifteen days from the date of posting the notice in the district in which the claim is located, or at the nearest office. For the convenience of prospectors and locators the county recorders of the several counties must appoint a deputy at any place where they deem it necessary, and in all places more than ten miles distant from the existing office whenever ten or more mining locators interested petition for such appointment. Upon failure to make such appointment for ten days after receipt of petition the resident miners may temporarily appoint one of their own number to act as recorder, and his record shall be as valid as though made by deputy; provided, that whenever the recorder appoints a deputy for that district the authority of the person elected by the resident miners ceases. At the time of presenting a notice for record, or within five days thereafter, one of the locators named in the same must make and subscribe an affidavit in writing on or attached to the notice which must contain the name of the lode, ledge or claim, and must state that the claim therein described or any part thereof has not before been located according to the law of the state, or that if so located has been abandoned or forfeited by reason of the failure of the locators to comply with the law.

**HOW RECORDED.**—The notice herein required to be recorded is substantially the same as that required by other statutes. It must be recorded by the deputy appointed by the district recorder or the person elected for that purpose (when the legal fee is tendered), in the book to be kept for that purpose. Said book must be in the names of the locators, and must be kept in alphabetical order. The fee to be tendered for making such record, administering the oath and certifying the same, and for indexing the names occurring in the notice, and to include recording of the notice by the recorder, is \$2, which must be equally divided between the recorder and the deputy, and no other or additional sum of money must be demanded or received by either of them for any services connected with the recording of any notice of location made pursuant to the requirements of this statute.

**DEPUTY TO RECORDEE NOTICE OF THIS STATE.**—The deputy recorder of mining claims of each district or the person elected in his place must at least once a month transmit to the recorder at the county seat all notices of location filed with him for record not previously transmitted to him, which must be recorded by said recorder in a book to be kept in his office and known as the book of mining claims.

**DEPUTY RECORDER'S DUTIES.**—Deputy recorders provided for and employed by any authorizing act perform any duties which the special duties herein specified. They must keep an official seal, and the records in their custody are public records, and the seal of a deputy recorder must not be attached to any paper except for the purpose of authenticating certificates attached to transcripts in his custody.



**PLACER CLAIMS, LOCATION OF.** Placer claims may be located under like circumstances and conditions and upon similar proceeding as far as applicable to those provided in the case of lode claims.

**MARKING THE GROUND AND NOTICE.**—The locator of any placer mining claim must at the time of location place a substantial stake or monument at each corner of the location, and post on each a notice of location as required in case of a lode claim.

**RECORDING.**—The same affidavit must be attached to the notice of location of every placer claim, and notice and affidavit must be filed for record at the same time as the lode claim.

**RIGHT OF WAY.**—The owner, locator or occupant of a mining claim may have and acquire a right of way for ingress and egress when necessary in working such mining claim over and across the lands or mining claims of others. When any mine or mining claim is so situated that for its convenience and enjoyment of the same a road, railroad or tramway therefrom, or a ditch or canal to convey water thereto, or a ditch, flume, cut or tunnel to convey water or tailings therefrom, or a tunnel or shaft may be required for the better workings thereof, which road, railroad, tramway, ditch, canal, flume or tunnel may require the use or occupancy of lands owned, occupied or possessed by others, the owner, claimant or occupant of the mine or mining claim first mentioned is entitled to a right of way and to enter into possession of such uses and privileges for the purposes of a road, railroad, tramway, ditch, canal, flume or tunnel, in, upon, through and across such other lands or mining claims may be constructed upon compliance with the following provisions: When the owner, claimant or occupant of the mine or mining claim desires the right of way above mentioned and which cannot be acquired by agreement with owner of lands or claims over, under, across or upon which he seeks to establish this way, he may present to the judge of the district court in and for the county in which such right of way or some part thereof sought to be enforced is situated a petition that such right of way be awarded him. Such petition must be verified and contain a particular description of the nature and extent of the right sought, a description of the mine or claim of petitioner and the claim or lands to be affected by such right, with the names of the owners or occupants thereof.

**CITATION.**—Upon receipt of such petition and filing same with the clerk of the court the judge must direct a citation to be issued under the seal of such court to the owners named in the petition to appear before the judge on a day therein named and answer and show cause why such right of way should not be allowed. Such citation must be served on each party in the same manner as other legal papers.

**HEARING.**—On the return day of the citation the judge must proceed to hear the allegations and proofs of the respective parties, and if on such hearing he is satisfied that the claims of the petitioner can only be conveniently worked by means of the privileges prayed for, he must award to the petitioner such right of way, and must appoint three or more disinterested commissioners or assessors of the county to assess the damages resulting to the lands affected by such order.

**COMMISSIONERS.**—The commissioners must, without reasonable delay, assess the damages and report the amount of the same to the judge. For good cause this report may be set aside and three other commissioners appointed.

**APPEAL.**—Appeals from the assessment of damages made by the commissioners may be made and prosecuted in the proper district court by any party interested, at any time within ten days after filing the report of the commissioners. Notice of such appeal must be served upon the appellee in the same manner as summonses are served in civil actions. The appellant must file with the clerk of the court to which the appeal is taken a bond, with sureties, in the amount of the assessment appealed from, in favor of the appellee, conditioned that the appellant will pay any costs that may be awarded to the appellee and abide by any judgment that may be rendered in the cause. The prosecution of the appeal does not hinder, delay or prevent the appellee from exercising all the rights and privileges accruing under the title he files with the clerk of the court. A bond to double the amount of the assessment appealed from, conditioned that the appellee will pay to the appellant all damages he may sustain and the amount he may recover in the action.

**COSTS.**—If the appellant recover judgment against the necessity of the assessment for some more damages than the commissioners awarded or the appellee has offered to allow, the appellee must pay such costs of the appeal, otherwise the appellant must pay such costs. The costs and expenses of proceedings under the provisions of this law, except as herein or otherwise provided, must be paid by the party making the application, unless the applicant before commencement of such proceedings has tendered to the parties owning or occupying the claims or mining claims a sum equal to the costs and expenses that no Chinese or person of Mongolian descent not born in the United States can acquire any title to land or real estate.

**MINE PARTNERSHIP PROPERTY.**—The mining ground owned and worked by partners, whether purchased with partnership funds or not, is partnership property.

**PARTNERSHIP NOT DISSOLVED BY SALE OF INTEREST.**—One of the partners may sell his interest without dissolving the partnership. The new partner takes subject to all the obligations of the partnership. **CONTRACTS WITH PARTNERS.**—No member of a partnership or agent or manager can bind it by contract except by express authority derived from the members thereof.

**WHO MAY OWN.**—Any person, whether citizen or alien, may own any mining property, but that no Chinese or person of Mongolian descent not born in the United States can acquire any title to land or real estate.

## WATER-RIGHTS.

The right to the use of running water may be acquired by appropriation, if it be for any useful purpose. As between the appropriators the one first in time has the right. A person who desires to appropriate water must first notice all the persons who intend to divert or stating another purpose and means by which he intends to divert it, and must begin work on such ditch, pipe or aqueduct as he intends to use, and must continue such work until finished, unless temporarily interrupted by snow or rain. He must also file a notice of the notice of appropriation within ten days with the recorder of the county in which said notice is posted. A failure to comply with this rule deprives the claimant of the right as against a subsequent claimant who does.

## ILLINOIS

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## CORPORATIONS.

**FORMATION OF.** Corporations for pecuniary profit for any lawful purpose except banking, insurance, real estate brokerage, the operation of railroads and the business of loaning money, and for any other general business, may be formed in Illinois for pecuniary profit. To obtain a charter from the state, the persons who propose to form the corporation, not less than three nor more than seven, must make, sign and acknowledge a statement setting forth the name of the proposed corporation, the object for which it is to be formed, its capital stock, the number of shares, the par value of each share, the location of the principal office, and the duration of the corporation, which must not exceed ninety-nine years. This statement is then filed in the office of the secretary of state, who thereupon issues to such persons a license as commissioners to open books of subscription to the capital stock of the corporation. The capital stock must be all fully subscribed, and the commissioners must then convene a meeting of the subscribers for the purpose of electing directors. Notice of such meeting must be given by depositing in the postoffice, addressed to each subscriber, ten days before the time fixed, a written or printed notice, stating the time, place and object of the meeting. At the subscribers' meeting, every subscriber has the right to vote all shares subscribed by him. In voting, he may cumulate his votes so as to cast as many votes for any one candidate as is equalled by the number of shares multiplied by the number of directors. He also has the privilege of distributing his votes among as many candidates, on the same principle, as he may desire. An election of directors which disregards this right is invalid. The shares may be divided into three or more classes, and the term of office of one class shall expire on the day of the next annual election, the second class a year thereafter, and the third class two years thereafter. When so divided, the stockholders elect each year for the full level of three years as many directors as are in that particular class whose term expires. Vacancies in the board of directors are filled in accordance with the by-laws of the corporation.

When the directors have been elected as above stated, the commissioners make a full report of their proceedings, including a copy of the notice to the subscribers, a copy of the subscription list, the names of the directors and their respective terms of office. This report is sworn to by a majority of all the commissioners and filed in the office of the secretary of state. The secretary of state thereupon issues a charter or certificate of organization and attaches thereto a copy of all papers filed in his office in and about the organization of the corporation. This charter is then recorded in the office of the recorder of deeds in the county where the principal office of the company is located.

**BY-LAWS.** A corporation may adopt such by-laws as it sees fit, but they must not violate or contravene any of the statutes of the state, nor the number of shares, nor the term of office, nor the term of their office changed without the consent of the owners of a majority of the stock.

**ELECTIONS.** The annual elections for directors occur at such time as may be provided in the by-laws, and may be changed from time to time by changing the by-laws.

**PLACE OF MEETING.** Directors' meetings may be held with the consent of a majority of the directors at any place within the United States, but the main office for the transaction of business must be kept within the state and must be that designated in the articles of incorporation.

**OFFICERS.**—The officers of the corporation must consist of a president, secretary and treasurer and such other officers as the directors may determine upon.

**LIABILITY OF STOCKHOLDERS.**—Every subscriber is liable for the whole amount of stock subscribed for by him, and must pay for the same to the extent of paying in full for his stock. If stock is assigned before it is fully paid, both the assignor and the assignee are liable for the unpaid balance on the stock until it has been fully paid for. There is no liability on the part of stockholders after their stock has been paid for.

**LIABILITY OF OFFICERS.**—The president and officers of a corporation exceed the amount of its capital stock, the directors who assent to the creation of such debt are personally liable to the creditors of the corporation for the excess of debts over the amount of capital stock.

**CONTINUANCE.**—Corporations continue for two years after the expiration of the time for which they were organized, for the purpose of winding up their affairs.

**FAILURE TO ELECT OFFICERS.**—A failure to elect officers or to transact corporate business does not have the effect to dissolve the corporation, but an election may be held and new officers elected at any time after proper notice.

**DISSOLUTION OF CORPORATION.**—If a corporation does or refrains from doing any act which subjects it to a forfeiture of its charter or allows an execution for the payment of money to be returned on property found or remain unpaid ten days after demand by the officer having such execution, or shall dissolve or cease doing business leaving debts unpaid, suit may be brought in equity against the stockholders who have not paid for their corporate stock and against the officers who may be required to pay on his unpaid subscription his pro rata share of the debts which exist and are unpaid. The court also has full power upon good cause shown to dissolve or close up the business of a corporation or appoint a receiver to do so or to close up its affairs.

**FOREIGN CORPORATIONS.**—Foreign corporations are subject to all the liabilities, restrictions and duties that are imposed upon corporations of like power organized under the laws of this state, and have no other or greater powers.

#### EMINENT DOMAIN.

Private property may be taken for public use, for public roads, for railroads, roads to mines and mills, but not without compensation first made.

The party authorized to take or damage the property required for such purpose may apply to the judge of the circuit or county court by filing a petition setting forth the authority and purpose for which the property is to be taken, a description of the property and the names of all persons interested in the property, if known. The judge orders a summons issued to each resident defendant and notice published to each non-resident defendant. The case may be heard in vacation or term after ten days' service of process. Any number of separate pieces of property may be included in one petition, if they are in the same county, but the compensation must be assessed separately by jury. New parties may be brought before the court whenever necessary. When the summons is issued the clerk makes out a list of the interested freeholders and from them a sheriff's jury of twelve is selected by lot. This jury is sworn, examines the property, hears the proof and makes a written report under the direction of the judge, showing how much damage each person is entitled to, benefits or advantages the property receives from the improvement cannot be deducted from the compensation. Upon receiving the report the judge makes an order that the petitioner may enter upon the property for the purpose specified, upon the payment of the ascertained compensation. Appeals lie from the decision of the court to the supreme court. If the party whose property is damaged appeals, the petitioner may enter upon the use of the property before the appeal is decided, if he gives bond conditioned to pay for the improvement adjudged. The amount of the money to be paid to the county treasurer, and he shall, on demand, pay it to the party entitled thereto.

#### LIENS.

Persons furnishing materials under contract with the owner of any lot or piece of land for the erection or repair of any building thereon, or appliances thereto, are entitled to a lien upon the building and lot or land for the amount due. Sub-contractors and workmen are required (except where the sworn statement of the contractor serves to give the owner due notice) to give notice of their claim for a lien within forty days after the completion of the sub-contract, or within a like time after payment should have been made to him. Whenever the original contractor desires to draw any money from the owner under his contract, he must give the owner a statement under oath of the numbers and names of sub-contractors or workmen, and the amounts due or to become due to each, and owner shall retain, out of money due contractor, sufficient to pay them. Until such statement is made, contractor has no lien or right of action against owner. If owner pays contractor for receiving a statement under oath, he retains enough to pay what is or will become due sub-contractors and workmen, the payment is illegal, and does not deprive sub-contractors or workmen of their rights. To enforce the claim to a lien, a bill in equity must be filed, in which all facts, such as the contract for the amount due and unpaid, a description of the premises, and such other facts as fully disclose the rights of the parties. All persons interested in the realty may be brought in as parties to the suit. If there is several liens, a distribution may be made between them, if necessary, and the owner cannot be required to pay more than the amount contracted to be paid to the principal contractor. There is no preference between lien-holders. The liens are preferred to all incumbrances existing on the land before the erection of the building, and take preference over such prior incumbrances on the building, but not upon the land, and the whole property may be ordered sold and the proceeds properly apportioned. The suit should be begun by sub-contractor or workman within six months, and by contractor within six months, from the time the material was furnished. The lien exists for all materials furnished to any railroad corporation necessary to the construction, maintenance or repair of its railroad, and six months after the date of the contract in which to enforce their lien. If the railroad contractor fail to complete his contract, any sub-contractor may, within three months, by suit in equity, have the lien-holders' rights adjudicated and established. Any lien-holder may enforce his lien thirty days after notice to do so from any person interested.

#### MILLS.

**MILL-SITES.**—Any person owning land on one or both sides of a river-course, who desires to erect a mill or erect or improve a dam, may, if the compensation for the land taken cannot be agreed upon, cause the damage to be appraised by filing a peti-

tion in the county or circuit court and giving notice to all persons interested, both personally and by six days' publication in some newspaper. After the requisite notice has been given, a jury is selected to ascertain and report just compensation and decide whether the health of the neighborhood will be injuriously affected. If not, and the improvement is not to be made, the applicant is liable to make the improvement by paying damages assessed by the jury. Applicant has three months after jury report in which to decide whether he will pay the amount fixed by the jury. If he does not accept their verdict, the petition is dismissed, and if an appeal is taken he must pay the damages with all costs and a reasonable attorney's fee, and must make the improvement in from one to three years, according to its nature. If the improvement, after erection, be destroyed, the owner has five years in which to replace it.

**INJURY TO MILLDAM, RACE, ETC.**—Unlawfully injure, remove or destroy any canal, levee, dam, reservoir or trench, or the gear or machinery of any mill, or to draw off, or procure to be drawn off, the water from any millpond, reservoir, canal or trench, whereby any water-power is injured or its use impaired, is an offense punishable by fine of \$500 or imprisonment for one year.

**MILLS IN VILLAGES AND CITIES.**—The municipal board in each city and village have authority to allow the construction of such restrictions as they may deem proper.

#### MINING.

**DRAINS, ROADS AND RAILROADS.**—Whenever any mine cannot be worked without a road or railroad thereto or a ditch or drain to convey water to or from it, the owner or operator of the mine may appropriate land and construct a roadway, such railroad, road or ditch by proceeding under the law relative to eminent domain.

**WAYS AND RAILROADS TO.**—The commissioners of highways may cause to be laid out and opened up to a public highway or a railway in the same way as public highways are laid out. They may also permit the owner or operator of the coal mine to construct and operate a horse or dummy railway thereon or on any other highway, but same must be so constructed as not to unnecessarily interfere with public travel.

**TRESPASS BY MINING.**—If the owner of land adjacent to a mine makes written complaint under oath to any judge in the county where the land is situated stating that he has reasonable grounds to believe that the owner or operator of the mine is trespassing on his lands by mining, the judge must appoint a county surveyor or other suitable person to descend into the mine and make such examination as the surveyor may deem necessary. The person so appointed has the right to descend into the mine and make examinations and surveys, and if any person obstruct or hinder him from entering the mine or performing his duty he shall be fined not exceeding \$200. If any person adjacent to the mine complains to a judge and then refuse to make the survey, he commits a contempt of court and may be fined \$500. The expenses of such examinations must be paid by the complainant; but if the complainant recover damages against the mine-owner for mining on his land, the expenses shall be added to the damages. Whoever willfully trespasses on the land of another by mining thereon shall pay the damages and also be liable to the penalty of not over \$500, to be collected by the owner of the land trespassed on.

**MINING RIGHT OR THE RIGHT TO DIG FOR ANY MINERAL.**—No mining right or the right to dig for any mineral on the land may be sold, leased or conveyed by deed or lease to be acknowledged and recorded the same as like instruments affecting real estate. The conveying by deed or lease of a mining right separates such right from the land, and such right and the land are taxed separately, the same as though they were separate pieces of real estate.

**RECORD OF LEAD BOUGHT.**—All persons purchasing lead mineral must keep a book in which an account of all lead mineral bought by him is kept. The amount, from whom and when purchased and the place where such mineral was dug must be entered in such book. The party purchasing must make diligent inquiry of the person offering the mineral for sale, and the purchaser may be held to be unlawful to buy it. Such purchaser must keep his book at his place of business, open at all reasonable times for inspection by miners, owners of mineral land and smelters. If the purchaser has no usual place of business, he may keep his book at his nearest smelter, but must give to the nearest smelter a report to the nearest smelter of lead ore, and the smelter shall make the same record in his book. Purchasing lead mineral without a book or without giving to the nearest smelter a copy of his book of such purchases renders the offender liable to pay a forfeit varying from \$5 to \$25 for each offense.

**MAP OF COAL MINES.**—The owner, operator or superintendent of any coal mine must make a correct map of the mine, showing all details thereof, the section lines of the land and the direction of the air currents of the mine. This map must show the date of each survey. If more than one seam of coal be worked, a separate map must be made of each seam. A true copy of this map must be delivered to the state inspector of mines for the district and by him filed and retained for reference. Such maps are the property of the state, and are open to the inspection of the public. In July of each year, and on the first day of August, a copy of the maps and all other records must be kept at the mine. If a coal mine is about to be abandoned, a map must be completed and filed before abandonment. If the operator of the mine fails to furnish a satisfactory map the inspector causes one to be made at the owner's expense.

**ESCAPEMENT-SHAFT.**—For all coal mines where more than six men are employed there must be, in addition to the hoisting-shaft opening, a separate escapement-shaft so that there will be

two distinct available means of ingress and egress. Passageways to escapement shafts must be at least five feet wide and five feet high. The escapement shafts are constructed under the direction of the inspector, and must have stairways not steeper than forty-five degrees; provided, that if the mine be not more than one hundred feet deep, the shaft may be fitted with suitable hoisting apparatus instead of stairways. No obstructions or bars can be permitted in any escapement shaft or on any stairway. By agreement between adjacent owners of mines where the workings are driven together and a roadway kept open between them, they may use each other's escapement shaft.

**VENTILATION.** Sufficient ventilation, not less than one hundred cubic feet of air for each man and six hundred cubic feet for each animal per minute, must be provided and maintained; and if the inspector deems this amount must be distributed to the main and main entries for conducting ventilation must be tight and close themselves when opened, and an attendant kept at each door to see that the air currents are properly controlled. If the inspector finds men working without sufficient air or under any unsafe condition he gives notice to correct the defect, and on refusal orders the men out until the mine is put in proper condition. Mines must be examined every morning to see whether there is any danger or obstruction or lack of ventilation, and no person is allowed to enter the mine until it is reported safe by the examiner. The examiner keeps a record of the condition of the mine in his book, shows in condition every day, and the book shall be open to examination of the inspector. Currents of air in mines shall be so regulated as to cause a sufficient current to enter every hundred men, and the inspector may order a separate current for a smaller number of men. Mines must be sprinkled to keep down dust. Inspector must see that powder is carefully handled and no more powder in a mine than is required for use of the day. The use of loose powder in charging blasting-holes is forbidden. It is unlawful to employ persons to handle explosives or whose duties involve contact with inflammable gases, unless such employes have had experience in such work. A furnace is used for ventilating purposes it must be so lined up as to prevent fire from communicating with the works, and the smoke from the furnace cannot be emitted into any compartment adjoining a hoisting shaft nor into a shaft or escapement.

**STAIRS, HOISTWAYS.** Every operator of a coal mine must provide a safe cage covered with boiler iron for hoisting or lowering persons, with brakes, safety-catches and other appliances to prevent consequences of cable breaking or disconnection of machinery. The cage must be operated by hand and steam power there must be competent persons at the top and bottom of every shaft, who shall have charge of all hoisting, be furnished with sufficient light, and use the statutory code of signals, and in charge of any escapement shaft. No more than twelve persons can ride in a cage at one time and coal cannot be hoisted while persons are in the cages. No cage containing persons can be used for hoisting coal or other material to the surface.

**CHILDREN AND WOMEN NOT TO WORK IN MINES.** No child under the age of fourteen nor any woman is permitted to work in any coal mine. Any boy offering to work in a coal mine must produce an affidavit from his parent or guardian promising to enforce a cover fourteen years of age. Violation of this provision or failing to obey the law regarding hoisting and lowering persons is a misdemeanor, which is punishable by fine in the discretion of the court.

**BOILER-HOLES.** The operator of a mine must provide boiler-holes twenty feet in advance of and on both sides of a working place when driving toward an abandoned mine or part of a mine suspected to contain gas or to be filled with water.

**STEAM BOILERS.** All boilers used by coal mines must be kept in good order and inspected by competent boiler-makers every six months, or oftener if the inspector requires it, and the result certified to the mine inspector. The steam boiler must be provided with steady gauge, water gauge, safety valve.

**PIKE AND CROSS.** The top of every shaft and the entry to every vein or slope must be securely fenced. All single track planes on which cars are drawn must have proper means of signaling and well-placed pieces of refuge, not more than ten yards apart. Bottoms of shafts must be sign-posted with traverse-ways by which men can pass from one side to the other without going under cages. All slips must be securely plankered over.

**INSPECTOR DISTRICTS.** The state is divided into five inspection districts with an inspector in each district appointed by the governor. Inspector must have full practical knowledge and experience for ten years, shall not be interested in any mine, and is supplied by the state with the most improved modern instruments. He is bonded for the faithful discharge of his duties for \$1,500 per year. It is his duty to devote the whole of his time to the business, make personal examination of every mine in his district, see to health and safety of the workmen employed in the mines, and that the laws of the state are strictly enforced. They each make annual reports to the bureau of labor statistics, recommend legislation on the subject of mining, and report information to the state geologist. They may be removed for negligence or neglect of duty or incompetency, by the bureau of labor statistics.

**INSPECTION.** The inspector may inspect any coal mine or machinery by day or night, and the operator must furnish all necessary assistance. If the operator refuses to furnish necessary assistance or furnish necessary assistance, the inspector may, by affidavit with the judge of the circuit court and obtains an order commanding the operator to comply with the law or be punished for contempt of court, and proceedings must be heard on two days' notice, and the court or judge may prohibit the further working

of the mine until the same has been made safe and the law complied with.

**INJURIES.**—For any injury occasioned by violation of the law about coal mining a right of action accrues to the party injured for all damages sustained, and in case of loss of life through such violation the widow, heirs, adopted children or any other person dependent on the one killed may recover not exceeding \$5,000.

**INJURY TO MACHINERY.**—Any injury to the machinery, obstruction of airways, carrying lights into places worked by the light of safety lamps, disturbing the machinery of the hoisting engine or doing any other act which endangers the lives of the persons working in the mine or the security of the mine or its machinery are endangered is a misdemeanor punishable by such fine as the court may direct.

**PROPS.**—The operator of every mine must keep a supply of props and pieces on hand and deliver same with the miner's empty car.

**FIREPROOF BUILDINGS.** All engines, boiler-houses, hoisting derricks and other machinery must be roofed and sided with fireproof materials, and there must be provided a steam pump and a sufficient supply of water and hose to guard against fire. If this is not done the inspector proceeds in the same manner as though the operator refused to allow the mine to be inspected.

**COPPER REPLEMENTS.** All miners must use copper needles and not less than five inches of copper on the end of all iron bars used for tamping blasting powder, under penalty of not less than \$5 nor more than \$25.

**WEIGHING COAL.**—The operator of every coal mine at which the miners are paid by weight must provide at the mines suitable and correct scales for the weighing of all coal mined, and the same must be carefully weighed, and a correct record kept of the weight of each miner's car, and the record kept open at all reasonable hours for inspection. The person weighing coal and keeping the record must before beginning so to do make an affidavit that he will correctly weigh and true record keep of all coal mined, the affidavit to be posted up in the place where he weighs. The miners employed in the mine may furnish a check-weighman at their own expense, who shall also be sworn and his affidavit posted up. Fraudulent scales or fraudulent weighing is a misdemeanor punished by fine of from \$30 to \$50 or by imprisonment in the county jail for not over sixty days; and operating coal mine where product is shipped by rail or water without compliance with the law, or without weighing of all coal mined, and able by fines from \$50 to \$500. The coal cannot be screened before being weighed, and must be weighed in the pit cars at two thousand pounds to the ton before being dumped into the screen or chutes.

**MANAGERS OF MINES.**—No person can take charge of the duties of mine manager, mine boss or pit boss in a mine where the output is twenty-five tons or more per day unless he has a certificate of the board of examiners. The board of examiners shall certify a person must appear before the state board of examiners appointed by the commissioners of labor, and submit to an examination as to his competency and length of service. The board of examiners meet at such times and places as they elect, and must their own rules and regulations for carrying into effect the examinations. They cannot give a certificate to a manager unless he be a citizen of the United States having had four years' practical experience in coal mines, and having served as mine manager continuously for one year preceding the enactment of the law. If any operator of a mine employ any mine manager who has no certificate of competency, and an accident occur in the mine by which any miner shall be killed or injured, then the injured party or his heirs may recover from the operator of the mine the full amount of the damages sustained.

**GEOLOGICAL REPORTS.**—The state inspector must procure for the state geologist a true record of the various strata through which coal shafts are sunk or borings for coal oil, gas or artesian water are made, report the altitude of the entrance to such shafts and bore-holes as compared with some specified point on the nearest railroad, and he must also report the dip of the coal stratum in all mines which are being operated.

#### WAGES.

**WEEKLY PAYMENT OF.**—Every manufacturing, mining, quarrying or other corporation must pay its employes weekly all wages earned by such employes up to within six days of such payment, and if such corporation violates this provision it shall be liable to a penalty of not less than \$10 nor more than \$30 for each day that the wages are not recovered in a civil suit commenced within thirty days after the violation occurs.

**PAYING IN GOODS.**—It is unlawful for any mining corporation to be engaged in or interested in, directly or indirectly, the keeping of or control of any store, warehouse, shop, or selection of the furnishing of supplies, tools, clothing, provisions or groceries to the employes. If any such corporation violates this law it is guilty of a misdemeanor for each and every day it does business and shall be liable to a fine of not less than \$50 nor more than \$200 for each offense.

**DEDUCTION FROM.**—No such corporation can make deduction from the wages of the workmen except for lawful money, checks or drafts actually advanced with any such deduction, or selections as may be made or ordered for hospital or burial fund for sick or injured employes. A violation of this provision may be punishable by the same fine as for keeping a truck store, and the deduction may be collected by suit, together with reasonable attorney's fees.

## INDIANA

## CORPORATIONS.

**HOW INCORPORATED.**—Whenever three or more persons may desire to form a company to carry on any kind of manufacturing, mining, mechanical or chemical business, they shall make, sign and acknowledge before some officer capable of taking acknowledgment of deeds a certificate in writing, which shall state the corporate name, object, capital, the amount of capital stock, the term of its existence (not, however, to exceed fifty years), the number of directors and their names who shall manage the affairs of such company for the first year, the name of the county and county in which its operations are to be carried on, and file the same in the office of the recorder of said county, which certificate shall be placed upon the record, and a duplicate thereof in the office of the secretary of state.

**WHEN INCORPORATED.**—When the certificate shall have been filed as aforesaid, the signers shall be a body politic and corporate, and by their corporate name may take, hold and convey real estate necessary to carry on the operations named in such certificate.

**DIRECTORS.**—The business shall be managed by not less than three nor more than eleven directors, who shall be stockholders therein and residents of the United States. A majority of the directors shall be a quorum. They shall be elected by the stockholders annually, and the electors shall elect the president thereof. They shall also annually elect a secretary and a treasurer, who shall respectively give bond, and be sworn to the faithful discharge of the duties assigned to each of them. Voting by proxy is allowed, each share of stock entitling the owner to one vote.

**CAPITAL STOCK.**—The amount of capital stock shall be fixed by the company, but may be increased by vote of the stockholders at any annual meeting. Such stock is transferable in such manner as the by-laws may provide, but the funds of such a corporation cannot be used to purchase stock in another corporation, only upon the written consent of all the stockholders of the company to purchase said stock, and also the written consent of all the stockholders of the corporation in which stock is sought to be purchased.

**PAYMENT FOR STOCK.**—The capital stock shall be paid into the treasury within eighteen months from the incorporation of the same, in such installments as the by-laws direct.

**CERTIFICATE OF PAYMENT TO BE FILED.**—The president and directors, within thirty days after the payment of the last installment of the capital stock, shall make a certificate stating the amount of the capital so paid, and paid in, which they shall sign and within thirty days file in the office of the clerk of the circuit court.

**REDUCTION OF CAPITAL.**—Every such company, at a meeting called for that purpose, may reduce the capital stock of the same. **STATE REPORT.**—The officers of every such company, annually within twenty days from the 1st day of January make a report, which must be published in some newspaper in the county, which shall state the amount of capital, the amount of assessments made and actually paid in, and the amount of existing debts, which report the said president and directors shall sign and verify by their oaths.

**LIABILITY OF OFFICERS.**—If said certificate or report of public notice shall be false, or if such report is not made, and any person is misled or deceived thereby and damaged, and any person who shall sign the same, knowing it to be false, or fail in giving the report as aforesaid, shall be jointly and severally liable for any damages resulting from such failure on their part.

**LIABILITY OF STOCKHOLDERS.**—The stockholders of manufacturing and mining corporations shall only be liable for the amount of stock subscribed by them respectively; provided, they shall be individually liable for all debts due and owing laborers, servants and employees for services rendered such corporation.

## LIENS.

**HOW ACQUIRED.**—In all coal mines in this state the miners and other persons employed and working in and about the mines, and the owners of the land, and others interested in the rental or royalty of the coal mined therein, shall have a lien on said mine, and all machinery and fixtures connected therewith, for work and labor performed within two months, and the overt of the land for royalty on coal taken out from under his land for any length of time not exceeding two months; and such liens shall be paramount to and have priority over all other liens, except the liens of the state for taxes, and such liens shall have priority as against every other in the order in which they accrue, and for labor and royalty on coal. To acquire such lien, such person shall file in the recorder's office in the county where the coal mine is situated, within sixty days from the time the payment has been made, a notice of his intention to hold a lien upon such property for the amount of his claim, stating in such notice the amount of his claim, and the name of the coal works, if known, or any other designating or describing the property claimed, and the date of such record, and the said notice, when presented, in the book used for recording mechanics' liens, for which the recorder shall receive a fee of 25 cents.

Suits brought to enforce any lien herein created shall be brought within one year from the date of filing said lien. All wages for working in and about the mine shall be due and payable on the second Saturday of the month after the month in which the work was done, and all payments shall be made in bankable funds of the state of Indiana.

## MINING.

**NUMBER OF EMPLOYEES—OUTLETS—WATER.**—It shall not be lawful for more than ten persons to work in any mine in every

twenty-four hours, after five thousand square yards have been excavated, until the second outlet shaft have been made. Said outlet shall be separate from the hoisting-shaft by at least one hundred feet of natural strata, and shall be available at all times to all employees engaged in the mine. The traveling roads to said outlet shall not be less than four feet high and of five feet wide.

**AIR-WAYS.**—Air-ways shall be made in every room, at least every seventy-five feet. The doors used in assisting ventilation of the mines must not be left standing open.

**TIMBERING.**—Sufficient supply of timber shall be kept at the mine, so that the workmen may be able to properly secure the workings from caving in, and props of proper length shall be delivered to the rooms of the workmen when needed and required.

**SIGNAL BELLS.**—There shall be a formality of signals at all shafts in this state, with a signal bell at the bottom of each shaft.

**EXHAUSTED MINE.**—Before a mine shall be abandoned, a survey shall be made thereof, the mine properly staked on the surface, and a map made and filed within thirty days thereafter at the office of the county recorder, and said map shall have attached thereto the affidavits of the surveyor, and of the mine boss or of the mine boss in charge of the underground workings of said mine.

**PROVISIONS AS TO GAS AND WATER.**—When the place is likely to contain a dangerous amount of water or gas, the workings approaching such place shall not exceed eight feet in width, and there shall be constantly kept one bore-hole near the center of the workings, and sufficient flank bore-holes on each side.

**MINING BELLS.**—A mining boss, who shall be an experienced coal miner, shall be employed to keep a continuous watch over the ventilating apparatus and air-ways, and see that, as the miners advance through the excavations, all loose coal, slate and rock overhead are carefully secured against falling therein, and traveling air-ways. He shall measure the air current at least once a week at the inlet and outlet. He shall also, about the first of each month, mail to the inspector a copy of the air measurements, the number of persons employed in or about the mine, the number of mules and horses used, and the number of days worked in each month. None but experienced, competent and sober engineers shall be placed in charge of the engine used for conveying into and hoisting persons out of such mine.

**EXHAUSTED SHAFTS.**—The top of every such shaft shall be securely fenced off, so as to prevent the mouth thereof; and approved safety catches shall be attached to every cage used for the purpose of hoisting or lowering persons.

**INSPECTOR—APPOINTMENT, QUALIFICATION, CERTIFICATE OF OFFICE.**—The state geologist shall appoint an inspector of mines, who shall hold his office two years and until his successor shall be appointed and qualified; provided, however, that all applicants for such office shall be required to pass a satisfactory examination, which examination shall be wholly under the control of the state geologist, who shall give a certificate of appointment to the person appointed. The inspector of mines shall appoint an assistant, who shall pass such examinations touching his qualifications for such position as may be prescribed by such inspector of mines.

**RESIDENTS—PRACTICAL MINERS—NON-INTEREST IN MINE.** The inspector of mines and his assistant shall be residents of the state of Indiana for five years immediately preceding their appointment to office, and shall be practical miners of at least ten years' experience in actual mining. He shall not have any pecuniary interest in any coal mine within the state, and he and his assistant shall file with the secretary of state a sufficient bond or bond for the faithful performance of the duties of the mine, and an annual report to the state geologist of all matters now required by law to be reported by the mine inspector, which report shall be published with the report of the state geologist.

**SALARIES.**—The inspector of mines shall receive for his services \$1,500 per annum, and such assistant \$1,000 per annum; \$300 per annum shall be made over to the inspector of mines for the necessary expenses of himself and assistant in the testing of coal and measures.

**PROHIBITED EMPLOYMENT OF PERSONS.**—No female of any age or male under the age of fourteen years shall be permitted to enter any coal mine in this state for the purpose of employment therein.

**MINES.**—Corporations, companies, associations, firms and persons engaged in mining shall pay to their employees every two weeks the amount due such employees for labor, and such payment shall be in lawful money of the United States.

## INDIAN TERRITORY

(CHEROKEE NATION)

## MINING.

**MINERALS THE PROPERTY OF THE NATION.**—All minerals existing in their natural state within the limits of the Cherokee country are the property of the Cherokee Nation.

**RIVERS TO BE OPEN, ETC.—HOW OBTAINED.**—Every bona fide citizen of this nation wishing to mine minerals, or manufacture salt, or to engage in the collection or refining of coal oil or petroleum, or the manufacture of medicinal waters, shall make application in writing to the treasurer of the nation for that

purpose, stating the minerals he wishes to operate in, the number and names of the stockholders of the company, where located, and the mines and bounds of the reservation on which he proposes operating, provided he does not infringe upon the rights of any other citizen or mining company. He shall not operate a second claim without having surrendered the first.

**LICENSE.**—Before beginning the work he shall obtain from the treasurer a license for that purpose, and shall, at the same time, execute to the Cherokee National satisfactory bond in the sum of \$2,000, with sufficient security, conditioned upon compliance with the requirements of this act.

**REPORTS.**—He shall report under oath to the treasurer quarterly the gross amount of minerals mined, salt manufactured or mineral waters prepared for sale during each quarter preceding such report, and at the same time pay into the treasury, for the benefit of the school or orphan funds, a sum equal to five per cent. of the value of such minerals at the time of the report. He shall also report to the treasurer, at once, any other minerals found upon the reservation, and shall then have the right to the same by incorporating it into the original contract.

**PENALTIES.**—Every citizen of the nation who shall make a grant to any person other than a citizen of the same shall be fined a sum not to exceed \$2,000 for each offense, and forfeit his lease and bond.

No license shall be granted for a longer period than ten years; but the privilege is extended to the lessee to renew his lease upon the payment of all arrears to the nation.

## IOWA

Compiled by C. M. BROWN, Attorney at Law, What Cheer, Ia.

### CORPORATIONS.

**FORMATION OF.**—The constitution provides that no corporation shall be formed by special laws, but the general assembly shall provide by general laws for the organization of corporations; that the property of all corporations for pecuniary profit shall be subject to taxation the same as that of individuals; that the state shall not become a stockholder in any corporation, nor shall it assume or pay the debt or liability of any corporation, nor shall it incur the cost of any suit for the benefit of the state.

**DIVISION OF.**—The statute has divided corporations into, first, those "for pecuniary profit," second, those "not for pecuniary profit."

A number of persons may associate themselves and become incorporated for the transaction of any lawful business. Among the powers of such body corporate are the following:

1. To have perpetual succession.
2. To sue and be sued by its corporate name.
3. To have a common seal, which it may alter at pleasure.
4. To render the interest of stockholders transferable.
5. To exempt the private property of its members from liability for corporate debts.
6. To make contracts, acquire and transfer property, possessing the same powers in such respects as private individuals may enjoy.
7. To establish by-laws, and make all rules and regulations deemed expedient for the management of their affairs in accordance with law.

**COMMENCING BUSINESS.**—Previous to commencing any business except that of organization, articles of incorporation must be adopted, which must be signed and acknowledged by the incorporators, and recorded in the office of the recorder of deeds of the county where the principal place of business is to be.

The articles must be recorded within five days by the recorder, and he must certify thereon the time when the same were filed in his office, and the book and page where the record thereof will be found.

The articles and certificate of recorder shall then be recorded in the office of the secretary of state. The articles of incorporation must fix the highest amount of indebtedness or liability to which the corporation is at any one time to be subject, which must in no case, except in that of risks of insurance companies, exceed two-thirds of the capital stock. Notice of incorporation must also be published for four weeks in succession in some newspaper as convenient as possible to the principal place of business; such notice must contain:

1. The name of the corporation and its principal place of transacting business.
2. The general nature of the business to be transacted.
3. The amount of capital stock authorized, and the times and conditions on which it is to be paid in.
4. The time of the commencement and termination of the corporation.
5. By what officers or persons the affairs of the corporation are to be conducted, and the times at which they will be elected.
6. The highest amount of indebtedness to which the corporation is at any time to be subject itself.
7. Whether private property is to be exempt from corporate debts.

The corporation may commence business as soon as the articles of incorporation are filed in the office of the recorder of deeds, and the doings shall be valid if the publication in the newspaper is made and articles recorded in the office of the secretary of state within three months from such filing in the recorder's office. The provisions of the articles of incorporation may be changed at any annual meeting of the stockholders, or special meeting called for that purpose, but are not valid unless recorded

as the original articles are required to be; said changes need only be signed and acknowledged by the officers of the corporation.

**DISSOLUTION OF.**—No corporation can be dissolved prior to the period fixed in the articles, except by unanimous consent, unless a different rule has been adopted in the articles.

The same newspaper publication must precede a premature dissolution as required at its creation, and the publication is relation to organization and publicity renders the individual property of the stockholders liable for the corporate debts.

**DEFERATION.**—Corporations shall not exist for more than twenty years, except those for the construction of any work of internal improvement, or for the business of life insurance, which may exist for fifty years, but may be renewed from time to time.

Intentional fraud in failing to comply substantially with the articles of incorporation, or in deriving the public funds of individuals in relation to their means or their liabilities, shall subject those guilty thereof to fine and imprisonment, and damages may be recovered by any person who has sustained injury from such fraud.

A single individual may entitle himself to all the advantages of the law, provided he complies substantially with all its requirements, omitting those which from the nature of the case are inapplicable.

A body of men acting as a corporation shall be permitted to set up the want of a legal organization as a defense to an action against them as a corporation; nor shall any person sued on a contract made with such a corporation, or sued for an injury to its property, or a wrong done to its interest, be held liable therefor, or a want of such legal organization in his defense.

**LEGISLATIVE CONTROL.**—The articles of incorporation, by-laws, rules and regulations of corporations shall at all times be subject to legislative control, and may be amended, altered, abridged or set aside by law, and every franchise obtained, used or enjoyed by such corporation may be regulated, withheld or be subject to conditions imposed upon the enjoyment thereof, whenever the general assembly shall deem necessary for the public good.

**FOREIGN CORPORATIONS.**—It was enacted by Chapter 76 of the acts of the twenty-first general assembly that "any corporation for pecuniary profit other than for carrying on manufacturing or manufacturing business, organized under the laws of any other state or of any territory of the United States, or of any foreign country, desiring to transact its business or to continue the transaction of its business in this state, shall be required to file with the secretary of state a certified copy of its articles of incorporation, duly attested and authorizing the service of process on any of its officers or agents in this state, and requiring them to submit to the provisions of the law, and prohibiting the removal of the cause to the United States, and that no person being deprived of the privilege of doing business in this state."

This statute was declared to be unconstitutional in the case of *Barron vs. Burdick*, 121 U. S., 186.

### MINES.

There is no statute provided by which a miner mining coal can avail himself of a lien, except for the construction of wood, erection of machinery or material furnished, which is covered by the mechanics' lien laws, available for any and all laborers and material-men who perform work upon or furnish material for construction or improvement of property.

### MINING.

**INSPECTORS.**—The state is divided into three mining districts, and there are three mining inspectors, one for each district, appointed by the governor, and holding their office for two years; their duties require them to examine the mines of their district, and see that the mining laws are complied with.

**MAPS.**—The agent or owner of each mine shall make, or cause to be made, an accurate map of such mine, and on or before the 1st day of September of each year report all progress in working said mine. When a mine is worked out and abandoned, the owner or agent shall cause a correct map of same to the inspector, to be filed in his office.

**OUTLETS OR ESCAPES.**—There shall be at least two separate outlets, separated by natural strata of not less than one hundred feet in breadth, by which shafts or outlets distinct means of ingress and egress are always available to the persons employed in the mine. In no case shall a furnace shaft be used as an escape shaft, unless the furnace shaft is large enough to be divided, when a partition shall be placed to fully protect from heat and smoke. The distance from the main shaft shall not be less than two hundred feet, without the consent of the inspector, and no buildings shall be put near the escape shaft than one hundred feet, except the house necessary to cover the fan.

**VENTILATION.**—The owner or agent of every coal mine, whether it be operated by shaft, slope or drift, shall provide and maintain for every such mine an amount of ventilation of not less than one hundred cubic feet of air per minute for each person employed in such mine, and not less than five hundred cubic feet of air per minute for each mule or horse employed in the same. When the inspector finds men working without sufficient air, or under any unsafe conditions, he shall give the agent or owner notice to rectify the same, and if not done, he may order the men out until the defect is remedied.

**SAFETY APPLIANCES.**—The most approved methods of safety appliances are required to be used, subject to the approval of the inspectors. No but experienced engineers shall be employed in charge of the engines.

**BOYS.**—No boy under twelve years of age shall be permitted to work in any mine.

A failure to comply with the law in regard to the appliances and other provisions of the law makes the same liable to be enjoined, and liable for all damages which may accrue by reason of the failure to comply with the provisions of the law.

Any miner, workman or other person who shall knowingly injure or interfere with any air-course or brattice, or obstruct or throw open doors, or disturb any part of the machinery or do any act whereby the lives and health of the persons or the security of the mines and machinery is endangered, shall be deemed guilty of a misdemeanor.

**PROPS.**—The owner, agent or operator of any coal mine shall keep a sufficient supply of timber to be used as props, so that the workmen may at all times properly secure the workings.

**PENALTIES.**—Any person willfully neglecting or refusing to comply with the provisions of this act, when notified by the mine inspector to comply with such provisions, shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine not exceeding \$500, or imprisonment in the county jail not exceeding six months.

**SCALES.**—The owner or agent of each coal mine within this state at which the miners are paid by weight shall provide at such mine suitable scales of standard make for the weighing of all coal mined.

**WEIGHMASTER SWORN.**—The owner or agent of such mine shall require the person authorized to weigh the coal to be sworn, and be oath posted in a conspicuous place.

**CHECK-WEIGHMAN.**—The miners employed and working in any mine may furnish a competent check-weighman, who shall at all proper times have full and free access and examination of such scales, machinery, apparatus, and seeing all measures and weights of coal mined and accounts kept of the same.

**FRAUD IN WEIGHING.**—Fraud in weighing, committed by the company, check-weighman or any person, shall be punished by a fine of not less than \$200 or more than \$500, or imprisonment.

**WEIGHED BEFORE SCREENING.**—All coal mined under contract for payment by the ton or other quantity shall be weighed before being screened, unless otherwise agreed upon in writing. Eighty pounds of coal as mined shall constitute a bushel, and two thousand pounds of coal as mined shall constitute a ton.

**DAMAGES RECOVERED.**—Any person damaged by reason of coal mined not having been weighed and credited to him in accordance with the provisions of this act may recover his damages in a civil action against the employer, but such action must be commenced within two years after the right of action accrued.

**MINERS' WAGES.**—It shall be unlawful for any person, firm, company or corporation to sell, give, deliver or to any miner or workman, in payment for wages due for labor, or as advances on the wages of labor not due, any scrip, check, draft, order or evidence of indebtedness, payable or redeemable otherwise than in their true value in money.

**COERCION.**—Whoever compels or in any manner seeks to compel or coerce an employe of any person, firm, company or corporation to purchase goods or supplies from any particular person, firm, company or corporation, shall be deemed guilty of a misdemeanor, and punished by fine or imprisonment.

#### QUARRIES.

There are no statutes upon the subject of quarries.

### KANSAS

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#### CORPORATIONS.

**CONSTITUTIONAL PROVISIONS.**—Corporations may be created under general laws. Legislature can confer no corporate powers by special act.

Dies from corporations secured by individual liability of stockholders to additional amount equal to stock held by each. This does not apply to railroad corporations, nor to religious nor charitable ones.

Religious corporations, titles to all property of same vests in trustees, elected by members.

Term corporation includes all associations and joint-stock companies having powers and privileges not possessed by individuals nor partnerships.

**LEGISLATIVE ENACTMENTS.**—Corporations are: First, public; second, private; third, for religion; fourth, for charity or benevolence; fifth, for profit.

**PURPOSES FOR WHICH CORPORATIONS MAY BE ORGANIZED.**—The conduct of any lawful business, and among others enumerated, "the transaction of any manufacturing, mining, mechanical, chemical or metallurgical and agricultural implement and produce business, either separately or all combined."

**MANNER OF ORGANIZING.**—At least five persons, three of whom must be citizens and residents of the state, voluntarily associate themselves, and prepare a charter setting forth:

1. The name of the corporation.
2. The purpose for which it is formed.
3. The place or places where its business is to be transacted.
4. The term for which it is to exist.
5. The number of its directors or trustees, and the names and residences of those who are appointed for the first year.
6. The amount of its capital stock, if any, and the number of shares into which it is divided. Charter is mailed to secretary by secretary. Corporation exists from filing, and certified copy is evidence of creation of charter.

**SUBSCRIBED AND ACKNOWLEDGED.**—The charter of an intended corporation must be subscribed by five or more persons, at least three of whom must be citizens of the state and must be acknowledged by them before an officer authorized to take acknowledgments of deeds.

**CORPORATE NAME.**—The corporate name of every corporation (except banks and corporations not for pecuniary profit) must begin with the word "the" and end with the word "corporation," "company," "association" or "society," and such name must indicate the character of business to be carried on.

**POWERS.**—First. To have succession by its corporate name, for the term fixed in its charter, unless the period is limited for twenty years. Second. To maintain and defend judicial proceedings. Third. To make and use a common seal, and alter the same at pleasure. Fourth. To hold, purchase, mortgage or otherwise convey such real and personal estate as the purposes of the corporation shall require and also to take, hold and convey such other property, real, personal or mixed, as shall be requisite for such corporation to acquire, in order to obtain or secure the payment of any indebtedness or liability due to or belonging to the corporation. Fifth. To appoint and remove such subordinate officers and agents as the business of the corporation shall require, and to allow them a suitable compensation. Sixth. To make by-laws, not inconsistent with existing laws, for the management of its property, the regulation of its affairs, and for the transfer of its stock. Seventh. To enter into any obligation or contract essential to the transaction of its ordinary affairs. Eighth. To increase or diminish by a vote of its stockholders, cast as its by-laws may direct, the number of its directors, to be not less than three nor more than twenty-four, and may, in like manner, change its corporate name, without in any wise affecting its rights, privileges or liabilities.

**ANNUAL STATEMENT.**—President and secretary must make an annual report of each, to be not less than three nor more than twenty-four, and may, in like manner, change its corporate name, without in any wise affecting its rights, privileges or liabilities. Third. To increase or diminish by a vote of its stockholders, cast as its by-laws may direct, the number of its directors, to be not less than three nor more than twenty-four, and may, in like manner, change its corporate name, without in any wise affecting its rights, privileges or liabilities. Fourth. The receipts of the company during the preceding year. Fifth. The expenditures during the preceding year. Every corporation for profit, created under any law in this state, failing to make and deposit such statement shall be subject to a penalty of \$200, and an additional \$200 for every month that such company shall continue thereafter to transact business.

**GENERAL OFFICE.**—The general office must be kept within, and at least three directors must be citizens and residents of the state.

**TREASURER.**—Treasurer must keep his office and funds in the state.

**DIRECTORS LIABLE.**—Directors knowingly declaring and paying any dividend, when the corporation is insolvent, or rendering the corporation insolvent, jointly and severally liable for debts then existing or afterward contracted, to amount of dividend.

**BEGIN BUSINESS.**—Corporations must begin business within five years from filing of charter, or are thereby dissolved.

**LIABILITY OF STOCKHOLDERS.**—For debts of corporation limited to amount of stock, and a sum in addition equal to amount of stock owned.

**HYDRAULIC CORPORATIONS.**—Hydraulic corporation or irrigating company may sell or lease any portion of its power, and may convey water in pipes, canals, etc., or other power by shifting, elevating, or otherwise moving, or by means of any cranes, and property. (Bank charter forms may be secured from office of secretary of state on application.)

#### LIENS.

Any article entrusted to mechanic, artisan or tradesman for alteration or repair is subject to lien, and if not paid in three months may be sold.

One on contract with owner, trustee, agent, husband or wife of owner of land, for furnishing any material to build, alter or repair, or for washing or performing labor, or for trees, sidewalks, etc., shall have lien upon the land and all appurtenances, prior to all liens subsequent to beginning of building, etc.

Original contractors have four months lien on materials and labor, and any subcontractors have three months lien on work done, in which to file lien with clerk of district court, and one year after filing to begin suit for enforcement.

All rights assignable. If note be given for claim, such action lies within one year after maturity of note. If contractor fails to pay sub-contractor, or the latter or either the laborer, lien lies as above.

Attorney's fee allowed against defendant and property.

Lightning rods not considered in the preceding.

Banker's lien on clerk of court, in payment of claims, and not less than contract price, avoids all liens.

Public work, bond to state must be filed in contract price.

FOR RENT. Owner of building or land has lien on goods or crops of tenant, and may remove them without paying rent, at time or within thirty days after removal.

#### MINING.

**SHAFT.**—Escapement shaft must be two distinct means of ingress and egress, commenced with each level worked, and each at least one hundred feet from main shaft through natural strata. Must be constructed as main shaft is opened. Failing to provide, punished by fine and imprisonment.

**EXPENSES.**—Third party charging files affidavit and gives bond for expense of survey, whereupon court orders county surveyor to make survey and report, upon which injunction may issue.

City may contract for mining under streets, alleys and public grounds.

**MAPS.**—Company must keep ready for inspection a correct plan of all workings.

**OPENINGS.**—In shaft or slope, employees are not allowed to work at depth to exceed one hundred feet, unless in connection with at least two openings separated by natural strata not less than eighty feet thick. Speaking tubes from top to bottom, cord and bell signals, improved safety catch, drum horns, bridle chains, and all previous improvements, must be furnished.

**BOILER.**—Boiler used about mine must have all safety appliances, and be officially inspected every six months.

**VENTILATION.**—Veins three feet thick or over, one hundred cubic feet of air per person per minute must be furnished in workings. Proportionate amount for thinner strata. Kept free of gas, examined and marked each morning before work begins. All roofs must be securely propped and all traveling ways provided with signals, and with manholes every thirty feet.

**EXPLOSIVES.**—Miner must not take more than five pounds of powder into mine at one time, which must all be used before mine is taken.

**INSPECTOR.**—A state mine inspector appointed by the governor has general supervision of all mines, safety appliances, ventilation, reports, etc.

**INJURY.**—Injury to persons or property by violation of act renders operator liable to person injured, or heirs.

**MINES.**—Mines under twelve years of age not employed, and has attended school three months in same year.

**SHOT-FIRERS.**—Shot-firers must discharge all blasts where explosives are used, and that only once a day when all others are out of mine.

**MISDEMEANORS.**—To fire blasts until coal is "mined" two feet, or full depth of drift; to fail to furnish shot-firers; to take down more than five pounds of powder.

## KENTUCKY.

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### CORPORATIONS.

Corporations are formed by filing in the county clerk's office articles of incorporation signed and acknowledged by two or more incorporators as deems are required to be. Such articles confer upon the corporation the usual corporate powers, including that of exempting the private property of the stockholders from corporate debt.

Within three months from the filing of the articles the corporation must publish for four consecutive weeks, in some newspaper as convenient as practicable to the principal place of business, a notice specifying:

1. The nature of the corporation, the name of the corporation and its principal place of transacting business.
2. The general nature of the business proposed to be transacted.
3. The amount of capital stock authorized, and the times when and the conditions upon which it is to be paid.
4. The time of the commencement and termination of the corporation.
5. By what officers or persons the affairs of the corporation are to be conducted, and the times at which they are to be elected.
6. The highest amount of liability or liability to which the corporation is at any time to subject itself.
7. Whether private property is to be exempt from the corporate debts.

### LIENS.

Material-men are given a lien, dating from the commencement of the work, upon the improvement, and the interest of the employer in the land, for all materials furnished for the erection, improvement or repair of any building or structure or any fixture thereto. Sub-contractors acquire a lien upon the amount due the contractor by giving the employer a right to remove after sale under the suit to enforce the lien, if such removal will not injure previous improvements. The claim for the lien must be filed in the county clerk's office within sixty days after the material is furnished, and it must state the name of the person to whom the material was furnished, the amount due, a description of the property on which a lien is claimed, and a bill of the items furnished, with prices. The lien is enforced by suit in equity commenced by anyone claiming a lien, within twelve months from the completion of the work. If one lien claimant commences such suit, all others may file and prove up their liens without formal pleadings.

There is no statute giving to laborers in mines a lien for their wages.

### MINING.

An inspector of coal mines is appointed by the governor with the advice and consent of the senate. He receives a salary from the state of \$1,800 per annum and his traveling expenses, and his duty is to visit each coal mine in actual operation as often as may be necessary and examine its condition with respect to ventilation, drainage, and safety appliances, and to report to the governor, and if he finds the same defective in any respect to notify

the superintendent or owner and require him to remedy the defect. For a failure to comply with the inspector's requirements within sixty days from receipt of said notice a fine of \$50 per day is provided.

The inspector is required to keep an office in the state-house at Frankfort and to keep a record of all his inspections. He is also required to furnish upon application a certified copy of his report of inspection to the commonwealth's attorney of the district in which the mine inspected is situated, which copy is made prima facie evidence of the facts of the state.

**REPORTS.**—The inspector is required to make a report to the governor annually on or before the 10th day of October, showing the number of persons employed, amount of coal mined, the number of accidents occurring, together with such other information concerning the condition and operation of the mine as he may deem useful, making such suggestions as to further legislation as he may deem proper. To enable him to make such reports, owners and operators of mines are required to give information on blanks to be furnished by the inspector, under a penalty of \$50 fine.

**MAPS.**—The owner or superintendent of each mine is required to furnish the inspector an accurate map of the mine on a scale of one inch to every hundred feet to the inch, showing the area mined or excavated and the location and connection of such excavation with the lines of all adjoining lands, and with the names of the owners of such lands marked on each tract.

Every six months after the map is furnished he shall file with the inspector a statement and plan of the progress of the workings of the mine up to date, so prepared as to enable the inspector to mark the same on the original map. In the event of failure to furnish such maps the inspector may cause the same to be made at the owner's expense, and the owner is subject to a fine of \$5 per day for each day of the delinquency.

**OUTLETS.**—Mines wherein over fifteen thousand square yards have been excavated shall not be worked unless there are to every seven or eight thousand square yards two separate outlets separated by natural strata of not less than one hundred feet in breadth by which outlets distinct means of ingress and egress are always available to persons employed in such mine. All other mines, whether shafts or drift mines, having two or more outlets after fifteen thousand square yards have been excavated. If such outlets have not been provided not more than ten persons shall work in the mines at once. In case a mine has but one shaft, slope or drift, the owner of the mine is furnished with the right to another, he is given power to condemn sufficient land for that purpose. At every mine operated by a shaft there shall be a safety catch and an overhead cover on all cages used for carrying down or up the shaft, and the shaft shall be provided. An adequate brake shall also be attached to every draw or machine used for raising or lowering persons.

**VENTILATION.**—The owner, agent or lessee of every coal mine, whether of drift, or shaft, is required to provide and maintain for every mine an amount of ventilation not less than one hundred cubic feet per minute per person employed, which shall be circulated to the face of each working place in the mine in such manner as to dilute, render harmless and expel the poisonous gas, and to draw it from each and every part of the mine, and no working place shall be driven more than sixty feet in advance of a break-through or air-way, and all break-throughs or air-ways exceed those made near working face of the mine shall be closed and made air-tight by means of doors, trap doors or otherwise. All mines are required to be provided with artificial means of producing ventilation, such as suction or forcing fans, exhaust steam furnaces or other contrivances for that purpose. All mines generating fire-damp shall be kept free from standing gas, and every working place shall be carefully examined every morning with a safety lamp by a competent person before any of the workmen are allowed to enter the mine.

**WEIGHING.**—A majority of the miners in any coal mine employing as many as twenty men may, at their own expense and with the approval of the judge of the county court, appoint a person to inspect the scales and see that the coal mined is properly weighed and accounted for, and each person shall at all times have free access to the scales and shall not be liable to any penalty for the performance of his duty under a penalty of a fine of not more than \$50 nor more than \$50.

**RIGHTS OF WAY.**—Any person owning any large coal bank or mine or any stone or gravel within three miles of any navigable stream or railroad in this state has the right to condemn a right of way to the most convenient point on such stream or railroad, and upon such right of way the court may, if it deem the object of sufficient public importance, allow a railroad to be constructed and operated.

**PENAL LAWS.**—Any person selling unscrubbed coal for screened coal shall be subject to a fine of not less than \$5 nor more than \$25.

Any person employed in a mine who intentionally and willfully neglects or refuses to securely prop the roof of any working place under his control, or neglects or refuses to obey any order given by the superintendent or other person in authority, or any part of that part of the bank where he is at work, and whoever willfully does any act endangering the lives or health of persons employed in a mine or the security of the mine or machinery, shall be fined from \$10 to \$50.

### MILLDAMS.

Any person owning land on a water-course, and desiring to erect a gristmill or other mill situated to the public use, and needing a dam in or across the water-course, may, by petition in writing filed in the county court of the county in which the larger portion of the land is situated, obtain therefrom a writ for the purpose of obtaining necessary condemnation proceedings, and to acquire all the land demanded, whether lying in the same or other counties.

Ten days' notice must be given to every person whose rights would be affected by the condemnation. The writ shall be directed to the sheriff of the county, who will at once impanel a jury of twelve men, who shall decide as to the height of the dam and the amount of land condemned which is not owned by the applicant and which is covered by the bed of the stream. When the applicant shall have paid to the several parties the amount of the damages as ascertained by the court, he shall have a writ of possession and otherwise proceed according to such leave.

#### WAGES.

It is provided by Section 244 of the constitution of Kentucky, adopted September 18, 1891, as follows: "All wage-earners in this state employed in factories, mines, workshops or by corporations shall be paid for their labor in lawful money. The general assembly shall prescribe adequate penalties for violating this section." By an act passed at the present session of the general assembly, and which takes effect after the end of the session, a penalty of \$500 is imposed for any violation of the above section.

## LOUISIANA

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#### CORPORATIONS.

Corporations must be formed under the general incorporation laws of the state, not by act of legislature.

Any number of persons, exceeding six, may organize themselves for literary, scientific, religious or charitable purposes. The act may be by public or private act, and it shall state the objects, name, style and title thereof, place of domicile, manner of choosing its officers, name of officer on whom citation may be served and length of time for which it is incorporated. The act must be approved by the district attorney and recorded.

Corporations for works of public improvement and homestead and building companies and for other purposes, except mercantile or commission business, brokerage, stock jobbing, exchange or banking business. Any number of persons, not less than six, may form themselves into a corporate body for the above purposes. Every charter shall contain:

1. The name and title of the corporation and the place chosen for its domicile.
2. A description of the purposes for which it was organized, the nature of the business to be carried on and the designation of the officer on whom citation may be served.
3. The amount of the capital stock, the number of shares, the amount of each share and the time when and the manner in which payment on stock subscribed shall be made.
4. The mode in which the election of directors or managers shall be conducted.
5. The mode of liquidation at the termination of the charter.

Publication of charter to be made once a week for thirty days at domicile; charter must be recorded in office of recorder of mortgages; charter amended or dissolved by a vote of three-fourths of the stockholders.

Telegraph and telephone companies shall have the right of way for their lines along any railroad line, along any parish line or public road or river of the state.

Railroad, plank road or telegraph corporations may appropriate land for their uses, jury to fix value, appeal not to suspend execution.

**LIMITED CORPORATIONS**, for the purpose of carrying on mercantile business, brokerage or other legal business not heretofore incorporated, except banking, to be composed of not less than three persons, are authorized to be established by Act No. 36 of year 1888 of the state legislature. The form of corporation act is to be the same as that required for corporation for public improvement above set forth.

Corporations for mining, mechanical or manufacturing business, except that of distilling or manufacturing intoxicating liquors, may be formed by any number of persons, not less than three, on company with the laws of the state governing corporations in general. Authorized by Act No. 111, July 5, 1882.

**BANKING CORPORATIONS**.—Free banking act passed in the year 1885, capital stock to be not less than \$100,000; number of persons to be not more than ten; powers, not less than powers, such as are customary for banks; their right to hold real estate limited to five years. Articles of incorporation to contain same provisions as above set forth. All stock subscribed must be paid up in full within twelve months. No loans shall be made to any stockholder on pledge of its own stock. Monthly publication of statements shall be made by banks not operating under free banking act; as to others, quarterly statements only required. (Act of 1882.)

**SAVINGS, SAFE DEPOSIT AND TRUST BANKS**.—Authorized by Act No. 156, of year 1888, also by amendment made as trustees.

**LICENSE TAX**.—A graded license tax is levied, according to the amount of business. Stock of all corporations subject to taxation without deducting value of United States bonds and other exempt securities.

Watered, or stock issued as full paid, but not in fact paid up, is forbidden to be issued by the state constitution of 1874. No state license is required for life insurance corporations doing business in the state, whether foreign or local. The license is graded upon the amount of premiums taken in, the highest being \$1,750 per annum and the lowest \$300 per annum. Provided by act of year 1880.

A license is required of other corporations doing business in this state through an agent, in proportion to the amount of business done. Foreign corporations doing business here are required to appoint an agent here, on whom citation can be served in case of suit.

#### LIENS.

**LABORER'S LIEN**.—Employee has a lien on all manufactured materials for thirty days after the maturity of the debt due them for wages; but this lien does not affect such materials in the hands of good-faith purchasers.

**LIEN FOR MATERIALS**.—Those persons who supply the owner or other person employed by him with tools or sub-contractor, with materials, which are intended for and are used in the erection or repair of any edifice or other work, have a lien or privilege on the building or work erected, and not exceeding one acre of land on which building or edifice is erected. If the lien claimant makes or obtains a written statement under oath of the amount due, or the acknowledgment by the debtor of the amount due, the lien is good as to third parties from the date of recording. There is no priority between lien-holders. The sub-contractor may deliver to the owner an attested account of the amount and value of the materials furnished, and the owner must retain such amounts from subsequent payments due contractor. On receipt of such an account, the owner must furnish a copy to the contractor. If the contractor desires to notify the owner within ten days that he intends to dispute the claim, the owner may pay the sub-contractor and deduct from amount owing contractor. If the sub-contractor and contractor cannot agree as to the amount the dispute may be adjusted by three arbitrators chosen by the contractor for five years from date of recording. It is enforced by a suit in court. There is also a lien given on vessels for materials furnished, but it only continues for six months from the time of furnishing the materials.

#### MINING.

There are no special laws in the state relating to mining.

## MAINE

Compiled by CLEMENT R. DONWORTH, Attorney at Law, Bonworth Block, Main Street, Machias, Me.

#### CORPORATIONS.

**ORGANIZATION UNDER GENERAL LAW**.—Three or more persons may associate themselves together by written articles of agreement for the purpose of forming a corporation for mining and quarrying purposes. Their first meeting shall be called by one or more of the signers of said articles, by giving notice thereof, stating the time, place and purpose of the meeting, to each signer in writing, or by publishing it in some newspaper printed in the county where such signers reside, at least fourteen days prior to the time appointed therefor. At such meeting they may organize into a corporation, adopt a corporate name, define the purposes of the corporation, fix the amount of the capital stock, which shall not be less than \$1,000 or more than \$100,000; divide it into shares, and elect a president, not less than three directors, a clerk, treasurer, and any other necessary officers, and may adopt a code of by-laws. Before commencing business, the president, treasurer and a majority of the directors shall prepare, sign and make oath to a certificate setting forth the name and purpose of the corporation, the amount of capital stock, the amount already paid in, the par value of the shares, the names and residences of the directors of the county where it is located, and the number and names of the directors; and after it has been examined by the attorney-general and by him been certified to be properly drawn and signed and to be conformable to the constitution and laws, it shall be entered in the registry of deeds in the county where the business is to be done, in a book kept for that purpose, and a copy thereof, certified by such register, shall be filed in the office of the secretary of state, who shall minute the date of filing thereon, and shall send a certified copy to be kept by the corporation, and shall record said copy in a book kept for that purpose. The corporation is created upon the filing of such certificate in the office of the secretary of state, and then becomes clothed with all the rights and powers, and is subject to all the duties and liabilities, as if chartered by special act.

**CHARTER BY SPECIAL ACT**.—Such corporation may be chartered by special act of the legislature. Before commencing business, if so chartered, the president, treasurer and a majority of the directors shall prepare, sign and make oath to a certificate as in case of corporations organized under general law and stating therein the date of approval of the charter, such certificate to be recorded in the registry of deeds in the county where the principal office of the corporation is to be held, and a certified copy of the certificate to be filed in the office of the secretary of state. The existence of the corporation is established by such filing in the secretary of state's office, and it has all the powers and is subject to all the liabilities before mentioned as pertaining to corporations created under general law.

**LOCATION OF OFFICE**.—The clerk of the corporation shall be a resident of the state, and the office of such corporation shall be at some fixed place within the state, where, and a certified copy of the corporation act and a book showing a true and complete list of all stockholders, their residences and the amount of



stock held by each. Such records and book shall be open at all reasonable hours to the inspection of persons interested, but this provision as to list of stockholders does not apply to any corporation doing business in the state and having a treasurer's office at some fixed place within the state where a stockbook is kept giving the names, residences and amount of stock of each stockholder. The clerk or other officer of the corporation shall, within twenty days after the election of a clerk, or change of location of the clerk's office, file in the office of the registry of deeds in the county where the corporation is established or has its principal office or place of business a certificate giving the full name and residence of the clerk and the location of the clerk's office.

**OFFICERS, THEIR QUALIFICATIONS AND TENURE.**—The officers shall consist of a president, clerk, treasurer and board of not less than three directors, one of whom shall be said board elected president of the corporation. The officers shall be chosen annually and shall continue in office until others are chosen and qualified in their stead. The directors must be stockholders. The clerk shall be sworn and shall keep a record of all votes of the corporation. The treasurer shall give bond for the faithful discharge of his duties.

**TAXATION.**—Mines of gold, silver, or of the baser metals, when opened and in process of development, are exempt from taxation for ten years from the time of such opening. The buildings, lands and other property of mining and smelting corporations, made personal by their charters and not exempt from taxation, are taxable in the corporation, and the shares of the capital stock shall not be taxed to the owner thereof.

**LIABILITY OF STOCKHOLDERS.**—No stockholder whose stock has been fully paid in, and no part of the principal has been withdrawn, is liable for corporate debts; but when corporate property cannot be found with which to satisfy such debts, each stockholder's stock and interest in stock may be seized and sold on execution, and he may recover of the corporation the value of the stock and interest so taken.

#### LIENS.

Whoever digs, hauls or furnishes rock for manufacture of lime, and whoever labors in any quarry in quarrying, cutting or dressing granite, or in mining, quarrying or manufacturing slate, has a lien for his wages on such lime rock for thirty days after the rock is manufactured in lime or until such lime is sold or shipped on board vessel; and on the granite so quarried, cut or dressed for thirty days after such granite is cut or dressed or until it is sold or shipped on board vessel; and on all slate so mined, quarried or manufactured for thirty days after such slate arrives at the port of shipment; and such liens have precedence of all other claims. No statute liens on ores and metals.

## MARYLAND

Compiled by ELLIOTT & HOFFMAN, Attorneys at Law,  
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#### CORPORATIONS.

Corporations may be formed by five or more persons, citizens of the United States, and a majority of them citizens of the state of Maryland.

Articles of incorporation must state:

1. Names in full and places of residence of the applicants.
2. Name of the corporation, which must include name of the city or county in which it is to be formed.
3. Object or purposes for which formed.
4. Place or places where the operations of the corporation are to be conducted, and where principal office of the corporation in this state will be located.
5. Term for which it is to exist (not exceeding forty years).
6. Amount of capital stock (if any) of the corporation.
7. The number of shares of stock and amount of each share.
8. The number of directors or managers, and their names, who shall manage the concerns of the corporation for the first year.

This certificate must be certified to be in proper form by one of the judges of the county or city in which the principal office of the corporation is to be located, and must then be recorded in the clerk's office of the circuit court of the county, or the superior court, if in Baltimore City.

Each stockholder remains severally and individually liable to the creditors of the corporation to the extent of his unpaid subscription to its stock, and no more.

The state imposes an incorporation tax of one-eighth of one per cent. on the capital stock of new corporations, excepting cemetery, religious, charitable and railroad corporations.

There are provisions under which it is made necessary for the president or other officers of a corporation located or doing business in this state, domestic or foreign, to make full reports showing the stock or gross receipts of the company, according to its nature, as also the names of persons by whom the stock is held, to the comptroller of the state, upon which report the tax commissioner determines or assesses the taxes to be paid upon said stock or income. A neglect or failure to make such report is punishable by fine or imprisonment. The liability of taxes is determined in each case by the tax commissioner, subject to an

appeal, within thirty days, to the comptroller and treasurer, who must both agree in order to any alteration of the tax commissioner's determination.

Foreign corporations, except insurance companies, do business and hold property without restriction.

#### MINING AND QUARRYING CORPORATIONS.

Any five or more persons, citizens of the United States, and a majority of them citizens of this state, may form a corporation for (1) conducting any kind of mining business in this state, and for selling or otherwise disposing of the products of said business, when the principal office of said corporation is located in this state; (2) for washing, dressing, smelting and otherwise preparing for and bringing to market and selling the ores of all kinds of metals; (3) for opening and working quarries of marble, slate or other economic minerals or mineral substances in this state, and for the manufacturing, transportation or exportation and sale thereof; (4) for boring for, opening, using or refining petroleum, salt or other mineral springs in this state, and for boring for, opening, using or refining other oils, where the principal office of said corporation is located in this state.

No such corporation shall hold more than one thousand acres of land at any one time. If said corporation is situated in Allegheny county it may not be more than five hundred acres if in any other county; nor shall its capital stock exceed \$3,000,000; and the presence, in person or by proxy, of a majority in interest of the stockholders shall be necessary to form a quorum for business at any meeting of stockholders or members.

The president and directors of any such corporation shall be invested with full power to locate and construct a railroad or railroads, with necessary appurtenances, beginning the same at or near the mines, quarries or works of said corporation. It shall not be lawful to occupy any portion of lands that may be necessary for accommodation of the works of the Chesapeake & Ohio Canal Co., or the main route of the B. & O. R. R., or the works of any other railroad company chartered by this state, except to cross said road without injury to same. No railroad built by any mining or other corporation as provided shall be more than ten miles in length. It shall be furnished with all necessary means for transportation of all persons and property that may be offered for transportation thereon, and in all cases in which said corporation furnishes cars and motive power, and is subject to all expenses of transportation, it shall be authorized to charge rates not exceeding 2½ cents per ton per mile on all coal or other articles, and 2 cents per mile for every passenger that may be transported on said road.

Questions of difference that may arise between any two corporations incorporated under Article 23, or between any corporation and a citizen, in regard to locating, constructing or working its railroad or railroads, or in respect to the charge of transportation thereon, may be submitted to and decided by the board of public works, and the decision of said board shall be final in all cases submitted to them.

#### LIENS.

All buildings erected, repaired, rebuilt or improved, to the extent of one-fourth of their value, all inclines, or wharves or bridges erected, constructed or repaired in this state, and all boats or other vessels built, equipped or repaired, are subject to the liens of the mechanics or other persons who have done the work or furnished the materials. To secure the lien and lay a foundation for enforcing it, the mechanic or material-man must, within six months after the last work has been done, file a claim in the superior court for the city of Baltimore, or in the circuit court for some county. The claim is to be recorded in a book kept for that purpose. These claims may be enforced by scire facias or by bill in equity. No scire facias must issue within fifteen days of the return day in the city of Baltimore, nor within thirty days in a county. The lien shall expire at the end of five years from the day on which it was filed, unless renewed by scire facias. In the case of a boat or vessel the claim must be filed within six months from the commencement of the work, and the lien continues for two years only.

## MASSACHUSETTS

Compiled by H. L. BAKER, Attorney at Law, John Hancock Building, Boston, Mass.

#### CORPORATIONS.

**FORMATION OF.**—Three or more persons may associate together by an agreement in writing for the purpose of forming a mining corporation, with a capital of not less than \$5,000 or more than \$1,000,000.

**AGREEMENT, NAME AND ORGANIZATION.**—Such agreement shall set forth:

1. The name assumed.
2. The purposes for which it is formed.
3. The town in which it is located in this commonwealth.
4. The amount of its capital stock and the par value thereof, and the number of shares.

The first meeting shall be called by a written notice given to all subscribers, for the purpose of temporary organization, and each subscriber shall take an equal number of shares of the capital stock unless otherwise agreed. The president, treasurer and a majority of the directors shall be elected by a majority vote. They shall forth a copy of the agreement, with the names of all the subscribers thereto, date of first meeting and adjournments thereof, and shall submit such certificate, together with the records of the association, to the commissioner of corporations, who shall thereupon issue a certificate of incorporation, which shall have the effect of a special charter.

**OFFICERS AND BY-LAWS.**—The business shall be conducted by a president, board of directors, clerk, treasurer and other officers; but no mortgage of real estate or lease for more than one year shall be given except by vote of the stockholders.

The board of directors shall consist of at least three members, one of whom shall be chosen president. The clerk shall be sworn to the faithful performance of his duties, and the treasurer shall give bond in such manner as provided in by-laws. Stockholders may vote by proxy authorized by a writing.

**CAPITAL STOCK.**—Stock may be transferred by a written instrument recorded in the clerk's book. The amount of the capital stock may be increased or diminished by vote of the stockholders, subject to the provisions of this chapter (157). Assessments may be made upon the shares not exceeding the par value thereof, and shares of members not paying assessments may be sold. The corporation shall not commence business until the whole amount of its capital stock has been paid in, and a certificate of such fact made and recorded; but conveyances of real or personal property will constitute such paying in.

**BUSINESS OF CORPORATION.**—Any corporation thus created may purchase and hold real estate and personal property necessary to its business, and may contract the same for the purpose of its business, but shall not direct its operations to other purposes than those mentioned in its agreement of association; but its business may be altered, added to or changed by the stockholders at a special meeting called for that purpose.

**CERTIFICATES AND RETURNS.**—An annual certificate must be filed setting forth the time of last annual meeting, amount of capital stock, such time as the same shall be paid in, and liabilities of the corporation; and upon failure so to do for two successive years, the commissioner of corporations may apply to the supreme court for its dissolution. Certificates must also be filed upon an increase or reduction of the capital stock.

**LIABILITY OF OFFICERS AND STOCKHOLDERS.**—The president and directors shall be liable to the extent of a dividend by which the corporation is rendered insolvent, to the extent of such dividend; between the time of making loan to stockholder and time of its repayment, to amount of such loan; for signing false certificate or statement, required by law, only the persons so signing being liable.

Stockholders shall be liable for debts contracted before the capital stock has been paid in, but only those who have not paid the par value of their shares shall be so liable; for debts existing at the time the capital stock was reduced, to the extent of such reduction; for debts existing at the time the special stock is created, until the same is redeemed; for sums due operatives for services rendered within six months before demand made upon the corporation; but in all cases stockholders shall only be liable to par value of shares held by them. All wages due employees shall be paid weekly.

Roads, drains, ditches, tunnels and railways may be established through lands of adjacent owners or over highways, upon petition to the county commissioners, proper proceedings instituted thereupon and assessment of damages for injuries to such owners.

The above provisions apply also to quarrying companies, in which case the capital stock shall not exceed \$500,000.

Provision is made for returns of foreign corporations having offices in this commonwealth. (Statutes 1882, Chap. 106; Statutes 1886, Chap. 230.)

Corporations owning mines or quarries outside of this commonwealth, or incorporated under the laws of any other state and having an office or place of business within this commonwealth, shall pay a tax of one-twentieth of one per cent, upon the par value of the capital stock.

#### LIENS.

Any person to whom a debt is due for materials furnished and actually used in the erection, alteration or repair of a building or structure upon real estate, by virtue of an agreement with or the consent of the owner or his agent, shall have a lien on such building and the interest of the owner in the land in which such building is situated. But no lien shall attach if he has purchased by a person other than the owner, unless a written notice be previously given of the intent to claim such lien. The owner of such building, if he be a person other than the party by whom or in whose behalf a contract has been made, may prevent the attaching of a lien for materials not then furnished, by a notice in writing given to the person furnishing such materials. The lien shall not extend against an owner recorded. A statement in duplicate of a just and true account of the amount due, a description of the property and the name of the owner must be filed in the registry of deeds within thirty days after ceasing to furnish materials; and such statement must be filed with the county clerk of the county in which the property is situated. The lien may be enforced by petition to the superior court, or to a lower court when the claim does not exceed \$300, and proper proceedings had thereupon, the owner being duly summoned, and the debtor and all creditors having been upon the estate being duly notified of such petition. Upon the establishment of a lien

a sale of the property will be ordered by the court. Any interest in property so sold may be redeemed within one year. Creditors entitled to a lien shall share the proceeds of such sale in proportion to their respective debts, but a creditor having a previously attached lien is preferred. All rights to such liabilities for a lien under the provisions of this chapter (152) survive. Any person entitled to a lien may pursue his common-law remedies also.

#### MILLDAMS.

Milldams may be erected across non-navigable streams subject to conditions. No such dam shall be erected to the injury of any dam already existing. The height of water and the length of time which may be kept up shall be determined by a jury. All persons injured by flowage or otherwise may obtain compensation therefor upon petition to the superior court, and proceedings thereupon, the remedy so given taking the place of any common-law remedy. No milldam shall be constructed or materially altered until specifications of the proposed work have been approved by the county commissioners.

## MICHIGAN

Compiled by R. C. FLANNING, Attorney at Law, Norwalk, Mich.

#### CORPORATIONS.

**MINING, SMELTING AND METAL MANUFACTURING COMPANIES.**—Any number of persons, not less than three, by articles in writing may organize themselves into a corporation for the purpose of engaging in and carrying on any kind of mining business, or for refining, smelting or manufacturing any or all kinds of ores, minerals or metals, or for both mining, refining, smelting and manufacturing any or all such ores, minerals or metals. The articles of association shall be acknowledged in duplicate by not less than three of the subscribers, and shall state the purpose for which the corporation is formed; the amount of the capital stock, which shall not be less than \$10,000 nor more than \$2,500,000; the number of shares of \$25 each; the amount of cash actually paid in; the cash value of any property, real or personal, conveyed to the corporation contemporaneously with its organization; the names of the stockholders, their respective places of residence and the number of shares held by each; the location of the business office, and, if located without the limits of the state, as it may be, the location within the state of its office for the transaction of business; the county or counties in the state where the business of the corporation is to be carried on; the number (not less than three nor more than nine) constituting the board of directors; the directors (one of whom shall be a resident of Michigan) for the first year and the term of existence of the corporation, which shall not exceed ten years. Upon filing the articles with the county clerk of the county where the business office or the office for the transaction of business is located, and with the secretary of state, and on paying the franchise tax, the corporation may lawfully commence business. The original reports are not obliged to subscribe for the entire capital stock and the portion not subscribed for may be disposed of at any time afterward by the corporation. The stock is treated as personal property, transferable only on the books of the company, and the corporation at all times shall have a lien thereon for all debts due from members. The directors may call in stock subscriptions by installments and may sell the stock on thirty days' notice for assessments past due sixty days. The corporation may acquire and hold any quantity of land not exceeding fifty thousand acres; may subscribe for or purchase stock in any corporation formed to construct or improve any canal, harbor, plank-road or railroad, or to create, generate or manufacture any kind of power or light, when the construction, improvement, power or light is designed to facilitate the operations of the company; may construct and operate boats or vessels for the transportation of its product or of general freights, and may charter such boats or vessels to others; may conduct its mining, manufacturing or other business wholly or partly in any foreign country, and the United States, its territories, or in any foreign country, and, when conducting its business wholly at a place outside the state, may subscribe for or purchase stock in any other corporation formed for the purpose of mining, smelting or manufacturing ores or minerals wholly at a place outside the state; may increase or diminish its capital stock within the limits above indicated, by a vote of two-thirds of the capital stock; may consolidate with any other corporation or corporations, or may acquire by a vote of two-thirds of the stock of each corporation; may mortgage or sell the mine, works, real estate or franchise if authorized by a vote of three-fifths of the stock, but may convey city or village lots or land not required for mining purposes from which the timber has been removed, or rights of way and depot grounds for railroads, if authorized by a vote of a majority of the directors; may hold meetings of stockholders or directors at the business office, wherever located; and shall annually, in the month of June, make in duplicate an affidavit with the county clerk of the county in this state where the mine or works are situated, and with the auditor-general, a report for the preceding year ending December 31st, showing the total cash paid in on the mine or works, the amount of cash paid in on the property to the corporation; the amount invested in real and personal estate; the names of the stockholders, their places of residence respectively, and the number of shares held by each; the total floating and bonded indebtedness of the company and its output. It is made the duty of the president and secretary to

make and file this report, and if they, or either of them, willfully and intentionally neglect to make and file the same they may be criminally punished as for a misdemeanor.

**INDIVIDUAL LIABILITY OF STOCKHOLDERS.**—The stockholders are made individually liable for all labor performed for the corporation, which liability may be enforced by an action in assumpsit, contract or debt, from the time when payment for such labor became due and not afterward. An action for labor cannot be maintained against a stockholder alone; the corporation must be joined, and a judgment against the corporation alone is a bar to a subsequent action against the stockholder for the same debt. The suit for labor may be commenced against any or all of the stockholders and the corporation jointly, but a levy upon the property of the stockholder is not permitted until the property of the corporation has been exhausted. Any stockholder who is compelled by action to pay the debts of the corporation in whole or in part may call upon all the stockholders to contribute their part of the sum paid by him, and may sue them jointly or severally, or any part of them, and recover in such action the ratable amount due from the stockholder or stockholders, so much. Suits for labor may be commenced against the corporation alone at any time within six years from the accruing of the cause of action, as in other personal actions.

**MANUFACTURING COMPANIES.**—Any number of persons, not less than three, may incorporate for the purpose of carrying on any manufacturing or mercantile business or any union of the two. The articles, shall be made on uniform blanks furnished by the secretary of the state, shall be signed and acknowledged by the persons associating in the first instance, and shall state the name of the corporation; the purpose or purposes for which it is formed; the place or places at which its operations are to be conducted; the amount of its capital, not exceeding \$100,000, or less than \$5,000 nor more than \$50,000, except corporations formed for the manufacture of cheese or other products of milk, in which companies the capital stock shall not be less than \$10,000; the number of shares of such capital, the amount of each share actually paid in at the date of the articles, which shall not be less than ten per cent. of the whole; the place in the state where the office of the company is located; the term of the existence of the corporation, which shall not exceed thirty years, and the names of the stockholders, their respective residences and the number of shares subscribed for by each. The articles being filed in the office of the secretary of state and with the county clerk of the county in which the corporation are to be carried on, or of the county in which the company is located, if its business is to be carried on outside the state, and the franchise tax being paid, the corporation may commence business. The property and business is managed by not less than three nor more than fifteen directors, the amount of whose shares is transferable only on the books of the company, and for all debts due from them; the corporation at all times has a lien upon the stock or property of its members invested therein. The directors shall in no case subscribe for an amount of stock which exceeds the amount of any assessment past due for thirty days, in any proper action brought against the stockholder, or may sell the stock at public auction upon thirty days' notice and thereafter sue for or recover from a stockholder the deficiency of any there shall be. The corporation may acquire and hold such lands, tenements and hereditaments and such other lands, tenements and hereditaments as shall be taken in payment of or as security for debts, and may manage and dispose of the same at pleasure; may purchase and hold any grant of lands made by the general government to aid in any work of internal improvement in this state; may, within the limits prescribed, increase or diminish its capital stock, by a vote of two-thirds in interest; may conduct its business in whole or in part at any place or places within the United States; may amend its articles of association by a vote of two-thirds in interest; may re-locate its place of business, or may change its name, by a vote of two-thirds in interest of the stockholders; may establish an office or offices which cannot be changed within one year (hereafter) for the transaction of business without the state, but within the United States; may, at any time, by a vote of two-thirds of the stockholders or directors at such time, may continue its corporate existence for a further term of thirty years beyond the time fixed by the articles, by a vote of two-thirds in interest, at a meeting held within one year immediately preceding the expiration of the first term; shall annually in proper form make and file with the secretary of state and clerk of the county where its business is carried on a report for the fiscal year of the corporation, upon blanks furnished by the secretary of state, showing the amount of capital stock actually paid in, the amount of stock actually invested in real and personal property, the total debts and credits of the corporation, the stockholders and their respective residences and the number of shares held by each at the date of the report, and shall, at the expiration of the fiscal year, if it does not require, shall within thirty days after its happening file with the secretary of state and clerk of the county where the office of the corporation is located a notice of the dissolution or termination of the corporation, or of the change of its name, or of the change of its property and franchise; shall keep its books and accounts open for the inspection of the stockholders at the place where the corporation is located or at the office of its treasurer; shall make and exhibit to the stockholders at the meeting of the stockholders a statement of the accounts of the corporation; shall not diminish its capital so as to impair any demand or obligation due from the company; shall not withdraw or refund to the stockholders any part of its capital until all claims for or against the company shall have been paid, or until it has paid any dividend when insolvent, nor any dividend the payment of which would render it insolvent.

**INDIVIDUAL LIABILITY OF DIRECTORS.**—If the directors shall willfully neglect or refuse to make and file the annual report, they are each made liable for all the debts of the corporation and are subject to a penalty of \$25, and in addition thereof the sum of \$5 for each and every secular day after the 1st day of March in each year during the pendency of such neglect or refusal. Neglect to give notice within thirty days thereafter, to the secretary of state and county clerk, of the dissolution or termination of the corporation or of the sale of its property and franchise, subjects the directors to the same penalties provided in case of neglect to make the annual report. If they declare and pay a dividend when the corporation is insolvent, knowing that fact, or that the payment of such dividend would render the corporation insolvent, they thereon are made jointly and severally liable for all debts due from the corporation at the time of declaring or paying such dividend; and if the corporation shall violate any of the provisions of the act under which it is organized, the directors ordering or assenting to the violation are made jointly and severally liable for all debts contracted after the violation, to the extent of three times the amount paid in on the stock standing in the name of the offending directors on the books of the company.

**INDIVIDUAL LIABILITY OF STOCKHOLDERS.**—If capital stock is withdrawn and refunded to the stockholders before payment of all debts for which such stock would have been liable, the stockholders are made jointly and severally liable to creditors to the amount of the sum so refunded, and in addition thereof the stockholder is also made individually liable for all labor performed for the corporation, to be enforced only after execution returned unsatisfied in whole or in part against the corporation, and the stockholder so compelled to pay may call upon all or any number of the responsible stockholders to contribute their equal part of the sum paid.

**FRANCHISE TAX.** Every corporation or association incorporated by or under any general or special law of this state is required to pay to the secretary of state a franchise fee of one-half of one dollar of the amount of the capital stock of the corporation and a proportionate fee upon any and each subsequent increase thereof, the fee in no case being less than \$5. The secretary of state is prohibited from filing or recording the articles of association of any corporation unless accompanied by the franchise fee.

**FOREIGN CORPORATIONS.** Foreign corporations organized for the purpose of mining, smelting, refining or manufacturing any kind of ores or metals, upon filing copies of their charter or articles of incorporation with the county clerk of the county in which they are to be carried on, and with the secretary of state, may carry on business in the state, and shall enjoy all the rights and privileges and be subject to all the restrictions and liabilities of domestic corporations organized for the same purposes. Foreign corporations organized for the purpose of manufacturing or other business in this state of the Union or of any foreign country, either wholly or in part, for any of the purposes contemplated by the Mining Act for the organization of manufacturing companies, upon recording their charter or articles of incorporation with the county clerk of the county in which they are to be carried on, and with the secretary of state, as in the case of domestic manufacturing companies, and upon filing also in the office of the secretary of state a statement under oath showing the name and locality of the company, the amount of its capital stock, the amount of its capital paid up, the assets of the company including cash on hand and in the hands of agents or other persons, unincumbered real estate, bonds owned by the company, how secured and rate of interest thereon, debts due and owing by the company secured by mortgage, debts otherwise secured, all other securities and moneys, the total liabilities due or to become due and all other claims against the company, and upon appointing an agent for service of process, may, for such purpose, carry on business in this state, and shall enjoy all the rights and privileges and be subject to all the restrictions and liabilities of domestic corporations organized and existing under the manufacturing act. Foreign corporations engaged in the business of smelting, refining or manufacturing any kind of ores or metals within the state are required to make annual reports to the auditor-general, in such form as he shall prescribe, showing the original capital stock paid in; subsequent increase of capital for the purpose of carrying on the business; the amount of the amount of real estate actually used; amount of their property not in actual use in the business; the cash earnings since the organization; the estimated cash value of all assets above the amount of their liabilities carried since the organization; the names, their respective residences and the number of shares held by each; the par value of stock and the amount in cash called in upon each share; dividends paid since the organization; the amount of coal, limestone or other building material used during the year; the value of the skilled and unskilled labor employed and the wages paid; the amount of mineral and for whom smelted; the net yield in refined or smelted metal and the charge therefor; the gross amount of unamortized costs; the cost of transportation and consumption of fuel; the amount of fuel used at local rates separately; the amount of capital invested out of the state and how invested, and showing all other investments other than the amount actually invested in the business, omitted in the report; and the names of the officers whose duty it is to file the annual report shall neglect for a period of sixty days, after the first Monday of July of each year to make and file the same, they are made liable to a fine of not less than \$5,000 nor more than \$10,000, and every officer and every agent of the company who neglects to file such neglect upon the part of its officers, shall, in the discretion of the court, forfeit not less than \$5,000 nor more than \$10,000 in addition to any fine or fines collected of the officers, and the court may direct upon the part of the officers, and the company, to bring to enforce the penalty will work a forfeiture of the company's right to do business within the state. Foreign mining

corporations not engaged in the business of smelting or reducing ores and foreign corporations doing business in the state under the manufacturing company act are required to file a report similar to the report of the domestic corporation and under like penalties.

**TAXATION.**—The law imposing a specific tax for state purposes on corporations engaged in the business of mining, smelting, refining or manufacturing ores, and on mineral lands, specifically provided, and the property tax and personal tax of the corporation, whether foreign or domestic, is, taxed for other and other purposes under the general provisions of law relating to the assessment and collection of taxes. The capital stock as such is not taxed.

**CORPORATIONS OTHER THAN FOR MINING OR MANUFACTURING.**—In the Michigan statutes will be found special acts for the organization of state banks, railroad companies, under railroad depot companies, train railway companies, street-railway companies, plank-road companies, stage companies, bridge companies, ferry companies, telegraph companies, express companies, pipe-line companies, water-supply companies, marine companies, commerce or navigation companies, warehouse companies, land companies; canal, harbor and river improvement companies, river navigation improvement companies, water-power companies, rafting companies; rafting, running and booming companies; rafting associations, cooperatives, trade-unions, labor unions, associations, building and leasing companies, electric-light companies, printing and publishing companies, newspaper and book publishing associations, insurance companies, and for the incorporation of various religious and benevolent societies.

#### LIENS.

**MECHANIC'S LIENS.**—Every person who shall, in pursuance of any contract between himself and the owner, part owner or lessee of any interest in real estate, build, alter, improve, repair, erect, ornament or put in or who shall furnish any labor or material in or for building, altering, improving, repairing, erecting, ornamenting or putting in a house, building, contract, wharf or structure, and every person who shall, as sub-contractor, laborer or material-man, perform any labor or furnish materials to the original or principal contractor or to any sub-contractor in carrying on, forwarding or completing any such contract, is given a lien therefor upon the structure and its appurtenances and also upon the entire interest of the owner, part owner or lessee in and to the lot or piece of land, not exceeding one-quarter section of land, or, if an improved city or village lot, the lot or lots upon which the improvement is made, to the extent of the right, title and interest therein of the owner, part owner or lessee at the time work was commenced or materials were begun to be furnished under the original contract or by the sub-contractor or who furnishes or furnishes with a laborer or material-man in the performance or execution of such sub-contract, and also to the extent of any subsequent acquired interest of any such owner, part owner or lessee. The person, firm or corporation furnishing material is required within ten days after the sale to serve on the owner, part owner or lessee, or on his agent, if such owner, part owner or lessee resides in or has a known agent in the county in charge of the structure, a fairly detailed statement of the goods so sold. The owner, part owner or lessee will not be liable to the sub-contractors, material-men or laborers for any greater amount than he contracted to pay the original contractor, and is entitled to recoup any damages which he may sustain by reason of any failure or omission in the performance of the contract. The risk of all payments made to the original contractor when the claimant for labor performed or materials furnished shall have, before or at the time of the commencement of the performance of such labor or the furnishing of such materials, filed with the register of deeds of the county in which the land is situated, written notice that the lien will be claimed for the labor or materials, giving a description of the premises and the name of the owner, part owner or lessee and contractor, and within the same time shall have served a copy of the same on the owner, part owner or lessee, shall be upon the owner, part owner or lessee until the expiration of sixty days from the date on which the last of the materials shall have been furnished or the last of the labor shall have been performed; and no payment shall be made by the owner or made before the expiration of this sixty-day period shall defeat any lien of any sub-contractor, material-man or laborer unless such payment has been distributed among the sub-contractors, material-men and laborers, or if distributed in part only, then to the extent of such distribution. If labor is performed or materials are furnished upon lands belonging to a married woman with her knowledge and consent, and in pursuance of a contract with the husband, the lien attaches upon the property the same in all respects as if such contract had been made with the wife, and in case the title to the lands is held by a husband and wife jointly the lien attaches to the lands and improvements, if the improvements were made in pursuance of a contract with both of them or in pursuance of a contract with either of them, by an act with the knowledge and consent of the other. If labor or material is furnished for the erection of a new building or structure upon lands to which the person contracting for such erection has no legal title, the lien for the labor or material attaches to the title or claim of title made, and a forfeiture or surrender of any title or claim of title held by such contracting person to the land will not defeat the lien. If the property covered by the lien is held by the contracting person under a land contract and he surrenders or forfeits his rights or surrenders, if the person holding such lien, by performing the covenants contained in such contract within thirty days after such forfeiture or surrender, may be subrogated to the rights of the contracting person as his rights existed immediately before the surrender or forfeiture. The owner may retain from any moneys

due or to become due to the original contractor an amount sufficient to pay the demands of the sub-contractor, material-men or laborers who have filed and served notice of their intention to claim a lien. The original contractor, whenever any payment shall become due to or whenever he desires to draw money from the owner, is obliged to deliver to the owner a statement under oath of the number and names of every sub-contractor or laborer in his employ, and of every person furnishing materials, giving the amount, if anything, which is due or to become due to them, and the owner may retain, out of any money then due or to become due to the contractor, an amount sufficient to pay all such demands whether due or to become due, and may pay the same, and all payments so made shall, as between the owner and the contractor, be considered the same as if paid to the original contractor direct. Until this statement is made the contractor has no right of action or lien against the owner or the premises on account of the contract, and all payments made by the owner before such statement is made or before sufficient money is paid, if that amount be due or is to become due, to pay the sub-contractors, laborers or material-men, as shown by the statement, is considered illegal and made in violation of the rights of the persons intended to be benefited by the lien act, and their right to a lien shall not be affected thereby. If neither the owner nor his agent can be found within the county where the structure is made, the contractor is not obliged to deliver the statement as a prerequisite to the institution of proceedings to fasten his lien or such other proceedings as he may desire to bring, but he may at any time during the progress of the work demand in writing of the contractor the statement, and if the contractor fail to furnish it within five days he is made liable to the owner in the sum of \$100 for each refusal or neglect, and all actual damages occasioned by his neglect or refusal. The lien is lost unless the person entitled thereto shall make under oath and file in the office of the register of deeds of the county or counties in which the real estate, building or structure is situated, within sixty days from the day on which the last of the materials were furnished or the last of the labor shall have been performed by the person claiming the lien, a true and just statement or account of the demand due him over and above all legal set-offs, setting forth the time when such materials were furnished or labor performed, and for whom, and containing a correct description of the property to be charged with the lien and the name of the owner, part owner or lessee, if known, and shall follow up the filing of such statement by proceedings to enforce the lien, which shall be by bill in chancery and shall be commenced within twenty days after the filing of such statement.

#### MINING.

**MINING OPTIONS.**—Any person holding a mining option or agreement for a mining lease or license to explore or mine on lands in this state, containing a clause allowing the lessee, his personal representatives or assigns, to surrender such lease or license at any time before the expiration of the term thereof, by giving notice, has an absolute right to have such option or agreement specifically enforced, if not in default himself, or if he is holding an agreement for an interest in any mining lease or license from the lessee is entitled to have the same specifically enforced, if not in default himself. All mining options, leases and licenses are assignable and survive and may be enforced by the courts, administrators, personal representatives or assigns of the party or parties, whether the option contains words of assignability or not. Mining licenses for mining ore or minerals are subject to levy and sale on execution.

**MINING LIENS.**—Every person who shall furnish or perform any labor for any corporation organized for the purpose of mining, smelting or manufacturing ores or minerals in the Upper Peninsula of Michigan and every bona fide holder of any draft or order for the payment of money due for any such labor, issued or drawn by any officer, clerk or agent of any such corporation, is given a lien for the amount thereof upon the real and personal property of the corporation lying and being in the Upper Peninsula, which lien takes precedence of all other debts, judgments or decrees, liens or mortgages, except liens accruing to the state for taxes, fines or penalties.

## MINNESOTA

Compiled by A. E. McMANIS, Attorney at Law, Duluth, Minn.

#### CORPORATIONS.

The law of the state of Minnesota relative to the organization, powers and rights of corporations for the purpose of mining, smelting, reducing or refining ores or minerals, or for working coal mines or stone quarries, marketing the material, or for manufacturing brick, stone or iron, steel, copper or other metals, or for the purpose of buying, delivering, or conveying any mineral or other lands, or for the whole or any part of said purposes, is as follows:

**ARTICLES OF INCORPORATION.**—Any number of persons, not less than three, being desirous of forming a corporation under the above head, may do so by signing and severally acknowledging articles of incorporation which shall declare that they do

thereby associate themselves together and agree upon the articles for the purpose of forming a corporation under the provisions of an act of the legislature of the state of Minnesota, entitled "An act to authorize the formation of corporations for mining and smelting ores and for manufacturing iron, copper and other metals," approved February 24, 1876, and the acts amendatory thereof. The articles shall be set out

1. The name of the corporation, which shall not be the same as that previously assumed by any corporation in this state.
2. The general nature of the business to be carried on, and the name of the principal office to be provided for in the by-laws.
3. The names and places of residence of the persons so associating themselves to form such a corporation.
4. The amount of the capital stock and the limit of indebtedness. (This last may be provided for in the by-laws. It, however, is generally inserted in the articles of incorporation.)

**RECORD, FILING, ETC.**—These articles must be executed in duplicate, one copy filed with the register of deeds in the county in which the principal office of the company is located, or, if the principal office is without the state, then in the county where the office of the company is located, as hereinafter provided, and the other copy with the secretary of state in St. Paul, Minn.

**PUBLICATION.**—No publication of the articles of incorporation is necessary, but upon the depositing of the articles, as herein set out, the corporation is deemed to exist as a mechanical and manufacturing corporation; may sue and be sued in its corporate name; contract and be contracted with, and sue on the business mentioned in said articles; purchase, acquire, hold, use, sell, transfer, convey, rent and lease all such real and personal property and effects as may be necessary or convenient for the purposes of said corporation.

**EVIDENCE.**—The certified copy of said articles from the said register of deeds of this state shall be evidence in all courts of the existence and legality of the organization of such corporation.

**AMENDMENTS OF ARTICLES.**—The articles of incorporation may be amended by a majority vote in amount of the stockholders at any regular meeting of the same, or at a special meeting of the stockholders called for that purpose. And such amendment, after being duly certified, must be deposited for record in the same manner as the original articles.

**CAPITAL STOCK.**—The amount of the capital stock shall in no case be less than \$10,000, divided into shares of \$100 each, and each share shall have one vote at any stockholders' meeting, and may be transferred in person or by proxy in writing.

**TRANSFER.**—Such stock is considered under our law as personal property and may be bought, sold and transferred as may be prescribed by by-law or resolution of said corporation or its managing board, and no stock purporting to be full paid shall be subject to assessment in the hands of the lawful holder without assessment. Stock in a corporation shall, at the time it is prima facie subject to levy for the debts of the holder until the same is transferred to someone else upon the books of the company, unless, by by-law, the transfer is otherwise provided for.)

**BY-LAWS.**—Such corporation may prescribe and adopt by-laws for the management of its business, and such by-laws may be amended by the board of directors from time to time and may also be amended by the stockholders at any regular meeting, and such amendment by stockholders shall stand until repealed or changed by the stockholders at some regular meeting thereafter. A copy of all by-laws, duly certified, and all amendments and alterations shall be filed in the same manner as the articles of incorporation.

**BOARD OF DIRECTORS.**—Until the corporation shall have been duly organized and the board of directors elected the persons executing the articles of incorporation shall constitute a first board of directors with full authority and power to act, to draw up and approve by-laws and to do all things necessary to complete the organization of said company.

**RECORD OF PROCEEDINGS.**—The corporation must keep a record of all proceedings had at any stockholders' meeting, in books kept for that purpose. Also all official acts of its board of directors, trustees or officers, and such record shall be at all times open to the inspection of any stockholder on demand.

**OFFICE, PLACE OF BUSINESS.**—The officers of the company may be located without this state, and the board of directors may meet to transact business without the state, provided that an office of the corporation be maintained with some suitable person in charge within the state where legal process may be served, and a service of process upon the corporation may be made at the said office is considered and constitutes service upon the corporation.

**POWERS OF CORPORATIONS TO MORTGAGE, SELL AND LEASE.**—Such corporation may mortgage, sell or lease its real estate on a majority vote of the stockholders and not otherwise.

**STOCK IN OTHER CORPORATIONS.**—Such corporation, upon the election of a majority of the stockholders, may acquire and hold stock in other corporations.

**MEETINGS.**—The regular meetings of the stockholders shall be provided for in the by-laws, and such by-laws shall provide for the meetings of the board of directors, but in case a majority of the stockholders at any time wish a meeting they may call one irrespective of the by-laws, giving thirty days' notice by publication in a paper published at the place of the office of the company, or, if there be no such paper, then in a paper published at the capital of the state.

**LIABILITY OF STOCKHOLDERS.**—The stockholders in such a corporation incur no liability for the debts of the corporation under the constitution of the state of Minnesota, except in so far as they may be deprived of the value of their stock, the liability not being a personal one.

## MISSISSIPPI

Compiled by BRAME & ALEXANDER, Attorneys at Law,  
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### CORPORATIONS.

[Code 1892, §§ 882-896.]

Corporations for every lawful purpose and of every kind, except for the construction and operation of railroads (other than street railroads) and the carrying on of insurance business, may be created under the general laws.

The persons desiring to be incorporated may prepare a charter, which is to contain a statement of the purposes of the corporation, the name, the powers to be exercised, the period (which is not to exceed fifty years), and other particulars. This is to be published in the newspapers, and signed by the governor, on the advice of the attorney-general, and the charter is to be recorded.

Corporations of benevolent societies, charitable associations and literary and religious societies, fire companies, mechanics' associations, fair associations and agricultural societies are not required to publish their charters.

Renewals and amendments shall be made in the same way as a corporation is created. Charters are to be recorded in the office of the secretary of state, and in the office of the clerk of the chancery court of the county in which the corporation does business.

Every corporation thus created may hold necessary real and personal estate not exceeding \$250,000; banks and manufacturing companies, \$1,000,000.

Stockholders are liable for debts to the amount of their unpaid subscriptions to stock. The property and franchises of a corporation are saleable under judgment, but may be redeemed within six months. On dissolution of a corporation the assets are vested in the stockholders.

Foreign corporations which exist by the laws of any other state, or by the acts of congress, or the laws of any foreign country, may do business in this state. Their corporate names, and are liable to be proceeded against by attachment or otherwise as individual non-residents.

A note or security of any kind given by any subscriber for stock shall not be considered, taken or sold as payment of any part of the capital stock of the company.

No part of the capital stock shall be withdrawn or diverted nor a dividend declared when the company is insolvent. Directors violating this are personally liable. The debts of a corporation purchasing or trading corporation shall not exceed the amount of its capital stock paid in. If this is violated the directors are liable.

### LIENS.

[Code 1892, §§ 2626-2715.]

Every building and any fixed machinery, and every water craft and railroad erected or required, is subject to a lien for labor done or materials furnished about the erection, construction, alteration or repairs thereof. In case of a house or building in a city or town the lien shall extend to and cover the lot of land on which the building stands, and if not in a town or village, shall extend to and cover one acre of land on which the building may stand, if there be so much, to be selected by the holder of the lien. If the structure be a railroad, the lien shall extend to and cover the entire road-bed and right of way, depots and car buildings. The lien shall take effect against purchasers or incumbrancers for a valuable consideration without notice from the time of commencing suit to enforce the lien or from the time of filing the contract for record in the office of the clerk of the chancery court.

The contract by which any labor is to be performed or material furnished may be in writing and recorded in the office of the clerk of the chancery court of the county in which the work is to be done or where the material is furnished. When so recorded it shall be binding on all persons who take a lien enforced by suit within six months after the time when the money is due. Suit is to be commenced by petition in the circuit court of the county, or in the justice court if the amount is less than two hundred dollars.

All persons in interest are required to be summoned, and the statute provides for trial, judgment and sale of the property to satisfy the lien.

Sub-contractors and laborers may bind the amount due the contractor by giving the owner of the property or the person who is having the work done written notice of the amount due them by the contractor. When such notice is given any amount that is due the contractor shall be first applied to the payment of the debt by the owner of the property, sub-contractors and laborers.

A lien is also given on all carriages, buggies or any articles constructed, manufactured or repaired for the price of the labor and material employed in constructing, manufacturing or repairing the same, and the person to whom the price of such labor or material may be due shall have the right to retain possession of the articles until the lien is discharged, and if the debt shall not be paid within thirty days he may commence suit and have the lien enforced by a sale of the property.

## MISSOURI

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## CORPORATIONS (MINING).

**FORMATION.**—Any three or more persons, having associated themselves together by articles of agreement in writing, may incorporate under any name or title designating such business, for the purposes of any kind of mining.

- Articles of incorporation must be filed with the recorder.
- Name of corporation, which shall not be that of any other corporation or an imitation of the same.
- The name of the city or town and county in which the corporation is to be located.
- Amount of capital stock must not be less than \$2,000 nor more than \$50,000,000 and the number of shares into which it is divided, the par value thereof; that the same has been bona fide subscribed and one-half thereof actually paid up in lawful money of the United States and is in the custody of the persons named as the first board of directors or managers.
- The names and places of residence of the several shareholders and the number of shares subscribed by each.
- The number of the board of directors or managers (must be not less than three nor more than thirteen, and at least three must be citizens and residents of this state and stockholders in such corporation) and the names of those agreed upon for the first year.
- Term for which the corporation is to continue (not exceeding fifty years).
- Purposes for which the corporation is formed.

The articles of incorporation must be signed and acknowledged by all the parties thereto and recorded in the office of the recorder of deeds of the county or city in which the corporation is to be located, and a certified copy of such instrument filed in the office of the secretary of state and a certified copy of the state treasury of \$50 for the first \$50,000 or less of capital stock, and \$5 for every additional \$10,000 of capital stock. Thereupon the secretary of state shall issue his certificate that such corporation has been fully organized and the amount of its capital stock, and such certificate shall be taken by all the courts in this state as evidence of the corporate existence of such corporation, and the persons so acknowledging such articles shall become a body corporate. Corporations must keep a general office for transaction of business in this state. The capital stock shall not be paid by note, nor can a corporation loan money to stockholders.

**CORPORATE POWERS.**—Every corporation, as such, has power: First, To have succession by its corporate name, for the period limited in its charter, and to sue and be sued, for twenty years. Second, To sue and be sued, complain and defend in any court of law or equity. Third, To make and use a common seal, and alter the same at pleasure. Fourth, To hold, purchase, mortgage or otherwise acquire real and personal property for the purposes of the corporation shall require, not exceeding the amount limited in its charter of the law creating it, and also to take, hold and convey such other property, real, personal or mixed, as shall be necessary or requisite for such corporation to acquire in order to obtain or secure the payment of any indebtedness or liability belonging to the corporation. Fifth, To appoint such subordinate officers and agents as the business of the corporation shall require, and allow them a suitable compensation. Sixth, To make by-laws not inconsistent with existing law, for the management of its property, the regulation of its affairs and for the transfer of its stock. Seventh, To increase or diminish, by a vote of its stockholders, cast as its by-laws may direct, the number of its directors or trustees, to be not less than three nor more than thirteen, and may, in like manner, change its corporate name without in any wise affecting its rights, privileges or liabilities; such changes of name or number of directors or trustees shall take effect and be in force from the date at which the president or secretary of the corporation shall file with the secretary of state an affidavit setting forth the name adopted and the number of directors or trustees fixed, together with the date at which such change in name or number of directors or trustees was voted by the stockholders. No corporation shall engage in business other than that expressly authorized in its charter or the law under which it may have been or may hereafter be organized.

**RIGHTS.**—The first meeting, unless otherwise provided in act of incorporation, be called by notice signed by one or more of the incorporators named in the act of incorporation, setting forth the time, place and purpose of meeting, and such notice shall be delivered to each member at least seven days before the meeting, or published in a newspaper in the county where the corporation may be established, or, if there be no such newspaper, then in the nearest newspaper; or a justice of the peace may, on the written application of two or more members thereof, issue a warrant to either of said members directing him to call a meeting by giving the required notice. Subsequent meetings shall be called by the president and secretary by notice published for ten days setting forth the place, hour and object of such meeting, or, if they fail, it may be called by either of the said officers. Two sworn inspectors, not directors, shall be appointed to canvass the vote on election of directors or any other proposition to be voted on at such meeting, and certify the result to the president. In election for directors each stockholder may cast as many votes in the aggregate as equal the number of shares of stock held by him multiplied by the number of directors to be elected, in person or by proxy, for one or distribute them among two or more candidates, and the person or persons so elected must be elected by a majority of the votes cast. The president and secretary and other officers as prescribed by the by-laws.

**BY-LAWS.**—In addition to the providing for the management of its property, regulation of its affairs and transfer of its stock, the by-laws may provide the time of service and mode of classification of the directors, or an election of three directors, or the number or proportion of directors as may be found upon dividing the entire number of directors by the number of years composing a term. The time and place of such election shall be prescribed by its by-laws, and if no time is fixed by the by-laws, the election shall be held on the second Monday in January, of which time and place two weeks' notice shall be published in a newspaper printed at least once a week in the county; or if there be no such paper, then in a paper published in the county, which notice shall be published in the county. An election may be made for the time being by the directors to direct the manner of taking the votes of stockholders on the question of increasing or diminishing the number of directors or trustees, or changing the corporate name, but by-laws regulating the election of directors may be made at least sixty days before such election.

**LIABILITY OF STOCKHOLDERS.**—Stockholders are individually liable for the payment of the full amount of their stock only. Directors shall keep correct account of their transactions, and have full statements of the condition of the affairs of such corporation and a list of the stockholders and the number of shares owned by each made out, and a copy thereof delivered or sent by mail to each of the stockholders as often as once in each year, and at least ten days before the day of election, and each stockholder may at all proper times have access to the books of the company.

Wages of employes for all labor and services performed by them within three months next preceding the date of election, for the last day of that month, are preferred claims over all demands not secured by specific liens on the property of the corporation; payment of wages shall be made on or before the 15th day of each month for the full amount of all wages earned prior to the 1st day of that month. Thirty days' notice must be given to employes of the reduction of wages by written or printed hand-bills specifying the class of employes whose wages shall be reduced and the amount of the reduction, posted in a conspicuous place where the employes work or by mailing such notices to each employe.

**REPORTS AND STATEMENT.**—Every mining corporation shall make an annual report to the secretary of state on the 1st day of July annually, giving the location of its principal business office, names of its president and secretary, amount of its capital stock and actual value at the time of making the report, cash value of its personal property within this state on the 1st day of June immediately preceding; the amount of taxes, city, county and state corporation tax, on the 1st day of July immediately preceding the report, and when and to whom paid. If the corporation is incorporated in any other state, territory or country and doing business or having an office in this state, it shall announce the location of its principal office in this state, the name of its principal officer, the amount of its gross and net earnings within this state during the year last preceding, the cash value of all personal and real property within this state on the 1st day of July immediately preceding; amount of taxes, city, county and state, paid by the corporation in this state for the year immediately preceding, and when and to whom paid. Each of said reports shall be sworn to by the president and secretary of the corporation be organized under the laws of this state, and by its principal officer in this state if organized without this state.

**FOREIGN CORPORATIONS.**—A foreign corporation must maintain an office in this state where legal service may be had upon it and where proper books shall be kept to enable it to comply with the constitutional and statutory provisions governing such corporations. It must file in the office of the secretary of state a copy of its articles of incorporation, authenticated by the proper authority, and its principal officer in this state shall make and forward immediately to the secretary of state a statement duly sworn to of the proportion of the capital stock of said corporation represented by its property located and business transacted in the state of Missouri, and it shall be held to be a corporation for all purposes and to all intents and purposes required of similar corporations formed within this state. A certificate that it has complied with the law of this state and is authorized to do business therein is then issued by the secretary of state.

## LIENS.

Persons furnishing materials, machinery or fixtures for any building, erection or improvement on land or for repairs thereof, under contract with the owner, proprietor or his agent, trustee, contractor or sub-contractor, may have a lien on the erection and on the land, including the building, machinery or fixtures, on the lot in town or city. The lien only covers the title or interest which the possessor has for whose use the structure is erected. The lien attaches to buildings when the land is previously encumbered, and to the building may be retained by the contractor or contractor. The lien attaches to the leasehold interest of the tenant, and the buildings and improvements erected by the tenant may be removed within sixty days after the lease terminates. Contractors must within six months, and subcontractors within ninety days, file with the circuit clerk of the county where the building is a just and true account of the amount, after allowing just credits, with a description of the property sufficient to identify the same, the name of the contractor, or subcontractor, in this state, and the name of the owner of the building, or of the person for whom the building was erected, and the name of the person for whom the building was erected. The lien has precedence over all incumbrances created after the commencement of the building. Sub-contractors must serve written notices on the owner that they have a claim against the building before filing the lien. If the owner is absent, such notice is served by filing with the county recorder. Suit to enforce a lien must be commenced within ninety days after the

lien is filed and must be prosecuted without delay. If the sub-contractor file lien, it is the duty of the contractor to defend the suit thereon, and the owner may withhold the money due the contractor during the pendency of the suit.

#### MILLDAMS.

Anyone owning land on one side of a stream and a part of the bed, who desires to erect a milldam, if he cannot agree with the owner of the opposite side, or with the owners of the land which will be flowed, may file a petition in the circuit court of the county in which the mill or dam is to be erected, and such court may issue a writ directed to the sheriff of the county commanding him to summon a jury to appraise the damages. Notice must also be served on the proprietors of the land at the time such petition is filed. After the payment of damages and expenses, the applicant secures a right to erect his mill or dam.

#### MINING.

**WORKING MINES.**—Owners or those having a leasehold interest in real estate for mining purposes shall keep a printed statement of the terms, conditions and requirements upon which said lands may be mined or prospected and the time during which the right to mine or prospect thereunder shall continue, posted or hung up in a conspicuous place in the principal office or place of business of such person or company in the county in which the lands are situated, and shall deliver to such person mining or prospecting, on his requesting a printed copy of such statement, and all persons engaging or mining on said lands after the posting of such statement shall be deemed to have accepted the terms thereof, and upon failure to comply with the requirements of such statement shall forfeit all rights thereunder and the owner or lessee may, at his option of the same, if the owner or lessee shall permit any person to enter and dig for lead ore or other minerals with his consent without complying with the foregoing, and such person shall upon any mine or extend any shaft, in good faith, but before a written right to continue such work for three years from the time of getting such permit; but such right to work shall be forfeited by failure to work for ten days in any one calendar month, unless such failure was caused by unavoidable circumstances, and such failure must be paid, monthly if demanded, of the same kind and proportionate amount paid by others mining the same kind of ore on the land of the owner or lessee, but before a written copy is made, and if there be no other person mining on said land, then according to the royalty paid by miners on lands nearest thereto. The owner shall have a lien on all such minerals mined for royalty due. The owner or lessee may release all such minerals mined by paying the same, or may release all minerals mined elsewhere on his land, but if no other is being mined on his land, then the highest price paid for like minerals on lands nearest thereto. Otherwise said minerals may be sold by the miner, after paying the same, and the owner or lessee of the land five days' written notice and opportunity to purchase. All minerals dug or mined belong to the owner or lessee of the land, and it is a crime for any other person to remove or dispose of them except as modified by consent or law, and trouble damages may also be recovered for minerals so mined and carried away.

Any person owning land adjoining a tract upon which a mine is situated may have such mine and shafts surveyed by the county surveyor by making affidavit before a justice of the peace that the miners have entered the premises of the affiant. Scraping of ore, except by owner, is prohibited without written consent from the person having control of the mine. Coal and other minerals in place are land, and may be conveyed as such, and when thus conveyed constitute a separate and distinct inheritance.

**COAL MINING IN CITIES.**—Mining for coal is prohibited within the corporate limits of any city, town or village, and within the corporate limits of any city, town or village of not less than inhabitants or over an acre and a half of land, the location of which is given. No office must be given designating the locality for mining, the nature of the mining, and a day fixed for filing and approving the bond in the circuit court of the county. No other permission of property or interest in the locality of such mine, and no complete and true diagram of said mines must be filed each term in the circuit court, made and verified by the county surveyor, showing, with reference to the boundaries of such mine and the lands and lands of neighboring owners, the extent of such mines, their drifts, tunnels and excavations, giving the length and breadth of each drift, bank and tunnel, so as to fully inform the court and parties in interest of the same, and the character of such mining operations. Removing of coal at mines employing miners at bushel or ton rates, prohibited, and a penalty is also provided for false weighing or false sales.

**LABORERS, HOW PAID.**—Mine laborers must be paid regularly at least every thirty days, and in cash, memorandum or token redeemable at the option of the holder in cash.

**SCHOOL LANS.**—Mining on leased school lands is prohibited. **SAFETY AND INSPECTION.**—An inspector of mines is appointed by the governor, whose duty it is to see that every necessary precaution is taken to insure the health and safety of the workmen employed in any mines in this state and that the provisions and requirements provided for are faithfully observed and obeyed. He has the right of entering and inspecting any mine and take proper steps to enforce the law. If any person is killed or seriously injured in a mine such fact must be reported at once to the inspector, and if he deems it necessary he may order the mine immediately to be closed, and may call upon the owner to investigate the cause of the accident, and make and keep a report therefrom. An accurate map is required to be made annually of

every mine employing ten or more men, showing the veins, inclination of the strata, material deflection in the workings and the boundary lines, and deposited with the clerk of the county clerk. Mines must have escapement shafts approved by the inspector; must be properly ventilated and furnished with one hundred cubic feet of air per man per minute; ladders provided for immediate use, and kept at least a hundred feet from the place where the driver or operator of the mine shall also keep sufficient supply of prop timber for use.

## MONTANA

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#### CORPORATIONS.

Private charters and special privileges are prohibited by the constitution, and all domestic corporations must be formed under the legislation provided for the formation of corporations for industrial and productive purposes.

Three or more persons, but not more than nine, who desire to form a company for the purpose of carrying on any kind of manufacturing, mining, mechanical, agricultural, or other business, or of building, developing, or mining tunnels; of purchasing, developing, improving, using, leasing, selling, conveying or otherwise disposing of water powers and the sites thereof, and lands necessary and useful therefor, or for the interests and subdivisions thereof, or for the purpose of purchasing, holding, laying out, platting, developing, leasing, selling, dealing in, conveying or otherwise using or disposing of townships, cities, towns, or the lots, blocks or subdivisions thereof, or lots, blocks, townships, or the lots, blocks or subdivisions thereof, or for any other branch of business designed to aid in the industrial or productive interests of the county and the development thereof, or of one or more of the aforesaid branches of business, may make, sign and subscribe a certificate in writing giving the name of the corporation, the objects for which the corporation shall be formed, the amount of the capital stock of said company, the term of its existence not exceeding twenty years, the number of shares of which the said corporation shall consist, the number of trustees and their names, who shall manage the concerns of the said company for the first three months, and the name of the city, town or locality and the county in which the operations of said company shall be carried on. The certificate must be filed with the county clerk and recorder of the county or counties where the business is to be carried on, and a duplicate thereof filed with the secretary of state. The stock, property and concerns of such company shall after the first three months be managed by not less than three nor more than nine trustees, who shall be stockholders of the company and who shall be annually elected by the stockholders after a published notice of such election of not less than ten days in a local paper. All elections shall be by ballot, and each stockholder shall be entitled to as many votes as he owns shares of stock therein multiplied by the number of trustees to be chosen, and may cast all his votes for one candidate, or distribute them as he may see fit, and the persons receiving the greatest number of votes shall be the trustees.

But in case it should happen that the election should not be held at the time designated the corporation is not thereby dissolved, and all officers shall hold over till their successors are elected.

The stock of such company shall be deemed personal estate and transferable as prescribed by the by-laws, but no transfer shall be valid, or copies be taken therefrom, until it shall be duly recorded upon the books of the company, showing the facts of the transfer and designating the particular shares and the date of the transfer.

The stockholders shall be jointly and severally liable to the creditors for the amount to the amount of their unpaid stock until the whole amount subscribed for shall have been paid in.

The company may issue stock in payment of purchase price of mines, manufactures and other property, but no further assessments can be made thereon by creditors or the company.

Every such company shall annually within twenty days from the first of September make a report, which shall be published in a local newspaper, showing the amount of business carried on, the amount of the amount of capital and the amount actually paid in and the amount of existing debts, which shall be signed by the president and a majority of the trustees and filed with the clerk and recorder, and upon failure to make said report all the trustees become jointly and severally liable for all the debts then existing, and for all that may be contracted before the report is made, but no such liability shall attach to any trustee or board of trustees if within the time named any trustee or board of trustees shall cause said report to be filed in the office of the county clerk and recorder, notwithstanding the same was never published.

The business also become jointly and severally liable to the creditors if they shall declare and pay any dividends when the company is insolvent, or the payment of which will cause the company to become insolvent or diminish the amount of its capital stock, and said liability continues as long as they remain

in office, provided that any trustee may escape such liability by filing a certificate of his objection to such payment of a dividend with the clerk of the company and with the county clerk and recorder at any time before its payment.

No loan can be made to a stockholder, and, if made, the officer so making or consenting thereto, shall be liable jointly and severally to the extent of the loan and interest, and for all the debts of the company contracted before the repayment of the loan.

Any false notice, report or certificate heretofore named creates the same liability as if the trustees, president or secretary had signed it.

It requires a two-thirds vote of all the capital stock issued at a meeting held for that purpose, after a notice published six weeks and a copy mailed to each stockholder, to increase or diminish the capital stock or to effect any change in the management or constitution at which meeting stockholders may appear in person or by proxy.

If the indebtedness of the company ever exceed the capital stock the trustees are personally liable to the creditors for the excess.

Trustees must cause a book to be kept which shall be open to the inspection of stockholders and creditors or their representatives, showing in alphabetical order the names of the stockholders, their residences, the number of shares owned by each and when they become the owners thereof, and the amount of stock actually paid in, and creditors and their representatives are entitled to make extracts therefrom, under penalty for failure to so keep said book.

The owners of fifteen per cent. of the capital stock by a written request on the treasurer may demand and obtain a full statement of the company's affairs on twenty days' notice.

Corporations so organized have power:

1. To have succession in the corporate name for the period limited in the certificate.
2. To sue and be sued, complain and defend in any court of law or equity.
3. To make and use a common seal and alter the same at pleasure.
4. To hold, purchase and convey such real and personal estate as the purposes of the corporation may require.
5. To appoint such subordinate officers and agents as the business of the corporation shall require, and to allow them suitable compensation.
6. To make by laws not inconsistent with any existing laws for the management of its property and the regulation of its affairs for the trustee of its property.

Corporations so organized may exercise the right of eminent domain.

The trustees of such corporation have no power to sell, lease, mortgage or otherwise dispose of mining ground, quartz mills, smelters, concentrators or reduction works the property of the corporation, except by calling a meeting (in the manner indicated to increase or diminish the capital stock) and after submitting such matter to a vote of a majority of the stockholders at the meeting so called, and being authorized by a vote of at least three-fourths of all the shares of stock of the corporation, and which vote must be carried by at least two-thirds of all the shares of the corporation.

Corporations so formed may make their stock assessable or non-assessable by so designating in their certificate of incorporation in addition to the other facts required to be stated.

No assessment shall exceed five per cent. of the amount of capital stock named in the certificate of incorporation, and none levied while any portion of any previous assessment remains unpaid, except where the collection thereof is impracticable or has been restrained. All assessments must be incurred in by a majority of the board of trustees.

Every order levying an assessment must specify the amount and the time of payment and name a day within sixty days thereafter at which if assessment is not paid the stock will be deemed delinquent, and a notice of the same to be given to the delinquent stock, which shall not be less than fifteen nor more than sixty days after the day declaring the delinquency.

Notice of the making of said order and stating said facts must be published in a local paper for four weeks and a copy delivered to each stockholder.

After stock becomes delinquent, notice must be published (in statutory form) for ten days if in a daily paper and two weeks if in a weekly paper, describing each certificate delinquent and the amount due thereon, the time of publication being seven to ten days prior to the day of sale. The corporation then has jurisdiction to sell and give a complete title to the stock sold, but shall sell only sufficient to pay the assessment and costs of sale. The delinquent stock must be sold at public auction to the highest bidder for cash and the person offering to take the least number of shares and pay the assessment and costs will be deemed the highest bidder.

No one but the amount of assessment and costs the company then has the privilege of bidding it in for the assessment and costs and if then becomes treasury stock, subject to the same disposition as if never issued. The delinquent assessment and costs are thereby satisfied.

Corporation may become disincorporated by presenting a petition to the judge of the district court under the oath of the officers that it is authorized by a two-thirds vote of all the stockholders at a meeting called for that purpose, and the said court, after being satisfied that the necessary steps have been taken and the necessary votes to dissolve itself given, shall enter an order declaring it dissolved and the rights of franchise shall then cease and become void.

**FOREIGN CORPORATIONS.**—The constitution provides that no foreign corporations shall do business in the state without having one or more known places of business, and an authorized agent or agents in the same, upon whom process may be served, and no company or corporation formed under the laws of any

country, state or territory shall have or be allowed to exercise or enjoy within this state any greater rights or privileges than those possessed or enjoyed by corporations of the same or similar character created under the laws of the state.

Foreign corporations or joint-stock companies are permitted to do business by filing with the secretary of state and in the county clerk and recorder's office of the county wherein they intend to operate a sworn copy of their charter or certificate of incorporation, and a verified statement attested by a majority of the board of directors showing:

1. The name of the corporation, the location of its principal office or place of business without the state, and if it have any place of business or principal office within this state the location thereof.
  2. The amount of its capital stock.
  3. The amount of its capital stock actually paid in money.
  4. The amount of its capital stock paid in any other way and in what.
  5. The amount of the assets of the incorporation and of what the assets consist, with the actual cash value thereof.
  6. The liabilities of such incorporations, and if any of its indebtedness is secured and how, and upon what property.
- The said statement must also be verified by the oath of the president and secretary of such incorporation.

Such incorporation or joint-stock company must also file at the same time and in the same office a certificate under the seal of the corporation and the signature of the president, vice-president or other acting head, and its secretary if there be one, certifying that the said corporation has consented to be sued in the courts of the state upon all causes of action arising against it in this state, and in any service of process, may be made upon some person who is a citizen of this state, whose name and place of residence shall be designated in said certificate, and that process when so served upon such agent shall be taken, deemed and held to be as valid to all intents and purposes as if served upon the company in the state or territory under the laws of which it is organized.

The written consent of the person so designated to act as such agent shall also be filed in the same manner.

A penalty of \$30 per day is provided for failure to comply with this law, and all acts and contracts of its agents are declared to be void as to the corporation.

The courts hold that a foreign corporation can protect its claims by litigation notwithstanding.

Every such corporation must annually within twenty days from the 1st of September make a report which shall contain the same information as the original statement, and file the same in the same offices.

#### LIENS.

Every mechanic, builder, lumberman, artisan, workman, interior or other person, association, partnership or corporation who furnishes or contracts for any work and labor upon or furnishes any material, machinery or fixture for any building, erection, bridge, flume, canal, ditch, mining claim, quartz lode, city or town lot or lots, ranch, railroad, telegraph, telephone or electric light line, gas-pipe or water-pipe line or other improvements, upon complying with the provisions of the statute shall have for his work or labor done, or material, machinery or fixtures furnished, a lien thereon and therefor.

To comply with the provision of the statute, he must within forty-five days after the completion of the work file in the office of the county clerk and recorder of the county of the liens of the property a just and true account of the amount due or owing to him after allowing all credits, and containing a correct description of the property to be charged, verified by his affidavit. The said lien extends to all the interest the person for whom the material was furnished or work done has in the property upon which the improvements are made to the extent of one acre if only one acre is included in the property, and to the whole lot if within said quantity.

All liens filed within thirty days of the filing of the first lien shall be liens of the first class and share pro rata and be first satisfied on foreclosure.

All liens filed after said thirty days and within sixty days shall be liens of the second class and share pro rata after the first-class liens are satisfied.

All liens for material furnished and work and labor done shall have priority to and precede over any mortgage, mechanic's lien or other lien subsequent to the commencement of the work on any contract for the erection of such building, structure or other improvement.

Every person, including guardians of minors, married women and partnerships, company, association or corporation, not tenants or lessees, for whose use, benefit or enjoyment any building, structure or improvement, as heretofore mentioned, shall be constructed, repaired or altered, shall be deemed the owner or proprietor for the purpose of the lien provided for in this act.

Liens are foreclosed by suit in the district court, which must be commenced within one year from the filing of said lien.

An implied contract is a sufficient contract with the owner upon which to assess a lien.

Sub-contractors having a lien, but must notify the owner of the particular value of the materials at or previous to the time of furnishing same, although he may in any event recover a reasonable value and the lien is direct.

Work done and subject to a lien for material furnished as well as for labor.

A reasonable attorney's fee is recoverable as costs against defendants in foreclosure of liens for material or labor.

#### MINING.

Ordinance 1 to the state constitution provides that "the people inhabiting the proposed state of Montana do agree and declare



that they forever disclaim all right and title to the unappropriated public lands lying within the boundaries thereof, which includes all mineral lands, and that the same shall be and remain subject to the disposition of the United States, and that lands belonging to citizens of the United States residing within the state of Montana shall not be cut away at a higher rate than the lands belonging to the residents thereof.

State constitution, Article III, Section 25, provides that "aliens and denizens shall have the same right as citizens to acquire, purchase, possess, mine, lease, sell and inherit mines and mining property and milling, reduction, concentrating and other works and real property necessary for or connected with the business of mining and treating ores and minerals, provided that nothing herein contained shall be construed to enlarge upon the authority of the United States to provide for the sale or disposition of its mineral or other public lands."

Under Section 1657 of the general laws the possessory right to mining property (unpatented) and any right to possess, occupy or enjoy any portion of the public domain, as between every person, association, corporation or power, except the government of the United States, shall be respected in law and in equity in all the courts and tribunals of the state as a chattel real and possessing the character of real estate.

State constitution, Article XII, Section 3, provides that "all mines and mining claims, both placer and rock in place, containing or bearing gold, silver, copper, lead, coal or other valuable mineral deposits, after the price paid for the United States therefor, unless the surface ground, or some part thereof, of such mine or claim is used for other than mining purposes and has a separate and independent value for such other purposes, shall be taxed as surface ground or any part thereof used for other than mining purposes shall be taxed at its value for such other purposes as provided by law; and all machinery used in mining and all property and surface improvements upon or adjacent to independent of such mines or mining claims, and the annual net proceeds of all mines and mining claims, shall be taxed as provided by law," and the state legislation follows the constitution and makes the surface ground or any part thereof used for other than mining purposes and the improvements, etc., taxable as personal property. Mining property is not taxable except as above stated, until after final proof and payment have been made for patent.

Quartz lode locations can be made only after the discovery on a lead, lode or ledge of a vein or veinlet of quartz or ore with at least one well-defined wall. Such locations cannot exceed fifteen hundred feet along the lead or lode in length and three hundred feet on each side of the vein or veinlet. After the discovery of quartz lode or placer mine, discoverer must within twenty days make and file for record in the office of the county recorder of the county where such discovery is located, a declaratory statement in writing, under the laws of the United States, in which the mineral property is so located, and describing the same.

The annual representation is shown by making and filing with the county clerk and recorder an affidavit showing:

1. The name of the lode and where situated.
2. The number of days' work done and the character and value of the improvements placed thereon.
3. The date or dates of performing said labor and making said improvements.

4. At whose instance and request said work was done or improvements made.
5. The actual amount paid for said labor and improvements, and by whom paid, when the same was not done by the owner or owners of said quartz claim.

The affidavit so filed is made prima facie evidence of the facts therein stated.

**TUNNEL RIGHTS.**—Any person desiring to locate a tunnel claim for the purpose of discovery and mining shall record the same, specifying the place of location and the course thereof, with the names of the parties interested therein. A tunnel claimant has a right only to such veins or lodes as may be discovered in his tunnel within three thousand feet from the face of claim for fifteen hundred feet from the mouth of the tunnel. That the line of the tunnel is a line the width of the sides of the tunnel, and that third persons after the location of a tunnel have a right to locate veins or lodes or ledge which extends along the tunnel, all these locations become invalid if they are within three hundred feet from the side of the line of the tunnel and within fifteen hundred feet along the line of any locations that may be made of their veins by the tunnel claimant.

Any person who may work any tunnel is entitled to a right of way through any and all lodes and ledges or ledges which may be located in the course of said tunnel provided that all quartz, ore or mineral taken from said tunnel from leads, lodes or ledges belonging to parties other than the owners of said tunnel shall be deposited on the surface by said tunnel claimant on or adjacent to the original occupants or owners of said lead, lode or ledge.

That in order to hold said tunnel claims the said owner shall within a year from the date of pre-empting his claim run the distance of one hundred feet on said tunnel.

Any person who shall pre-empt any tunnel claim shall be entitled to the hundred feet on each side of the mouth of said tunnel for the purpose of a quartz or ore yard.

Under the incorporation laws of the state a corporation formed for the purpose of excavating a tunnel shall have and hold every hundred feet on each side of the mouth of all lodes discovered by them while excavating said tunnel, and through all lodes dis-

covered previous to the commencement of said tunnel they shall have the right of way.

**RIGHT OF WAY.**—The proprietors or owners of mining claims, whether patented under the laws of the United States or held under the local laws and customs of the state, have a right of way under the statute for ingress and egress for necessary purposes over and across the lands or mining claims (patented or otherwise) of others, whenever any mine or mining claim is so situated that it cannot be conveniently worked without a road therefor, or a ditch or a cut to convey the water therefrom, or without a flume to carry water and tailings therefrom, or without a shaft or a tunnel) thereon, upon the payment of such damages, as shall be assessed by a committee of five who are appointed by the state to assess the damages resulting from such right or privilege.

**MILL-SITES FOR MINING PURPOSES.**—Mill-sites are located under Section 2537 of the United States statutes and patented in accordance therewith.

**COURT DECISIONS.**—The following questions have been passed upon by the supreme court and are stare decisis in Montana.

That the rights of an adverse claimant are forfeited if he fails, within the time prescribed by the statute, either to file his adverse claim in the United States land-office or to institute suit in the proper court to decide the same.

That a declaratory statement to a mining claim should be sworn to or filed by the locator.

An affidavit to a notice of location which did not state or refer to the date of location was insufficient.

Valid possession of the surface of a lode claim carries the right to and constitutes a possession of veins, lodes or ledges whose tops appear are within such surface-lines.

In the language of miners a lode is a vein containing ore; veins are narrow plates of rock intersecting other rock and are the fillings of cracks and fissures. Placers are superficial deposits which occupy the beds of ancient rivers or valleys.

In the case of the crossing of veins the prior locator is entitled to all the ore within the space of intersection, but a subsequent locator has a right of way through the same.

That the rules and customs of any particular mining district which are reasonable constitute the American common law on mining for precious metals.

A failure to do the representation work on a quartz lode as required by the United States statutes operates as a forfeiture and subjects the claim to re-location, but this forfeiture may be avoided by a bona fide resumption of work before a re-location has been actually made.

A location must be distinctly marked upon the ground so that its boundaries can be readily traced.

Held that the representation under the act of congress of 1872 was a muniment of title.

That the first locators have no right by custom or otherwise to allow tailings to run free in a gulch and thereby render other claims valueless.

They may, however, work their ground with reasonable care, and injuries resulting to other locators would be damnum absque injuria.

A patent to a mining claim being based upon an adjudication of the land department of the United States as to patentee's right thereto, and such adjudication having the effect of a final judgment, the rule conclusive proof of discovery, marking boundaries and the performance of all the requirements necessary to constitute a valid location.

#### STONE QUARRIES.

Stone quarries are taken up under the laws relating to placer mines and patents obtained by a compliance therewith.

## NEBRASKA

Compiled by STEVENS, LOVE & COCHRAN, Attorneys at Law, Newman Block, Lincoln, Neb.

#### CORPORATIONS.

Any number of persons may incorporate for the transaction of any lawful business. Corporations have power to have succession by corporate name; to sue and be sued; to make and use a corporate seal and alter the same at pleasure; to hold personal estate and such real estate as may be necessary for the business of the corporation; to render the interest of the stockholders transferable; to appoint such officers and agents as the business shall require; to make by-laws not inconsistent with any existing law.

Articles of incorporation must be adopted and recorded in the office of the county clerk before commencing business, and if the corporation is organized for the purpose of constructing internal improvements, the articles shall be filed also with the secretary of state.

Within four months from the time of filing such articles in the clerk's office, notice of incorporation shall be published stating the corporate name, its principal place of business, name and business, amount of the capital stock, and the time and condition under which it is paid, the time of the commencement and the termination of business, the highest amount of indebtedness allowed, which in no case shall exceed two-thirds of capital stock, and by what officers the corporate affairs are to be managed.

Copy of the by-laws and names of officers appended thereto must be posted in some conspicuous place at places of business.

Any amendment to the articles of incorporation must be made with the same formalities as the original articles.

The statute requires annual notices to be published in any newspaper of general circulation in the county or counties in which the business is transacted, showing the amount of existing debts, which notice shall be signed by the president and a majority of the directors.

Upon a failure to comply substantially with the statutory provisions, all the stockholders of the corporation shall be jointly and severally liable for all the debts of the corporation then existing after the corporate property has been exhausted.

Stockholders are liable for the amount of their unpaid subscription, and stockholders in banks are liable for their unpaid subscription and an additional amount equal to their subscription.

Service of legal process may be had upon the president, chairman of the board of directors or trustees or other chief officers of a corporation, or, if its chief officer is not found in the county, its cashier, treasurer, secretary or managing agent, or, if none of the aforesaid can be found, by a copy left at the office or last usual place of business.

Actions may be brought against railroad companies in any county through which their lines run.

Actions may be brought against an insurance company in any county in which there is an agency thereof. Service may be upon the chief officer of such agency.

Foreign corporations may be served by publication, or by delivering copy of process to managing agent. The property of foreign corporations is liable to seizure by attachment without bond.

Any foreign corporation may become a body corporate of this state by filing with the secretary of state a copy of its charter or articles of association and a certified copy of the resolution adopted by its board of directors accepting the provisions of the statutes of the state.

Conveyances of real estate are by deed sealed with corporate seal, signed by the president or presiding officer of the board of directors of the corporation.

#### LIENS.

Liens for labor, material, machinery and fixtures are allowed upon any house, mill, manufacture, building or appurtenances and the lot of land upon which the same shall stand.

The lien is secured by filing with the register of deeds a sworn statement of the items of the labor and material furnished, with a description of the land.

Contractors must file within four months, and sub-contractors within sixty days, from the date of the last item.

If building is left incomplete by the owner, laborers and material-men may proceed with the building as if completed.

Where the owner of real estate enters into a contract of sale in which it is agreed as part of the consideration that the purchaser shall erect certain buildings, liens for labor and materials upon such buildings are a lien prior to vendor's lien for purchase price.

Lien is assignable after filed.

Lien is enforced by action in equity in the same manner as foreclosure of mortgages; foreclosure must be commenced within two years from the filing of the lien.

#### MINING.

The statutes provide that when a vein of coal shall be discovered not less than twenty-six inches in depth, of sufficient capacity to pay to mine, and within paying distance from the surface, the state of Nebraska shall pay a reward of \$4,000 to the owner or owners thereof. A like reward of \$2,000 is provided for the discovery of a vein of good iron ore one foot thick.

## NEVADA

Compiled by GEO. S. SAWYER, Attorney at Law, Pioche, Nev.

#### CORPORATIONS.

Corporations may be formed for any purpose, except to issue notes to circulate as money. Three or more persons may form a corporation by signing and acknowledging a certificate of incorporation, and having the same recorded with the clerk of the county in which the principal place of business is to be located, and also filing a copy thereof, certified under the hand of such clerk and the seal of the court of such county, with the secretary of state. The certificate must contain the name of the corporation, its object, the amount of the capital stock and number of shares, its term of existence (not exceeding fifty years), the names of the officers and directors, and the name of the person who shall manage its affairs for the first six months, and the name of its principal place of business, referring to town and county.

The corporate powers shall be exercised by a board of trustees, not less than three in number, who shall be stockholders, and who shall be elected annually by the stockholders.

The general powers and duties of stockholders and trustees are such as are incident to all corporations.

The corporation may purchase delinquent stock, which shall be under the control of the board of stockholders, and a majority of the remaining stock shall be held to be a majority of all stock in all subsequent transactions.

On petition of stockholders holding a majority of stock, the district judge of the district shall call a meeting of stockholders for the purpose of removing any or all of the officers of such corporation, and at such meeting any officer may be removed and a new one elected.

Shares are personal estate and are transferable by mortgage and delivery, but such transfer is not valid, except as to the parties thereto, until entered on the books of the corporation.

No dividends can be declared except upon net profits.

The debts must not exceed the amount of capital stock paid in, and the trustees who allow any excess become personally liable. A corporation dissolved by a receiver or a trustee, its proceedings before the district judge of the district where its office is located.

#### LIENS.

Every person who performs labor or furnishes materials of the value of \$5 has a lien upon the property upon which he has performed the work or for which he has furnished the material, together with enough land around or adjacent to the property. This applies to work, labor, materials furnished, etc., in the carrying on of any mill, foundry, manufactory, reduction-works, etc. Any person in control of the work shall be deemed the agent of the owner of the property, and the property will be held subject to the lien unless the owner shall, within three days after knowledge of the work or material furnished, post a written notice on the property that he and the property are not responsible. Liens are preferred to all other incumbrances subsequent to the commencement of the work, and to all prior incumbrances of which the lien-holder had no notice, actual or constructive.

Original contractors must file their claims of lien with the county recorder within sixty days from the completion of the work, and all other persons within thirty days, and suits upon such claims, to enforce the liens, must be commenced in the proper court within six months from the date of such filing. Claims of lien are assignable. Liens are claimed as preferred as follows: First, all persons other than the original and sub-contractors; second, the sub-contractors; third, the contractors.

#### MINING.

Mining claims are located and held by virtue of the laws of the United States and local regulations thereto authorized. There is no state regulation in this respect, except (1) in case of proceedings against delinquent co-owners under the United States statutes. The moving party must, within thirty days after the time the title vests in him, have recorded in the office of the county recorder a copy of the notice given, with an affidavit of service, if personal, or an affidavit of publication, by the publisher of his work, when published, together with his own affidavit that the parties proceeded against have not paid their share of expenditure, or performed their share of labor. Such record or a copy thereof is prima facie evidence of the facts therein stated.

(2) An affidavit of annual labor and expenditure made before the mining recorder of the district and recorded with him is prima facie evidence of the facts stated therein.

The right of eminent domain may be exercised in favor of mining, including the selling or conveying of land or ores.

Three or more persons, owning a majority interest in any mining claim, may form themselves into an association or corporation for the purpose of working the same, and may sue anyone owning with them, but not a member of such association or incorporation, for his pro rata share of the expense of working the same, without previous notice or demand.

Mining corporations may be compelled to allow stockholders to visit and examine the mines. Mining corporations may consolidate in any district, and the district recorder shall, by the county recorder shall be ex officio mining recorder. Mining recorders shall transmit copies of their records to the county recorder.

## NEW HAMPSHIRE

Compiled by E. S. & H. A. CUTLER, Attorneys at Law, Nashua, New Hampshire.

#### CORPORATIONS.

Under the general corporation laws a company can be formed to carry on any lawful business except banking, railroad and life insurance business. Such a corporation can operate mines in former states. Every corporation organized under the laws of this state which does not carry on its business in New Hampshire shall pay a charter fee on the largest amount of the authorized capital, as follows: One per cent. on the first \$100,000, one-half of one per cent. on all above that amount and under \$1,000,000, and three-eighths of one per cent. on all its capital above \$1,000,000. This is a prerequisite to recognition as a corporation.

A corporation can be specially chartered by the legislature, or organized by five persons under a certificate of incorporation, in any business, place of business and amount of capital, which articles shall be recorded in the secretary of state's office and in the town clerk's office where the corporation shall have its principal place of business. The clerk shall be a resident of the state. None of the shares of the capital stock can be disposed of except for cash and at par.

LIABILITY. Every stockholder shall be liable for all the debts of the corporation, until the whole amount of the capital shall have been paid, and a sworn receipt of such amount of stock held in the office of the town clerk where the corporation is located.

#### LIENS.

Aside from the common-law liens and those of taxes and mortgages, the statutes give a lien to boarding-house keepers on the effects of their guests, to the keepers of horses, cattle, etc., and

to laborers on vessels and buildings. The last two liens extend for a period of ninety days, and may be secured by attachment. A lien-holder on personal property may sell the same at public auction, on fourteen days' notice by posting and personal service. The proceeds obtainable, and a return of such sale shall be made to the clerk of the town.

MILLDAMS.

Repairs to dams and thunes may be made by joint owners in proportion to the several interests, upon petition to the selectmen of the towns where the dam is located. The petition must state material facts, be served personally, or by publication in case of absent owners, fourteen days before the day of hearing. The selectmen shall determine the necessity for repairs by examining the premises and by testimony. When the premises are situated in two or more towns the selectmen of all the towns shall have jurisdiction. A dam may be maintained upon a non-navigable stream which flows the owner's land and all lands which have jurisdiction over allow to be overhauled. The supreme court has jurisdiction over all questions of damages arising therefrom. A committee of three disinterested persons are appointed who determine the question of damages and all other questions at issue between the parties, and upon return to the court judgment may be had as in other proceedings. The court may subsequently inquire into the matter at issue if the report be set aside for any irregularity, and just assess damages, to which fifty per cent. must be added, and judgment issues accordingly. A jury trial may be had upon the election of either party.

MINING.

There are no special laws in regard to mining in this state.

NEW JERSEY

Compiled by LEWTHROP & OLIPHANT, Attorneys at Law, Trenton, N. J.

CORPORATIONS.

FORMATION. Corporations are created in this state under general laws by making, recording and filing certificates to that effect in the manner prescribed by the statute. Corporations for mining and quarrying purposes are formed under the statute of 1875 and the various supplements thereto. All corporations formed under this act must consist of at least three persons, one of whom must be a resident of the state of New Jersey. A corporation cannot be organized for a period exceeding fifty years, but its charter is renewable upon filing a fresh certificate for that purpose. All corporations are formed subject to legislative control. The laws regulate the certificate of organization to state the name and object of the corporation; the places where it will do business within and without the state; and the location of its principal place of business or office within the state; the total amount of capital stock, which cannot be less than \$2,000 per value; the amount with which it shall commence business, which cannot be less than \$1,000, and the number of shares into which the same is divided, and the par value of each share. It must also state the names and residences of the principal stockholders, and the number of shares held by each. It must also state the dates of the beginning and ending of the corporation. This certificate is signed by all the corporators, and sealed and acknowledged by the secretary of the corporation, and recorded in the office of the clerk of the county in this state, and after such recording, the instrument must be filed in the office of the secretary of state. This act, the corporation begins its existence, and may be organized at once.

POWERS. A corporation thus formed has all substantial intents the same powers as an individual to make contracts within the reasonable scope of the objects specified in its certificate of organization, and to execute and enforce them by suit or otherwise. It may own or lease real estate, and may carry on any legitimate business within the scope of its certificate, excepting banking, insurance, and the operation of a canal or of a railroad as a common carrier. It has no power to condemn lands. Its power to transact business is vested in a board of directors, one of whom must reside in New Jersey. The company may appoint such officers as it desires, and it is the duty of the company to file annually with the secretary of state within thirty days after the usual time of the annual election of its officers, a complete list of their names and the names of the directors of the company, with the date of their election or appointment, the complete list of the names of the directors and officers of the company, and the residence of each of them within the state. The principal place of the annual meeting of stockholders to be held at the same residence as that of the office of the company to be kept requires the stock and transfer books of the corporation may be transported within or without the state at the pleasure of the corporation, and it is capable of making and executing contracts at any point, whether mentioned in the certificate of organization or not, and it is capable of making and executing contracts as one of its places of business or the character of their business, the location of their principal office; to decrease or increase their capital, and to alter the laws of the United States. These constitutional changes may be effected by the consent of two-thirds in interest of the stockholders, evidenced by certificates in writing signed by the stockholders representing two-thirds of the

capital stock, duly proved by officers of the corporation and filed in the office of the secretary of state.

CAPITAL STOCK AND PERSONAL LIABILITY OF STOCKHOLDERS AND DIRECTORS. Stock may be issued either for money or for property purchased by the corporation. If stock is issued for property purchased, it must bear stamped upon its face the words "Issued for Property Purchased," and it always retains its original character through all transfers, and is unassessable in property purchased, unless it is considered as cash or cash paid for property of which it is issued. If stock issued for cash or property purchased be not full paid, the holder is liable to the creditors of the corporation for any amount remaining unpaid thereon which may be required to pay the debts of the concern. Stockholders holding full-paid stock are not liable for the debts of the corporation except in the following cases: 1. Where the capital of a corporation has been reduced, and a portion thereof withdrawn and repaid to the stockholders, they may be compelled to refund any proportion of the money paid to them in proportion to satisfy the debts of the company the and unpaid at the time the capital was withdrawn. When capital is thus withdrawn, it is capital with the law. A certificate of the proceedings be made and filed in the office of the clerk of the county in which the principal office of the company is located, within thirty days after the adoption of the resolution, and that published for three weeks in a newspaper circulating in that county; and in default thereof, in addition to the liability of the stockholders receiving the cash and drawn capital, the directors of the company become jointly and severally liable for all the debts of the company due and unpaid at the expiration of said thirty days, and before publication and the recording of the certificate; and the directors are also liable for all the debts of the company due and unpaid at the expiration of the last installment due upon the capital stock thereof, and to the treasurer of every corporation after the payment of the last installment due upon the capital stock thereof, and to the secretary and treasurer, and the directors are required to make a certificate stating the amount of the stock so fixed and paid in cash, which certificate must be sworn to and affirmed by the president, secretary and treasurer, and a majority of the directors, and must within thirty days be recorded in the county clerk's office. If the officers neglect or refuse to obey this requirement within thirty days after a written request to do so made by a creditor or stockholder of the company, they become jointly and severally liable for all debts of the company contracted before such certificate shall be recorded. 2. The directors of a corporation are strictly prohibited from making dividends except from the profits of the corporation, and from paying to the stockholders, or any of them, any part of the capital stock of the corporation, except as provided in the statute. And in case of a violation of this provision, the directors are jointly and severally liable, at any time within six years after such act, to the corporation, and to the creditors thereof, in the amount of the capital stock of the corporation, which has been so withdrawn, paid out or reduced, or capital stock which has been so withdrawn, paid out or reduced, with legal interest on the same from the date of the act in violation of the statute, until the time such liability accrued. A director can escape such liability only by causing his dissent to the act to be entered at large on the minutes of the corporation, or by causing a true copy of his dissent as entered to be published within ten days after it was entered upon the minutes, and by causing a true copy of his dissent as entered to be published within ten days after it was entered upon the minutes. If the company has its principal office in the county in this state where the company has its principal office or place of business; and if none be published in such county, then the newspaper printed in an adjoining county, and circulated in the neighborhood of such office or place of business. This provision is not intended to prevent the making of stock dividends for earnings of the company absorbed in improvements or extensions of its plant.

A corporation may issue preferred stock to an amount or proportion not exceeding two-thirds of all the stock issued. Such preferred stock may have a rate of interest not exceeding five per cent. per annum before the payment of a dividend upon the common stock.

FEES AND TAXES. Upon filing a certificate of incorporation with the secretary of state there is a charge of \$25 on all corporations with the secretary of state not exceeding \$100,000, and upon all corporations with the secretary of state in excess of \$100,000 the sum of 25 cents per \$1,000 of capital stock. Upon filing an amended certificate of incorporation there is a charge of \$25 and on filing a certificate of increase of capital there is a fee of one cent per share in excess up to \$100,000, and a fee of 25 cents upon each \$1,000 above \$100,000.

The state levies a franchise tax on all mining corporations of one-tenth of one per cent. of the entire amount of capital stock issued and outstanding, or on the sum of \$3,000,000, whichever amount of capital issued and outstanding in excess of \$3,000,000, a tax thereon of \$4,000,000 and not exceeding \$5,000,000, a tax thereon of \$1,000,000 one per cent, and a further tax thereon on all amounts of capital stock issued and outstanding in excess of \$5,000,000. This tax is not levied upon any mining corporation at least fifty per cent. of its mining carried on stock issued and outstanding is invested in mining. If the mining corporation carrying on within this state, and if the mining corporation carrying on stock issued and outstanding invested in business, a tax thereon of one per cent. and if the mining corporation carrying on stock issued and outstanding in mining without the state, excepting if its capital were not invested in mining, a tax thereon of one per cent. and a deduction from the amount of its capital stock issued and outstanding of the assessed value of its real estate issued and outstanding of the assessed value of its real estate. Personal estate so used in mining within this state, the state board of assessors is required to make arrangements enabling them to fix the proper amount of tax. Blanks for such reports are furnished by the board.

LIENS.

Every building and the lot or tract of ground on which it stands is liable to the payment of any debt due any person for labor done or materials furnished for the construction of such building; and such debt is a lien upon the land and building. Debts contracted for fixed machinery, gearing or other fixtures for manufacturing purposes, and for work or materials furnished in repairing, altering or adding to such buildings, machinery and fixtures, constitute liens thereon. A deed of land erecting a building on it, the building, and not the land, is liable to the lien, unless the owner of the land consent in writing to the erection of such building. Buildings erected on lands of a married woman, or the land as well as the building, if the woman files a building in the county clerk's office her dissent to the erection of the building. If a building be erected or repaired without a written contract, it is liable to material-men and laborers as tenors alike. If it be erected or repaired under a contract in writing, and the contract or copy thereof be filed in the county clerk's office, the building and lands are liable to the lien of the contractor alone; provided, that on the payment by the owner of the money due on the contract, the contractor delivers to the owner a release of liens executed by all material-men, workmen and laborers who have furnished material for and have worked upon the building, releasing the building and lands from their claims. Such release to be binding must contain an affidavit by the contractor, stating that no person not named in the release has any lien upon the building or lands for work done or materials furnished. Payment made to the contractor upon his tender of such a release, and without actual notice of outstanding claims, clears the buildings and lands of all liens under the statute. Where several lien claims exist against a building, they are payable concurrently and pro rata. A mechanic's lien takes priority upon the building over a prior mortgage on the land. If a purchase-money mortgage be taken on the land, and the contractor intended to be advanced upon a building to be erected on the land by the purchaser, a lien acquired for labor or materials furnished for such building takes precedence over the mortgage against both land and building. Except to the extent of the true price of the land as secured by the mortgage. To enforce the lien given by the statute, a claim in writing must be filed in the county clerk's office within a year from the time when the labor or materials were furnished; and a summons must be issued thereon within the year, and the suit duly prosecuted, or the lien will lapse.

MINING.

INSPECTION.—The state commissioner of mines is empowered to visit and inspect all mines in the state and to report their condition to the governor of the state annually, with such recommendations as the commissioner shall deem advisable. It is his duty to see that all proper safeguards for the protection of the lives of the employes in the mine are provided, and if such protections be neglected by the proprietor of the mines, the commissioner is empowered to give the owner or lessee notice in writing stating such neglect, and such neglect, if not remedied, will be immediately remedied the owner or lessee becomes criminally liable in case of death or accident to the employe through such deficiency of protection. Upon complaint in writing made by any employe in a mine, that such mine is dangerous to the lives of those employed therein, the commissioner is required to examine the mine complained of without delay; and if he find such complaint be just, he is required to notify the owner or lessee in writing to the fact, and make in his report a note of such violation, and until he shall have issued his certificate that such danger has been remedied. Any owner or lessee of a mine refusing to comply with the demands of the last-mentioned notice forfeits the sum of \$1,000 as a penalty therefor.

NEW MEXICO.

Compiled by S. M. ASHENFELTER, Attorney at Law, Deming, N. Mex.

CORPORATIONS.

Corporations for mining, manufacturing or other industrial pursuits, or for making and furnishing abstracts of title to real estate, or for insuring titles, or the construction or operation of railroads, wagon roads, irrigation ditches and the colonization and improvement of lands in connection therewith, or for colleges, seminaries, churches, libraries, or any benevolent, charitable or scientific associations, may be formed, by filing in the office of the territorial secretary a statement in writing, signed and acknowledged by three or more persons, setting forth the full names of such persons, the names of the promoters, the name of the company, the capital stock and number of shares, time of existence (not to exceed fifty years), names of directors who shall manage its concerns for the first three months, and the name of town and county in which the principal office of the company is located. A copy of this certificate, duly certified, must be filed with probate clerk of the county named. The statute confers all the usual powers. Directors must be stockholders, a majority of them citizens of the United States and one-third of them residents of New Mexico. Elected annually, upon such notice and in such place as provided by the by-laws, but must be by ballot, proxies being allowed. If election be not held on day designated, it may be held on subsequent day, and directors act until election of successors.

Directors control the calling in of amounts subscribed for stock. No dividends permitted except from surplus profits. Directors personally liable if debts exceed capital stock. Trust-

tees and persons holding pledged stock not liable for assessment. Notices of assessment and of stockholders' meetings must be published in a newspaper four weeks.

Corporations formed in contiguous states to construct telegraph lines, railroads or wagon roads may extend into New Mexico, corporate franchises are granted on full rights in New Mexico, original certificate with the territorial secretary and the probate clerk of the county in which they are to operate. Corporate franchise of name is exclusive; also of immediate property, except as to mining, mechanical or manufacturing operations.

All foreign corporations may obtain full rights in New Mexico, by filing with the territorial secretary and with the recorder of the county in which they propose to do business a copy of the charter, or, if incorporated under a general law, a copy of its articles and the general incorporation law authorizing same, and a certificate, signed by the president and secretary, duly acknowledged, designating the principal place of business and an authorized agent there residing, upon whom service of process may be had. There is a special act for incorporation of railroads, granting exemptions and privileges. Boards of county commissioners may grant franchises for the incorporation of toll wagon roads, bridges and ferries. There is also a special law for the incorporation of insurance companies, which places particular restrictions upon the management thereof.

Corporations must organize and commence transaction of business within two years from date of filing certificate, or their corporate powers cease.

LIENS.

Every person furnishing materials to be used in the construction, alteration or repair of any mining claim, building, wharf, bridge, canal, tunnel, flume, or other structure, or on any railroad or aqueduct or any other structure has a lien upon the same for the materials furnished, whether so furnished at the instance of the owner of the improvement or his agent; and every contractor, sub-contractor, architect, builder or other person having charges in whole or in part to be held to be the agent of the owner. All land necessary to proper use and enjoyment of the improvement is subject to the lien, and the lien is preferred to any mortgage or other incumbrance attaching subsequent to the time when materials were commenced to be furnished, or which was unrecorded at such time, unless the material-man had actual notice.

An original contractor within ninety days, and all others within sixty days after completion of the improvement, must file with the county recorder of the county in which the property or a part thereof is situate a statement of demands, with the name of the person to whom he furnished the materials, and a statement of the terms, time, given and condition of his contract, and also a description of the property to be charged with the lien. This statement must be verified by oath of material-man or some other person. If against two or more buildings or improvements, the claimant must designate amount due upon each. All claims of lien fall to the proceedings to enforce the same be commenced in proper court within one year after statement filed, or, if a credit be given, six months after expiration of such credit, but no agreement to give credit shall continue a lien in force more than two years.

The rank of liens is: First, all other persons than the original contractors and sub-contractors; second, the sub-contractors; third, the original contractors. Any number of lien claimants may join in the same action. Materials furnished are not subject to outside attachment, execution or other process. The taking of collateral security defeats a right of lien.

MINING.

Location must be distinctly marked on the ground, so that its boundaries may be readily traced. Written notice of location must be posted at some conspicuous place on the claim, and must contain a description of the location, and a statement of its extent, or permanent monument. A copy of this notice must be recorded in county clerk's office within three months after date of location.

The value of a day's labor is fixed at \$4, or eight hours of labor actually performed in one day.

Locators must sink a discovery shaft, ten feet deep from lowest part of rim at surface, and expose mineral in place, before filing location notice, and within ninety days from date of location. Surface boundaries must be fixed by reference to substantial posts or monuments at each corner, all marked to indicate direction.

Where mine is under lien, the lien-holder has right of entry to do the annual assessment work, if owner neglects same, and a penalty attaches for any obstruction of that right. The cost of such assessment work is made up by the lien-holder. Material-man's original lien as to tenor and effect. A stockholder in a mining corporation has right of entry to mine, and inspection of work, under penalty to officer or agent refusing to allow such entry. To make such assessment work is made up an additional lien, following original lien as to tenor and effect. A stockholder in a mining corporation has right of eminent domain for tramway or railway to transport ore to reduction works.

One purchaser and reduction must keep a detailed record of all ore received, with name of mine, person, etc. Under regulations, any party from whom ore has been stolen may have access to these books. Larceny of ore and knowing purchase thereof are made felonies.

False and malicious statement as to title, or knowingly making false claim or setting up a false lien, with a view to defeating sale of mining property, are felonies. It is a misdemeanor to tear down or change monuments, or remove or alter notices. The recorder of the county may, on application of the owner, make a map of all workings, on a scale of one hundred feet to the inch, which shall be kept posted up at the office and the mine, open to public inspection.

Two shafts, slopes or outlets, separated by natural strata one hundred and fifty feet in breadth, with distinct means of ingress and egress, always available to employes, are required in each mine.

Ventilation must be adequate, not less than fifty-five cubic feet per second of pure air for every fifty men, circulated through the face of every working place, so that the miners shall be free from danger to the health of the employes, and every mine must have a competent inside overseer, whose special duty it is to keep watch over the ventilation, pumps, tanks and timbering, superintending signaling, and, with necessary assistance, see that such mine generally is rendered secure. It is his special duty to see that the hoisting machinery is kept in repair and ready for constant use.

The word "owner" applies to lessees. The overseer is liable to criminal prosecution for failure to observe the law, and, in case of death of any person through such neglect, is to be deemed guilty of manslaughter. Through boiler inspection is required once in three months. The act does not apply to the opening of new coal mines.

Suitable scales must be provided at each coal mine, where miners are paid by weight, with weights sworn to accuracy and correctness of account. A copy of the oath is required to be conspicuously posted at place of weighing. Record of each mine is to be separate and open to his inspection and the inspection of all interested in the output. Miners may furnish a check-weighman with full right of access and examination, who must also make oath, to be conspicuously posted. Any person guilty of incorrect weighing or recording, or being accessory thereto, is criminally liable. Any person, owner or agent, failing to comply with any of the provisions of the act regulating weighing, is liable to criminal prosecution.

Convicts may not be employed in New Mexico coal mines.

## NEW YORK

Compiled by HASTINGS & GLEASON, Attorneys at Law, 265 Broadway, New York.

### CORPORATIONS.

Corporations may be formed in the state of New York for the purpose of conducting any lawful business. In 1891 various special corporation laws were repealed and a general act passed providing that five or more persons, a majority of whom shall be citizens and residents of the state, may become a corporation for the purpose of carrying on any lawful business, by making, signing, acknowledging and filing a certificate which shall contain:

1. The name of the proposed corporation.
2. The object for which it is to be formed, including the nature and locality of its business.
3. The amount and description of the capital stock.
4. The number of shares of which the capital stock shall consist, each of which shall not be less than five (\$5) nor more than one hundred dollars.
5. The location of its principal business office.
6. Its duration, which shall not exceed fifty years.
7. The number of its directors, not less than five, nor more than thirteen, who shall each be a stockholder, having at least five shares of stock.
8. The names and postoffice addresses of the directors for the first year.
9. The postoffice addresses of the subscribers and a statement of the number of shares of stock which each agrees to take in the corporation, the aggregate of which subscriptions shall not be less than one-tenth of the capital stock, and ten per cent. of which must be paid in cash to the directors named in the certificate. The shares which are not so paid or annexed thereto, as a part thereof, the affidavit of at least three of the directors, that the requisite amount of stock has been subscribed, and the prescribed percentage thereof paid in cash to the directors.

Every certificate of incorporation shall be filed in the office of the secretary of state and of the clerk of the county where the principal place of business of the corporation is, or is to be located. All taxes required by law to be paid before incorporation and the fees for filing and recording such certificate must be made before filing, and no corporation shall exercise any corporate powers or privileges until such taxes and fees have been paid.

The tax here specified is one-eighth of one per cent. upon the capital stock of the company to be incorporated, and the recording fees in addition to this amount to about \$15.

The amount of capital stock may be increased or decreased, and the principal place of business of the corporation may be changed. No corporation shall engage in the transaction or managing of the business after it is incorporated, until one-half of its capital stock has been subscribed, and ten per cent. thereof shall have been paid in cash, and until the same has been adopted by-laws of the corporation and shall have been filed in the office where its certificates of incorporation were filed a further certificate, executed and acknowledged by the president and treasurer of the board of directors, to the effect that one-half of the capital stock of the corporation has been in good faith subscribed and ten per cent. thereof actually paid in cash, and that the by-laws of the corporation have been adopted, and a copy of the subscription list to the stock of the corporation and a copy of the by-laws shall be annexed to such certificate, and the same shall be verified by the oath of the president and treasurer to the effect that the statements contained in it are true.

The by-laws of the corporation shall be adopted at a meeting of stockholders, who have subscribed in the aggregate at least one-half of the capital stock, and paid in ten per cent. of such subscription in cash. This meeting shall be called by the directors named in the certificate, by serving, at least five days before the meeting, upon every stockholder personally, or by depositing in the postoffice a copy addressed to him at his last known place of residence, postage paid, to a written notice stating the time, place and object of the meeting.

The by-laws are required to provide for the following matters:

1. The term of the office of the directors, which shall not exceed three years.
2. The manner of filling vacancies among directors and officers.
3. The time and place of the annual meeting.
4. The officers of the corporation, always including a president and stockholders.
5. The number of stockholders who shall attend, either in person or by proxy, in order to constitute a quorum.
6. The officers of the corporation, always including a president and secretary, and a treasurer, the manner of their election, by and among the directors, and their powers and duties.
7. The manner of electing or appointing inspectors of election, and the manner of amending by-laws.

No amendment of the by-laws of any such corporation shall take effect until a copy thereof, verified by the president and secretary, shall have been filed in the offices where the original certificates of incorporation were filed.

Liability of stockholders.—Every stockholder shall be paid in, one-half within a year, and the other half within two years from its incorporation, or the corporation shall be dissolved. The directors, within thirty days after the payment of the last installment of capital stock are required to make a certificate of the capital stock so paid in, which shall be signed and sworn to by a majority of the directors, and filed in the offices where its certificates of incorporation are filed.

LIABILITY OF STOCKHOLDERS.—Corporations may be formed as full liability companies, in which case the stockholders are liable to its creditors for all the debts and liabilities of the corporation. In other corporations the stockholders are only liable for the debts of the company until the stock is full paid and the certificate has been filed. This liability is equal to the amount of stock held.

Corporations are required within twenty days after the 1st of January in each and every year to make a report which shall contain a statement of the amount of capital portion actually paid, the amount and general condition of its existing assets and debts, and of its receipts and expenditures during the year, the names of its then stockholders, and the dividends, if any, declared since its last annual report shall be received by the president and a majority of its directors, and verified by the oath of the president and treasurer, and filed in the office of the secretary of state, and in the office of the county clerk of the county where its principal business is conducted.

If such report is not so made and so filed, all the directors of the corporation shall jointly and severally be personally liable for all the debts of the corporation then existing and all contracted before such report shall be made.

FOREIGN CORPORATIONS.—Foreign corporations doing business in the state of New York may acquire such real estate in the state as may be necessary for its corporate purposes in the transaction of its business within the state, and convey the same by deed or otherwise, in the same manner as a domestic corporation.

Foreign corporations may also make any contracts in the state the same as a domestic corporation.

The courts, however, have no jurisdiction in actions brought against foreign corporations, unless the plaintiff is a resident of New York, or the contract or cause of action arose in the state, or is brought to affect property situated in the state.

### LIENS.

Any person who shall hereafter perform any labor in or about the sinking, drilling or completing of any oil well, or any well sunk or drilled for oil or other liquid or gaseous substance in the state of New York, or in sinking or drilling any water well, sunk or drilled for the purpose of drilling or operating any such oil well or other well as aforesaid, or who shall erect, build or furnish any tank or other receptacle for oil, gas or water, which shall be built, erected or furnished for any of the purposes aforesaid, or who shall perform any labor or furnish any materials in or for the building or erecting of such tank or other such receptacle as aforesaid, or who shall furnish any material or any of the purposes aforesaid, including tubing, casing, suck- rods, packers or other appurtenances or appliances to any such well as aforesaid, with the consent of the owner, being such owner, shall hereafter have a lien for the value of such labor and materials upon such tank or other receptacle as aforesaid, and upon the contents of such tank or other receptacle, or the lot, premises, parcel or farm of land upon which the same shall be situated, to the extent of the right, title and interest of the owner of the property, whether owner in fee or of a less estate, or whether lessee for a term of years thereafter, or vendee in possession under a contract existing at the time of the filing of said notice.

The notice must be filed within sixty days of the completion of such labor or the final furnishing of such materials, and specify the nature of the claim, the amount of the same, and the lien is made, the owner of the land or the party in interest. Whenever the labor is performed by a contractor who shall have made a contract with the owner of the property, any money

remaining in the hands of the owner upon filing the notice with the owner is subject to a lien filed.

Where the claim is made against the contractor, notice must be served upon the contractor, the claimant who does not relieve himself of the liability by making payments to the contractor after the service of such notice.

Every lien shall continue to the expiration of six months of the time of filing notice, unless action is commenced within that time to foreclose thereon. The action shall continue until judgment shall have been rendered, and for one year thereafter, pending an appeal taken, if any.

#### MILLDAMS.

In all cases of application to the legislature for the passage of laws authorizing the constructions of dams, in or across the streams and waters of this state which are by law public highways, the following notice is to be given:

The notice shall be given for at least six successive weeks immediately before such application, or before the first day of the session at which the same is to be made, in a newspaper printed in the county, or in each of the counties where the objects of such petition are intended to be carried into effect.

Private waterways can be constructed on land owned by person erecting dam, but such constructing must not interfere with the rights of property of other persons on the stream above or below dam.

#### MINING.

The statute provides that the following lands are and shall be the property of the people of the state, in their right of sovereignty:

1. All mines of gold and silver discovered within the state.
2. All mines of other metals discovered, or hereafter to be discovered, upon any lands owned by persons not being citizens of the United States.
3. All mines of other metals discovered, or hereafter to be discovered, upon lands owned by a citizen of the United States, the ore of which, upon the average, shall contain less than two equal third parts in value of copper, tin, iron and lead, or any of those metals.

All mines and all minerals and fossils discovered, or hereafter to be discovered, upon any lands belonging to the people of this state, are, and shall be, the property of the people, subject to the provisions hereinafter made to encourage the discovery thereof.

All mines of whatever description, other than mines of gold and silver, discovered or hereafter to be discovered, upon any lands owned by a citizen of any of the United States, the ore of which, upon the average, shall contain two equal third parts or more in value of copper, tin, iron and lead, or any of those metals, shall belong to the owner of such land.

Every person who shall make a discovery of any mine of gold or silver within this state, as locator, discoverer, administrator or assigns of such person, shall be exempted from paying to the people of this state any part of the ore, produce or profit of such mine, for the term of twenty-one years, to be computed from the time of giving notice of such discovery, in the manner hereinafter directed.

No person discovering a mine of gold or silver within this state shall work the same, until he give notice thereof, by information in writing, to the secretary of this state, describing particularly therein the nature and situation of the mine. Such notice shall be registered in a book to be kept by the secretary for that purpose.

In all cases in which a person or persons shall have discovered a mine or mines, and become entitled to work the same, such person or persons shall form a corporation; if the consent in writing to enter upon and break up the lands of any person in or upon whose lands said mine or mines are found shall be refused or cannot be obtained by agreement, or by reason of the infancy or the absence of such person from the state, or other legal disability of the owner of such lands, the said corporation so formed may enter upon or break up the lands of such person for the purpose of working such mine or mines in the manner herein provided; and the right and easement so to do shall be deemed granted for public use, and for the public purpose of obtaining minerals reserved to the state; and the said right and easement are hereby granted to the corporation so formed, on the condition that the commissioner of the land office a full description of the location of such lands and obtaining a grant thereof from said commissioners, who are authorized to make such grant and file the terms thereof.

There is no provision as to what the size of the claim shall be.

The company entitled to work the mines are required to file a petition in the supreme court, setting forth the facts on which they claim such rights and the reasons which prevent them from doing in case upon such lands. And upon such petition the court may appoint three disinterested persons as commissioners to examine into the matter, ascertain and fix the damages aforesaid, and report to the court. Notice of the filing of such petition shall be published in the newspapers printed in the county or in each of the counties where the mine or mines are situated, and in the state paper, and a copy of such notice shall be served personally upon the owners of the land, or, if they are infants, upon their guardians, and, if lunatics, or charged with legal disability, either by such owners or their attorneys, or their property. And the publication of such notice in the state paper shall be deemed a sufficient notice to such owners as are residents in other states or in other countries, or are temporarily absent from the state, when it is proved that the actual residence of such absentees is known or can be ascertained, a copy of such notice and petition shall be sent them by mail. All the companies interested shall be entitled to a hearing before such commissioners at such times as such commissioners shall appoint. The report of the commissioners shall state:

1. The existence of the mine or mines proposed to be worked.
2. The names of the parties owning the land in which the mine or mines are situated, and the owners of the adjacent lands, far as they are affected by the application, and the nature and value of their interest in the same, individually.
3. An estimate of the damages to such owners from the contemplated use and occupation of their lands.
4. Such other information as the court may direct.

The report of the commission shall be made within reasonable time fixed by the court, and an order made either denying the petition and granting the amount of damages, if necessary, the damages to the property and the annual rent or the compensation to be paid to the owner, lessee or occupant thereof so long as the use and occupation shall continue. And thereupon payment of the damages, and upon entering into an agreement to be approved by the court, to pay the annual rent or the compensation and damages thus determined, shall have the right to enter upon and occupy and use the land set apart by such order, so long as they or their assigns shall work the said mine or mines, and shall pay the said annual rent or compensation.

#### QUARRIES.

On this subject there are no statutory enactments, the owner of the real property being entitled to excavate for quarries the same as other real estate owned by him.

## NORTH CAROLINA

Compiled by WALTER E. MOORE, Attorney at Law, Webster, N. C.

#### CORPORATIONS.

Corporations for mining and manufacturing may be formed before the clerk of the superior court, and may hold land, and not to exist longer than sixty years. The articles of agreement shall set forth:

1. The corporation name.
2. The business proposed.
3. The date when the same is proposed to be carried on.
4. The length of time desired.
5. The names of persons who have subscribed.
6. The amount of the capital and the number of shares and amount of each.

These articles shall be under the hands and seals of the parties applying for such corporation.

**TOWERS.**—To sue and be sued by its corporate name; to have a common seal; to render interest of stockholders transferable; to exempt the private property of stockholders from liability for corporate debts; to make contracts, acquire and transfer property; but all contracts involving or incurring a liability by the corporation for an amount exceeding \$500 must be in writing and signed by some proper officer of the corporation or under the common seal.

A corporation may be dissolved as follows:

1. For any abuse of its powers to the injury of the public or of the corporation, or of its creditors or debtors.
2. For non-user of its powers for two years or more consecutively.
3. For insolvency manifested by the return of an execution unsatisfied upon a judgment against the company docketed in the superior court of the county where it has its only or principal place of business.
4. Upon any conviction of the company of a criminal offense, if such offense be persistent.

#### LIENS.

Material-men have a lien on every building, lot, farm or vessel for materials furnished by them to build, repair or remove. The lien also covers the lot on which the building or improvement is made, and is superior to any lien or incumbrance created after the materials are furnished. The claim for a lien must be filed in the office of the clerk of the superior court within twelve months after the materials are furnished. This claim must be verified and must contain the names of the parties, a bill of the items so as to show the amount due, and a description of the property on which a lien is claimed; and if there be a special or written contract, its terms must be stated. To enforce the lien a suit must be begun in the superior court within six months after the lien is filed. Sub-contractors must not only file their claim, but must also notify owner before he settles with contractor and furnish owner with statement of amount due. Owner may require contractor to furnish an itemized statement of amounts due material-men. Owner may retain enough out of contract price to pay material-men. Owner cannot be held liable to sub-contractors for any greater sum than was due contractor when notice is given him of the claim of a lien by sub-contractor.

#### MILLDAMS.

Anyone desiring to erect a milldam on a stream of which he owns one side and part of the bed, and who cannot agree with the owner of the opposite bank as to the amount of damages, may file a petition in the superior court of the county where such dam is to be erected, and the court will appoint three disinterested persons as commissioners who will assess the damages. After

payment of all damages and costs, the applicant will have a right to begin his construction.

**ENTRYS TO DAMS.**—Whoever shall cut away, destroy or injure any dam, or who shall obstruct any race, canal or water channel used for furnishing water for any mill, factory or machine works, shall be subject to both fine and imprisonment and also to a civil action by the party injured.

**OBSTRUCTION OF STREAMS.** If any person willfully fills any tree or puts any obstruction in any branch, creek or other stream, whereby navigation of such stream by any raft or log may be impeded, delayed or prevented, he shall be subject to a fine not to exceed \$50 or imprisonment not to exceed thirty days.

## MINING.

All leases and contracts for leasing land for the purpose of digging for gold or other minerals or for mining generally, of whatever duration, shall be in writing and signed by the party to be charged therewith or by some other person by him thereto lawfully authorized. Lessors of mines not partners with their lessees, unless they so contract. Any person or body corporate engaged or about to engage in mining who may find it water either to or from his or its mine or mines over the lands of any other person or persons, may make application by petition in writing to the clerk of the superior court of the county in which the lands to be affected, or the greater part, are situated, for the right so to convey the said water. The petition shall specify the lands to be affected, the name of the owner of said lands and the character of the ditch or drain intended to be made, and said owner shall be made a party defendant, and jurors, three in number, shall be appointed to assess the damage to the owner of said lands, and the party must first pay or tender the damages so assessed, when he will have full right and power to enter and construct said ditch or drain, unless the person obstructing said ditch or drain shall be guilty of a misdemeanor.

The working of mines will not be enjoined in North Carolina, but a receiver may be appointed to take charge in case of litigation, where it appears the party in possession is of doubtful ability to respond in damages if he be cast in the action.

## NORTH DAKOTA

Compiled by SPALDING & PHELPS, Attorneys at Law, Fargo, N. Dak.

### CORPORATIONS.

**CREATION.** A corporation may be created by statute, which may be special for a particular corporation, or general for a number of corporations.

Every grant of corporate power is subject to alteration, suspension or repeal, in the discretion of the legislature.

Incorporation or right to exercise corporate powers shall not be collaterally attacked in any private suit, but such inquiry may be made in an action brought by the state.

Every corporation must have a corporate name, which it may change at its pleasure.

Corporations are either public or private.

Public corporations are formed or organized for the government of a portion of the state.

Private corporations are formed for the purpose of religion, benevolence, education, art, literature or profit, and all corporations not public are private.

The instrument by which a private corporation is formed is called "articles of incorporation" or "certificate of incorporation," and one-third of the officers of such corporation must be residents of the state.

Private corporations can be formed by three or more persons for the following purposes, viz.: Mining, manufacturing and other industrial pursuits, the construction and operation of railroads, wagon roads, irrigating ditches, for colleges, seminaries, churches, libraries, benevolent, charitable and scientific associations; for conducting the business of insurance, banks of discount and deposit (but not of issue), and for loan, trust and guarantee associations.

No corporation for charitable or religious purposes shall hold real estate to exceed the value of \$25,000.

Articles of incorporation must be prepared setting forth: Name of corporation, purpose for which formed, place where principal business is transacted, term for which it is to exist, number of directors and names and residences of such as are to serve until election of officers, if there be a capital stock, its amount and the number of shares into which it is divided.

Articles of incorporation must be signed by three or more persons, one-third of whom must be residents of this state, and must be acknowledged before a proper officer.

Upon the filing of the articles, the secretary of state must issue a certificate that articles of incorporation have been filed, thereupon the persons signing the articles become a body corporate for the purposes and of the name stated in the articles.

The secretary of state must also record the articles of incorporation.

Certified copies of the articles of incorporation from the secretary of state must be received in all courts as prima facie evidence of the facts therein stated and of the existence of the corporation.

Proof of the existence of a corporation shall not be necessary unless the same is expressly denied.

**CORPORATE STOCK.**—After the certificate is issued by the secretary of state the directors must open books for subscriptions of stock, and receive subscriptions to the full amount of the authorized capital, and may levy assessments and installments and collect the same.

When so authorized a corporation may forfeit stock for non-payment or recover the amount of any subscription by suit, but cannot do both.

All corporations for profit must issue certificates of stock when fully paid up, issued by the president and secretary. Shares of stock so issued are personal property and may be transferred by indorsement, but such transfer is not valid, except between the parties, until the transfer is recorded in the books of the corporation.

A corporation whose capital is limited cannot issue stock in excess of the limit.

A corporation may purchase, hold and transfer its own stock, from its surplus profits.

A dividend belongs to the person in whose name the stock stands on the books of the corporation on the day when it becomes payable.

**CORPORATE POWERS.** Every corporation as such has power to have succession by its corporate name for the period limited, or, if there is no limit, perpetually; to sue and be sued, to make and use a common seal, and after the same at pleasure; to purchase, hold, transfer and convey real estate and personal property; to appoint such subordinate officers and agents as the business of the corporation may require; to admit stockholders or members and to sell their stock, to enter into any obligations or contracts essential to the transaction of its ordinary affairs.

Every corporation must within one month after filing its articles of incorporation adopt a code of by-laws.

A corporation may by its by-laws provide: The time, place and manner of calling and conducting its meetings; the number of stockholders or members constituting a quorum; the mode of voting by proxy; the time of the annual election of directors, and the mode and manner of giving notice thereof; the compensation and duties of officers; the manner of election and tenure of office of all officers other than directors, and suitable penalties for violations of by-laws, not exceeding, in any case, \$100 for each offense.

All by-laws adopted must be certified by a majority of the directors and the secretary of the corporation and copied in the book of by-laws, which shall be open to the inspection of the public, by a two-thirds vote the by-laws may be amended or any by-law repealed at an annual meeting or one called for that purpose.

The directors must be chosen annually, and all elections must be by ballot, each share of stock entitling its holder to one vote.

All corporate powers, business and property must be exercised and controlled by a board of directors, consisting of not more than three nor more than eleven. Directors of a corporation for profit must be stockholders in an amount to be fixed by the by-laws of the corporation.

Immediately after their election the directors must elect from their own number a president, secretary and treasurer. A majority of the directors form a board, and every decision of the majority of the directors binds the corporation.

Directors must not make a dividend except from the surplus profit, nor must they divide, withdraw or pay out any part of the capital stock, nor create debts beyond the capital stock. Directors violating these provisions are liable to the corporation and its creditors jointly and severally for the full amount divided, withdrawn or paid out.

Officers making false certificates, official reports, public notices or entries on the books or records of a corporation shall be liable for the damages resulting therefrom.

No director shall be removed from office except by a two-thirds vote of members or stockholders holding two-thirds of the stock.

At all elections or votes had for any purpose, there must be a majority of the subscribed capital stock or of the members, represented in person or by proxy, in writing. Every person acting therein, in person or by proxy, must be a member thereof, or a bona fide stockholder, having stock in his own name on the stock books of the corporation at least ten days prior to the election.

Every stockholder in a corporation is personally liable for the debts of the corporation to the extent of the amount that is unpaid upon the stock held by him.

Every corporation may increase or diminish its capital stock at a meeting called for that purpose by the directors.

**BOOKS AND RECORDS.**—All corporations for profit must keep a record of all their business transactions. They must also keep a "stock and transfer book," in which must be kept a record of all stock; the names of the subscribers, in writing; every person acting therein, in person or by proxy, must be a member thereof, or a bona fide stockholder, having stock in his own name on the stock books of the corporation at least ten days prior to the election.

Every stockholder in a corporation is personally liable for the debts of the corporation to the extent of the amount that is unpaid upon the stock held by him.

Every corporation may increase or diminish its capital stock at a meeting called for that purpose by the directors.

**DISSOLUTION OF CORPORATIONS.**—A corporation is dissolved by the expiration of the time limited by its articles of incorporation, by an action brought by the state's attorney in the name of the state, for that purpose, whenever such corporation shall offend against any of the laws creating, altering or renewing such corporation, or violate any law, by which it shall have forfeited its charter by abuse of power; whenever it shall have forfeited its privileges by failure to execute its powers; whenever it shall have done or omitted any act which amounts to a surrender of its powers, or whenever it shall exercise a franchise or privilege not conferred upon it by law.

If voluntary, its dissolution may be effected by its voluntary application to the district court for that purpose.

If incorporation has been organized and commenced the transaction of business within one year from date of its incorporation, its corporate powers cease.

**ASSESSMENT OF STOCK.**—After one-fourth of the capital stock has been subscribed, the directors may levy assessments upon the subscribed stock, for the purpose of paying debts, paying expenses, or conducting business.

No assessment must exceed ten per cent. of the amount of the stock named in the articles of incorporation unless the whole capital stock has been subscribed, and the corporation is unable to pay its debts, when the assessment may be for the full amount unpaid. Railroad corporations may assess stock ten per cent. per month, and annual life, fire and marine insurance companies such a rate as they deem proper.

Every order levying an assessment must specify the amount, when, to whom and where payable, and fix a day upon which unpaid assessments shall become delinquent.

Notice of assessment must be personally served on each stockholder, or sent to him by mail, and same must be published for four weeks in a newspaper published at the principal place of business of the corporation.

If assessments are unpaid, notice of sale must be published in the same paper for ten days if in a daily, or two weeks in a weekly, specifying certificates, number of shares represented, and amount due thereon.

By publication the corporation obtains jurisdiction to sell stock upon which assessments are unpaid.

Stock must be sold at public auction on the day and place named in the notice to the highest bidder for cash.

The person offering to pay the assessments and costs for the smallest amount of stock is the highest bidder.

If no bidder offers the amount of the assessments and costs the stock may be bid in by the corporation, and becomes its property, and while so held is not subject to assessment, nor can any dividend be declared thereon.

No action can be sustained to recover stock so sold unless the party seeking to maintain such action shall first tender the sum for which it was sold, with delinquent assessments which have been paid thereon, and interest on such sums from the date of payment.

**EXAMINATION OF CORPORATIONS.**—The legislative assembly may examine into the affairs of any corporation at any time, and the committee appointed by such legislature shall have power to administer oaths to the officers of such corporation, and to examine them as to the condition of the corporation, and may compel the production of all keys, books, papers and documents.

## LIENS.

Every miner or other person who, at the request of the owner or owners, or his or their agents, of any lode, lead, ledge, mine or vein, or of bearing or other vein, or of any shaft, tunnel, drift, mine, or at the request of any contractor or sub-contractor, shall perform any labor or furnish any material in or about such mine, shall have a lien upon such mine, to secure the payment of the same.

Miners or other persons performing labor or furnishing any materials to a contractor may furnish an attested copy of their account to the owner of the mine or his agent, and he shall retain the amount thereof out of the first subsequent payment to the contractor for whom the work was done or materials furnished.

The owner shall furnish the contractor against whom account is claimed a copy of the same, and if he fails or refuses to dispute the claim or if disputed fails to have the same adjusted, he shall be deemed to have assented thereto.

The amount which may be due from any contractor to his creditor may be recovered from the owner of the mine, by the contractor or the contractor's agent, to the extent in value of any balance due by the owner to the contractor, at the time of the notice of indebtedness first given.

Any person claiming a lien shall make his account in writing, and, after making oath thereto, shall, within sixty days from the date of the last item of the account, file the same in the office of the clerk of the district court, filing at the same time a correct description of the property to be charged with the lien, and the same shall for one year from the furnishing of the last item of the account be a lien upon the property charged in the description; if work was done or materials furnished under a written contract, copy of same shall be filed with account and oath.

The holder of a lien may proceed to obtain judgment for the amount of his account by petition, and during the pendency of his action the lien sued upon shall still continue.

## MINING.

**LOCATION AND SIZE OF CLAIMS.**—Length of lode claims may equal but shall not exceed fifteen hundred feet; width shall not exceed one hundred and fifty feet each side of the center of vein. Any county may, by majority vote at a general election, make a greater width, not to exceed three hundred feet each side of center, or less, but not less than twenty-five feet each side of center.

The discoverer of a lode must within sixty days from discovery record his claim in the register of deeds of the county in which the lode is located. The location certificate must show the name of lode, name of locator, date of location, number of feet in length, number of feet in width claimed and general course of the lode.

Before filing certificate the discoverer must locate claim by sinking discovery shaft, and post on surface notice containing name of

lode and other particulars as required in certificate, and must mark surface boundaries of claim.

Surface boundaries must be marked by posts, set one at each corner and in the middle of each side, and end, marked on side next to claim with the name of lode, and the corner end or side they respectively represent.

The discoverer shall have sixty days from the time of discovery of lode to sink a discovery-shaft.

The location certificate shall include all surface ground within the side lines of the lode, and ledges throughout their entire depth, the top or apex of which lies inside such lines extended vertically, with such parts of all lodes or ledges as continue by dip beyond the side-lines of the claim, but shall not include any portion of such lode or ledge beyond the end-line of the claim, nor beyond the side-lines except by dip of the lode.

When the right to mine is separate from the ownership or right of occupancy of the surface, the owner or occupant may demand satisfactory security, and if refused may enjoy the mine. If locator deems the original certificate defective, he may file an amended certificate, provided it does not conflict with existing rights. Re-location does not preclude the locator from proving title under his previous location.

To hold possession of a mining claim \$500 worth of work must be done or improvements made each year.

Re-location of abandoned claims shall be by new discovery-shaft and fixing new boundaries, and the location certificate must state that the whole or part of the new location is on abandoned property.

No location certificate shall contain more than one location, whether made by one or more locators.

**DISPUTED MINING PROPERTY.**—In actions wherein the title or right of possession to mining property shall be in dispute, the judge may upon application order both a surface and underground survey, and shall designate the proper surveyors.

Judges of the district court have power to issue writs of injunction for affirmative relief, having the force and effect of a writ of restitution, restoring any person to the possession of mining property from which they may have been ousted by force or fraud, such writ to extend only to the right of possession, leaving the parties to their legal rights as though no such writ had issued.

**RIGHT OF WAY.**—Proprietors of mining claims have right of way across lands of others for road, ditch, flume, shaft or tunnel, provided such claim is so situated that it cannot be worked without.

If right of way cannot be secured by agreement, the same may be had on petition, duly verified, to the district court, setting forth the facts, and demanding that relief sought.

On filing of petition the court shall issue a citation to the owners of lands across which right of way is asked, to show cause why such right of way be not granted.

If the judge is satisfied on hearing the proof that right of way should be granted he shall make an order to that effect and shall appoint appraisers to assess damages to lands affected by his order.

The commissioners shall examine the premises and report damages to the court.

Upon payment of the assessed damages, the petitioner shall be entitled to the right of way asked for and to enter upon the premises and erect structures or dig excavations.

Appeals from appraisal may be made to the court, and there tried by the court or a jury.

The pendency of an appeal shall not prevent the applicant for right of way from occupying the premises, on filing a bond to pay any damages assessed by the court or jury.

If appellant recovers \$50 more than assessed damages he shall also recover costs of appeal, otherwise shall pay his own costs.

**WATER-RIGHTS.**—Any person holding title to mineral land shall be entitled to the usual enjoyment of the waters of streams and creeks, or of any other water, or right to such use, which shall not conflict with any prior right or claim to such water when the law has been complied with in doing the necessary work.

When the owners of land have no available water facilities upon them, or if the land is too far removed to use the waters of such stream or creek, such owner shall have the right of way through any piece of land for the purpose of conveying the water from such stream.

Any right of way or courses shall only extend to such digging as is necessary for the purpose required.

In all controversies respecting the right to water, the same shall be determined by the date of appropriation as made by the State.

Waters of streams may be made available to the full extent of their capacity, without regard to their deterioration, quality or diminution in quantity, so that the same do not materially affect or injure the rights of their prior appropriators.

Damages caused by digging ditches or building flumes shall be paid by party committing the injury.

Ditches or other artificial water courses across highways shall be dug and water not allowed to damage such highway, under penalty of fine of \$100.

Party appropriating water shall dig at least twenty feet of ditch and turn water from stream therein within thirty days from date of appropriation, and shall dig or construct twenty rods of ditch within ninety days thereafter, and within ten days from appropriation shall file location certificate with register of deeds, and shall post a copy of location certificate at head of ditch, which shall contain name of locator, date of location and number of inches of claim.

Failure to commence construction of ditch or flume shall be considered abandonment of appropriation.



## OHIO

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## CORPORATIONS.

Under the constitution, corporations can only be formed under general laws. Each stockholder is liable on his stock for any amount unpaid thereon, up to a certain amount, except in such cases. But by § 81 O. L. 2, a corporation may provide that each stockholder shall have but one vote, in which case he shall not hold or own stock in excess of \$1,000 face value.

Corporations may be formed for any purpose for which individuals may lawfully associate themselves together, except for dealing in real estate, or carrying on professional business. Private corporations, under the laws of Ohio, are classed as corporations for profit and corporations not for profit. If for profit, they must have a capital stock. A corporation for profit is formed by any number of persons not less than five, a majority of whom are required to be citizens of Ohio, subscribing and acknowledging, before any officer authorized to take acknowledgments of deeds, articles of incorporation, which must contain:

1. The name of the corporation which shall begin with the word "The" and end with the word "Company," unless the organization is not for profit.
2. The place where it is to be located, or where its principal business is to be transacted.
3. The purpose for which it is formed.
4. The amount of capital stock, and the number of shares into which the stock is to be divided.

Where the object of the organization is to construct an improvement not located at a single place, the articles of incorporation must show the kind of improvement intended, the termini of the improvement, and the counties in and through which it or its branches shall pass. The articles of incorporation are required to be filed with the secretary of state, who is required to record them, and copies thereof duly duly certified are prima facie evidence of the existence of the corporation. The filing of said articles of incorporation constitutes the persons therein named, by the name and style therein mentioned, a body corporate with the usual corporate powers. An installment of ten per cent on each share of stock is payable at the time of making the subscription, and the residue thereof shall be paid in such installments and at such times and places as may be required by the directors. As soon as ten per cent of the capital stock is subscribed, the subscribers of the articles of incorporation shall so certify to the secretary of state in writing. They shall call a meeting of the stockholders for the election of the board of directors, giving thirty days' notice thereof in a newspaper published or generally circulated in the county or counties where the books of subscription are to be opened. The number of directors shall be not less than five, nor more than ten, who shall continue in office until the time fixed for the annual election, and until their successors are chosen and qualified; but notice of such meeting of election of directors may be waived in writing in case all the subscribers are present in person or by proxy. The subscribers are made liable for any deficiency in the actual payment of the above amount of ten per cent. A majority of the board of directors are required to be citizens of the state, and all directors and all executive officers and holders of stock in such installments provided by the by-laws. Vacancies in the officers of the board of directors are filled by the board, unless the by-laws otherwise provide. Every corporation has power to adopt a code of regulations for its government, not inconsistent with law, and the board of directors may adopt a code of by-laws for their government, not inconsistent with law or the regulations of the corporation. The foregoing applies to the formation of all classes of private corporations for profit in Ohio, and the present statutes controlling the subject are: §§ 81 O. L. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80 O. L. 280.

The stock of a corporation is deemed personal property. The rights of a foreign corporation can exercise none of their franchises or powers within this state, except by county or legislative consent. That consent may be upon such terms and conditions as the general assembly under its legislative power may in any case see fit to impose.

**POWERS OF MINING AND MANUFACTURING CORPORATIONS.** Any company heretofore incorporated or that may hereafter be incorporated under the laws of this state, for the purpose of mining or boring for petroleum or coal, or of producing, selling or offering for sale or use, or of conveying, or of using, or of retaining, or of refining or purifying the same, quarrying stone, marble or slate; mining coal, iron, copper, lead or other minerals, or manufacturing the same, or engaged in the manufacturing of articles containing in the whole or in part iron or steel, or in the manufacturing cotton or woolen fabrics in the whole or in part, or both, and carrying on business connected with the main objects of such corporation, may, in its corporate name, take, hold and convey such real estate as may be necessary or convenient for conducting the purpose for which it was incorporated, and may carry on its business, or so much thereof as is convenient, in any county in this state, or beyond the limits of the state, and may there hold real or personal property, and may sue and be sued, and may contract for the purpose for which it was incorporated, or for conducting the same. §§ 180, v. 76.

**MINING COMPANIES MAY ACQUIRE ADDITIONAL POWERS.**—A company organized for the purpose of mining coal, or for the purpose of mining petroleum, or of producing, selling or offering for sale the mining of iron ores and coal, may, upon a vote of the holders of two-thirds of its capital stock, engage in any other branch of the manufacture of iron; but before it shall engage in such manufacture it shall, by its president, execute a certificate, under the

corporate seal of the company, setting forth the particular branch or branches of the manufacture of iron in which it purposes to engage, and the place or places where the business, or any part thereof, is to be located, the same to be verified by the oath of the president and acknowledged, certified and forwarded to the secretary of state; and thereupon the company may carry on the business certified in such certificate, in addition to the business named in the original articles of incorporation. (74, v. 21, Chapter 11, Section 1.)

**MAY BUILD A RAILROAD.**—Companies organized for the purpose of mining, quarrying, or producing any, who are not so provided in the articles of incorporation, may construct a railroad, with a single or double track, with such sidetracks, turn-outs, offices and depots as they deem necessary to carry out the objects of the incorporation, from any mine, quarry, manufacturing or any other railroad, or from any stream, lake, navigation or other navigable water or place within or upon the borders of this state, and shall, in respect to such railroad, be subject to and governed by the provisions of Chapter 11. (53 v. 108, Section 3.)

## DAMS, WATER-COURSES, ETC.

Dams, water-courses, sewers, ditches, etc., located on other than public lands of the United States, are governed by the ordinary rules applicable to real estate. Dams, water-courses, sewers, ditches, etc., may be established upon anyone's property providing the same does not conflict with or injure the rights and interests of adjoining owners. In such cases, water-courses and ditches may be established in or so connected. The county commissioners of any county may, whenever in their opinion the same will be conducive to the public health, convenience or welfare, upon petition of the owners of any lands adjoining or adjacent to any stream, living stream or flowing obstruction that may hinder the free passage of water in the natural channel of such stream. It is further provided by statute, that where a milldam or water-rights and privileges have become antiquated and in need of repair, and the owners thereof, for a period of ten years without attempt to repair or rebuild the same, the county commissioners of any county in which the same is located may, without bargain or compensation, cause the same to be removed, and the water-courses upon which it is located cleaned out and improved, and then from such time all rights shall cease and be barred.

## LIENS.

A person who performs labor or furnishes machinery or material for constructing, altering or repairing a boat, vessel or other water craft, or for erecting, altering, repairing or moving a house, mill, manufactory or any furnace, or furnishing material thereon, or other building, or erecting, altering, repairing or moving a dam, or for the digging or boring of any gas, oil or other well, or in mining coal, by virtue of a contract with the owner or his authorized agent, shall have a lien to secure the payment of the same amount of money, labor, or material, or machinery, or material, in the lot or land on which the same may stand or be located, or to which it may be removed. (R. S., Section 3184; 86 O. L. 143, 373.)

Such person in order to obtain such lien shall, within four months of the time of performing the labor or furnishing such machinery or material, file with the recorder of the county where the labor was performed, or the machinery or material furnished, an affidavit containing an itemized statement of the amount and value of such labor, machinery or material, and a description of any promissory note or notes given therefor, or any part thereof, with all credits and offsets thereon; a copy of the contract, if in writing; a statement of the amount and times of payment to be made thereunder, and a description of the land on which the house or other building, structure, gas, oil or other well may stand, or be located, or to which it may be removed; and the same shall be recorded in a separate book, and shall operate as a lien from the date of the first item of the labor performed, or machinery and material furnished upon or toward the property, and the interest of the owner in the lot or land upon which the same may stand, or to which it may be removed, for the period of two years from and after the date of filing of such attested statement. If an affidavit is not filed within the time herein fixed, this lien shall continue in force until the final adjudication thereof. There shall be no homestead or other exemption against such lien. (R. S., Section 3185; 86 O. L. 375.) If several liens be obtained by two or more persons on the same land, the same shall have no priority among themselves. (R. S., Section 3188; 86 O. L. 377.)

Any sub-contractor, material-man, laborer or mechanic performing any labor or furnishing any material or machinery for the construction, alteration, removal or repair of any house or water craft, boat, building or structure, and a contract with the head contractor, and whose demands are not paid when due, may file with the owner of such boat or water craft, house, building or structure, or the authorized agent of such owner, a sworn and itemized account of the value of such labor or material. It is providing such notice, the owner shall retain in his hands all subsequent payments from the principal or head contractor, upon the contract. (R. S., 3193 and 3194.)

Employees of corporations, whether the employment is in agriculture, mining, manufactory or other manual labor, have a lien upon the real property of employers for wages, superior to the lien of attachment thereon, during the existence of such unpaid wages or claims for property, and in case of the insolvency, insolvency of the debtor, or given to prefer creditors, or to secure a pre-existing debt, at and superior to claims for homestead, or other exemptions, except under Section 5439, R. S. (See Exemption from attachment of real property.) Claims for labor performed within three months prior to appointment of such assignee, etc., shall be paid next after claims for taxes and cost of administration. To acquire such a lien it is necessary to file,

within thirty days from the expiration of said three months, with the recorder of the county, an itemized statement of the claim. When the lien has been thus secured, it will continue valid for one year from said filing, and to the end of any action begun within that time to enforce such lien, (S. O. L., 183.)

#### RIGHT OF WAY.

All mining, quarrying, etc. claims shall be subject to the right of way of any ditch, flume or sewer, etc., for mining purposes, or any runway or road, etc., provided such right of way shall not be exercised against, and to the end of any action begun, and not abandoned prior to the establishment thereof, without consent of the owners, except by condemnation.

Mine owners have the right to appropriate private property to such extent only as to work their mine according to the state law; that is, as to shafts, outlets, cages, etc., giving workmen distinct means of ingress and egress.

## OKLAHOMA TERRITORY.

Compiled by WILLIAM BLINCOE, of Wm. Blincoe & Roy Hoffman, Attorneys at Law, Guthrie, O. T.

#### CORPORATIONS.

**CREATION.**—Private corporations for mining, quarrying and other business purposes are created by filing with the secretary of the territory a copy of their articles of incorporation, setting forth the name and business of the corporation, the number, names and residences of directors and the amount of capital stock and number of shares, which articles must be subscribed by at least three persons, one-third of whom must be residents of the territory, upon which the secretary of the territory issues the certificate of incorporation. A corporation must begin business within one year from the date of its charter.

**DISSOLUTION.**—Every grant of corporate power is subject to alteration, suspension or repeal in the discretion of the legislature. They may be dissolved in the usual way.

**OFFICERS.**—There must be not less than three nor more than eleven directors, who shall be elected for one year and shall be stockholders. No dividend shall be declared except from surplus profit, and any director who shall permit any dividend to be paid from the capital stock, or create any debt beyond the capital stock, shall be liable personally to any party damaged, unless he shall cause his dissent to be entered on the minutes. Any officer making a false report to the secretary of the territory or on the books of the corporation shall be liable to any person for all damages he may sustain.

**STOCKHOLDERS.**—Each stockholder of a corporation is individually and personally liable for the debts of the corporation to the extent of the amount that is unpaid upon the stock held by him. The capital stock may be increased or diminished by a two-thirds vote, but shall in no case be decreased to a less amount than the indebtedness. Stock is payable in full, but only affects third parties when transferred on the books of the association.

The legislature may at any time cause an investigation of the affairs of a corporation. A corporation must keep a record of its business proceedings, which shall be open to every member and creditor.

**MINING AND MANUFACTURING CORPORATIONS.**—Such corporations are organized as other corporations and are subject to their duties and liabilities, but their term of existence shall not exceed twenty years. The purpose of the organization must be distinctly stated.

**STOCKHOLDERS.**—Stockholders in such corporations are jointly and severally liable in their individual capacities for all debts due to mechanics, workmen, laborers employed by such corporation, and said liability may be enforced at any time after an execution against the corporation has been returned unsatisfied. This action must be commenced within four months, and the stockholders are liable for the same to the extent of their stock.

**REPORT.**—Every such corporation must once each year publish a statement of its business, indebtedness and profits.

Such corporations may have their business office within or without this territory. They may have a right of way to run a tunnel to any place they may desire. They must begin work within ninety days from the date of the charter and finish within two years or forfeit all right save as to lands owned by such corporations. If the corporation has its place of business in the territory it shall be allowed four years in which to complete the work.

**FOREIGN CORPORATIONS.**—No corporation shall transact any business in this territory until it shall have filed in the office of the secretary of the territory an authenticated copy of its charter and shall have appointed an agent to reside in the territory. A duly authenticated copy of the appointment of such agent shall be filed with the secretary of the territory and with the register of deeds of the county where such agent resides.

#### LENS.

Every person who shall do any labor upon, furnish any materials, machinery or fixtures for any building, erection or other improvements upon land, including those engaged in the construction or repair of any work of internal improvement, by virtue of any contract with the owner, his agent, trustee, contractor or sub-contractor, upon complying with the provisions of this article shall have a lien upon the same for the amount of his contract, and upon the land belonging to such owner on which the same is situated, to secure the payment.

A sub-contractor must file his notice of lien with the clerk of the district court within sixty days after the last of said work shall have been done, or material furnished, and an original contract within ninety days; but a failure to file the said notice within the said time shall not defeat the lien except as against purchasers or incumbrancers in good faith without notice, whose rights accrued after the sixty or ninety days and before the claim for lien was filed.

No lien is created upon the homestead unless the contract for the material is in writing, and then if the amount is over \$100 the wife must sign the contract and acknowledge in the same manner as a deed for the homestead. An action to enforce a lien must be begun in the district court within one year from the filing thereof.

## OREGON

Compiled by ROBERT G. SMITH, Attorney at Law, First National Bank Building, Grant's Pass, Ore.

#### CORPORATIONS.

Private corporations are formed under a general law by three or more persons making, subscribing and acknowledging, as in the case of an individual, articles of incorporation, and filing one copy with the secretary of state, one with the county clerk of the county where the principal office or place of business of the corporation is to be, and retaining the third in the possession of the corporation.

1. The name assumed by the corporation and by which it should be known, and the duration of the corporation, if limited.
2. The enterprise, business, pursuit or occupation in which the corporation proposes to engage.
3. The place where the corporation proposes to have its principal office or place of business.
4. The amount of capital stock of the corporation.
5. The amount of each share of such capital stock.
6. If the corporation is formed for the purpose of navigating any stream or other water, or mining or constructing any railroad, macadamized road, plank road, clay road, canal or bridge, the termini of such navigation, road or canal, or the site of such bridge.

After filing the articles of incorporation, the incorporators open books and receive subscriptions to the capital stock. After one-half or more of the capital stock is subscribed, the stockholders meet and elect directors.

**DIRECTORS.**—A director must be a stockholder in the corporation and a resident of the state of Oregon, except that in corporations formed for the purpose of constructing railroads or military wagon roads, canals or flumes, or carrying on mining enterprises, or publishing newspapers, or conducting institutions of learning, a minority of the board of directors may reside out of the state. Directors must take an oath of office. The directors elect a president and secretary, and such other officers as are required.

**POWERS.**—The corporation has authority by the name assumed in the articles:

1. To sue and be sued.
2. To contract and be contracted with.
3. To have and use a corporate seal, and the same to alter at pleasure.
4. To purchase, possess and dispose of such real and personal property as may be necessary and convenient to carry into effect the objects of the corporation, and to take, hold, possess and dispose of all real and personal property donated to such corporation by the United States, or by any state, territory, county, city or other municipal corporation, or by any person, firm, association or private corporation, for the purpose of aiding in the objects of such corporation.
5. To appoint such subordinate officers and agents as the business of the corporation may require, and prescribe their duties and compensation.
6. To make laws not inconsistent with any existing law for the sale of any portion of its stock for delinquent or unpaid assessments due thereon, which sale may be made without judgment or execution, provided that no such sale shall be made without thirty days' notice of the time and place of sale in some newspaper in circulation in the neighborhood of such company; for the transfer of its stock, for the management of its property, and for the general regulation of its affairs.
7. In case the object or purpose for which any such corporation is incorporated is in whole or in part to construct, or construct and operate a railroad, to lease any part or all its road to any other company incorporated for the purpose of maintaining and operating a railroad, and to lease or purchase, maintain and operate any part or all of any other railroad constructed by any other company upon such terms and conditions as may be agreed upon between said companies respectively. Any two or more railroad companies whose lines are connected and may be used in common for their common benefit to assist and promote the object for which they were created, provided that nothing in this act shall be construed to authorize the leasing of any railroad line to any company or corporation existing a road which forms a complete or controlled line to a railroad.

The stockholders meet annually and elect directors, who hold their office for one year and until their successors are elected and qualified.

**STOCK.**—The stock in private corporations is personal property and subject to attachment, execution, levy and sale as such. As sales of stock, whether voluntary or otherwise, transfer to the purchaser all rights of the original holder, and subject such purchaser to the payment of any unpaid balance due on such stock; but if the sale be voluntary, the seller is still liable to existing creditors for the amount of said balance, unless the same be paid by the purchaser.

A corporation failing to elect directors and commence the transaction of business within one year from the filing of the articles of incorporation, or otherwise, or within the first three months, forfeits its corporate existence. The capital stock may be increased or diminished, or the amount of the shares called by a majority vote of the stock at a stockholders' meeting called for that purpose.

**SUPPLEMENTARY ARTICLES OF INCORPORATION.**—The directors may file supplementary articles of incorporation when authorized by vote of the stockholders, for the purpose of engaging in any new enterprise, etc.

**LIABILITY OF STOCKHOLDERS.**—The stockholders are liable for the indebtedness of the corporation to the amount of their stock subscribed and unpaid, and no more. Corporations organized for constructing railroads, etc., may exercise the right of eminent domain. Land is contracted to their use, and the compensation to be paid by them fixed by action in the circuit court.

**FOREIGN CORPORATIONS.**—Foreign corporations, upon complying with the laws of the state, may do business therein as like domestic corporations. Municipal corporations are created by special acts of the legislature.

#### LIENS.

Liens for material are given any person furnishing material to be used in construction, alteration or repair, in whole or in part, of any building, wharf, bridge, flume, tunnel, fence, machinery, aqueduct, manufacturing works, mining claim or deposit, or yielding metals or minerals of any kind, or any structure or superstructure, or in grading or improving any lot in an incorporated town or city, for the value of the same, when furnished at the instance of the owner or his agent.

The land on which the building or improvement is located, within a convenient space around the same, is subject to the lien to the extent of the interest owned by the person causing the improvement to be made, if construction, grading, mining, or other work or person having or claiming an interest therein. Such lien is preferred to any unrecorded incumbrance or any incumbrance attaching to the land subsequent to the time materials commenced to be furnished and used on or adjacent to the land. And the lien shall be an incumbrance on the building or other improvement, preferred to all prior incumbrances on the land; and in enforcing the lien the building may be sold separately.

The original contractor must file his lien within thirty days from the time he ceases to furnish materials, and others have sixty days. Liens are filed with the county clerk of the county, and are binding for six months from date, or, if credit be given, then six months from date of credit; but no lien shall continue in force for more than two years unless renewed by a suit in equity in the circuit court. Liens do not attach to public property.

#### MINING.

The constitution provides that no claimant nor a resident of the state at the adoption thereof shall hold any mining claim or work any mining claim.

Any person or company establishing a lode claim is allowed to possess the land or vein for fifteen hundred feet in length and three hundred on each side. The discoverer is allowed an additional claim. Claim is established by posting a notice, good for thirty days, and if renewed before that time will hold claim till one year from 1st day of January next following the location thereof.

Within one year after the 1st day of January next following the location each claim must be worked to the amount of \$500. Failure to do such work forfeits claim. Where several claims are held by one person or company all the work for all the claims may be performed on one. Upon filing the affidavit of one of the owners and those of two or more witnesses to the effect that the labor has been performed, such claims will thereafter be considered real estate and the title shall vest in the holders. Miners are empowered to make local laws in relation to water-rights, placer claims and town lots, in mining camps.

Ditches and flumes used for mining are declared real estate. Failure to use for one year after abandonment or removal from the state with intent to change residence and remaining absent one year, without exercising ownership over ditch, flume or water-right for mining, forfeits the claim to same. The laws relative to sale and transfer of real estate apply to ditches and flumes. Interest in placer mining claims may be conveyed by bill of sale and delivery of possession as in case of sale of personal property.

## PENNSYLVANIA.

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#### CORPORATIONS.

The constitution, in effect January 1, 1874, provides:

1. That no local or special laws shall be passed by the general assembly (either directly or by the partial repeal of general laws incorporating ferry or bridge companies except for the erection of bridges crossing streams which form boundaries between this

and other states), creating corporations, amending, renewing or extending their charters, or granting them any special or exclusive privilege or immunity, or the right to lay a railroad track, or any other right, or to exempt any corporation from any law to nor any laws to limit the amount to be recovered for injuries to person or property, nor the time within which suits may be brought against corporations, which time is the same as that fixed by general laws for similar actions against natural persons, to wit, six years.

2. That the state may not surrender or suspend its power to tax corporations or corporate property, nor authorize municipal corporations or stockholders in, furnish money for or loan credit to any corporation.

3. That municipal corporations may not incur indebtedness exceeding seven per centum upon the assessed value of their taxable property; and when they do incur indebtedness, must lay a tax and intend to pay off said indebtedness, with interest, within thirty years.

4. That a corporation is subject to the right of eminent domain and may not infringe the rights of individuals or the general well-being of the state; nor engage in any business not expressly authorized by its charter; nor hold more real estate than is necessary and proper for its legitimate business; nor issue stocks or bonds except for money, labor done, or money or property actually received; nor increase its stock or indebtedness in pursuance of general law, nor without the consent of the holders of the larger amount of stock, obtained at a meeting held after sixty days' notice, according to law. All fictitious increase of stock or indebtedness is void.

5. That in all elections of directors or managers of corporations incorporated since the adoption of the constitution, each shareholder may either cast the whole number of his votes for one candidate, or divide them as he may prefer.

6. That just compensation must be made for property taken by the right of eminent domain, or taken, injured or destroyed by the construction or enlargement of the works of corporations, highways or improvements, such compensation to be paid or secured before taking, injury or destruction. At the general assembly may not deprive any person of appeal from any preliminary assessment of damages, but on demand of either party they shall be determined by a jury.

7. Foreign corporations must have in this state at least one known office, and one agent on whom process may be served.

8. That banking laws must provide for the registry and counter-signing, by an officer of the state, of all notes or bills designed for circulation, and for the depositing of ample security for their redemption; and no banks shall be chartered for more than twenty years, nor without three months' previous notice, at the intended location, of the intention to apply for such charter.

9. That any telegraph or telegraphic corporation, or any individual, may construct and maintain telegraphic lines and connect the same with other lines, to be regulated by reasonable and general laws, but no telegraph company may consolidate with or gain control of any competing line.

10. That the general assembly may alter, revoke or amend any charter when they deem it injurious to the citizens of the state, but not so as to do injustice to the corporators; but no law enacted after the adoption of the constitution shall create, renew or extend for more than ten years any corporation.

11. That associations for the purpose may construct and operate railroads and connect the same at the state line with railroads of other states, and intersect, connect with or cross other railroads, and may extend and transport passengers and freight, and be empty, without delay or discrimination. Railroads and canals must be public highways, and all railroads and canal companies common carriers. Those organized in this state must keep their books therein, open to the inspection of stockholders and creditors, and for the transfer of stock.

12. That undue discrimination by common carriers is forbidden; freight and passenger charges, except for commutation and excursion tickets, must never be greater for any given distance than for a shorter one, and no passes shall be given to any except officers or employees.

13. That no railroad or canal company may consolidate with or gain control of any competing line; and no officers or agents may have any interest in contracts for materials or services.

14. That common carriers may not engage in any other business, nor hold more real estate than is necessary for their business, or any mining or manufacturing company may own a canal or railroad, not more than fifty miles in length.

15. That street railways may not be constructed without the consent of local authorities.

#### ACTS OF ASSEMBLY.

**CLASSES.**—Corporations are divided, according to the purposes of their formation, into two classes:—The first class, not for profit, which may hold real estate, the yearly income whereof does not exceed \$50,000; and the second class (including mining, quarrying and sawing companies) for profit.

**FORMATION.**—1. Charters of intended corporations must be subscribed by at least five persons, three of them citizens of the commonwealth, and set forth the name, purpose, term of existence, place of business, number of shares or shares of stock of the first year, and names, addresses and number of shares of subscribers.

2. Notice of intention to apply for a charter of the first class, of the objects thereof and the time and place of intended application must be published in two newspapers of the proper county, for three weeks, and the petition acknowledged before the recorder of deeds, by at least three of the subscribers, and certified by him.

3. The petition must then be presented to a law judge of said county, with proof of publication, and upon examination, approval and indorsement be recorded, with his decree of approval, in the recorder's office.

4. Certificates of corporations of the second class (except building and loan associations) must, in addition, set forth the amount of capital stock, and number and par value of shares, the name and address of the treasurer, and the fact that ten per cent. of the capital stock has been paid in cash to him; and the three subscribers making the acknowledgment shall also make an oath or affirmation, to be indorsed on the certificate, that the statements therein contained are true.

5. Certificates must next be presented to the governor of the state in the same manner in which those of the first class are presented to the judge, and in the same manner approved by him; whereupon letters patent, and a certificate, and the original certificate must be recorded in the office of the secretary of the commonwealth (on the payment of \$5), and in the recorder's office of the proper county, and an abstract thereof furnished to the auditor-general, to be recorded in his office.

6. Purchasers at judicial sales of the property and franchises of corporations are invested with the same, on condition that said purchasers accept Article XVI of the constitution, meet and organize within thirty days of such sale, and furnish a certificate explaining the date of organization, name and other facts concerning the new corporation to the secretary of state for record in his office.

7. Executors and trustees may, with the consent of the beneficiaries, either by themselves or with others, organize second-class corporations.

**RENEWAL AND AMENDMENT OF CHARTERS.**—1. Charters may be renewed in the same manner in which new ones are granted, but must set forth the fact of renewal, the name of the corporation, the date of the original charter, a certificate under the corporate seal showing the consent of a majority in interest, its financial condition, its acceptance of the provisions of the constitution and the statute, and its surrender of all privileges granted by the original charter not given to corporations of its class by law.

2. First-class corporations may be consolidated and their charters amended by decree of the court of common pleas of the proper county, upon examination and approval by said court.

3. Charters of second-class corporations may be amended by letters patent, to be issued by the governor, and recorded in the office of the secretary of the commonwealth, after notice of their intention has been published in two newspapers of the proper county, once a week for three weeks, setting forth the character of the objects to be amended, the original charter, a certificate, under the corporate seal, has been examined and approved by the governor. But the charters of gas and water companies may not be altered so as to encroach upon territory covered by any other similar company.

**BY-LAWS.**—1. To have succession by their corporate name, perpetually, or for the period named in their charters.

2. To maintain and defend judicial proceedings.

3. To have and use a common seal, to be altered at pleasure.

4. To deal in real estate, to receive, to donate, to give, to sell, to appoint and remove subordinates, and arrange their compensation.

6. To enter into any obligations necessary to the transaction of their ordinary affairs.

7. To make by-laws (not inconsistent with law) prescribing times and places of meeting, powers and duties of officials, and penalties for the breach of the latter, not exceeding \$20.

8. To issue certificates of stock under the corporate seal, signed by the president and countersigned by the treasurer, transferable subject to payments due thereon, with all the rights, liabilities, etc., of the original holders, but stockholders indebted to a corporation may not transfer their stock without the consent of the directors.

9. To issue preferred stock, and to issue deferred and paid-up stock in payment or exchange for real and personal property.

10. To lay assessments upon shares, not to exceed the amount at which such shares were originally issued.

11. To increase the capital stock (after the amount thereof is fully paid) to the amount of \$100,000, by a vote, by ballot, of the stockholders, at a meeting held (after notice published once a week for sixty days at the chief office in the state) by resolution of the board of directors, and the vote be in favor of increase, return must be made, under oath, to the auditor-general, and to the secretary of the commonwealth to be recorded in his office.

12. In case of second-class corporations, to reduce their stock or change its par value, or entirely dispose of their stock to other corporation; but no corporation, except iron, steel and oil mining companies, may buy stock of other corporations, except iron or steel companies, and hold the same, except as collateral security for a prior indebtedness, and no other corporation shall hold the majority of stock of any common carrier.

13. To borrow money (not more than six per cent. interest) by issuing bonds, secured by mortgages, or by pledging stockholders to an amount not exceeding (except in certain classes of corporations having power to borrow to the amount of double their stock) one-half of the capital stock paid in.

14. To change, by election, the location of the principal office within the limits of the state.

15. To invest their surplus or other funds in certain specified securities. (Act of March 31, 1888, Section 1.)

16. To surrender any of their powers or to be dissolved on approval and by decree of the court.

17. To have special policemen appointed by the governor.

18. In case of exhibition companies, to mortgage all their property and franchises; chattel mortgages to be acknowledged, recorded and sold in the same manner as real estate, and if such property and franchises be sold, the purchasers to have the same rights, etc., as the original companies.

19. In case of ship-building companies, to increase their capital stock to the amount \$5,000,000, and receive necessary property in payment thereof.

**OFFICERS AND THEIR ELECTIONS.**—1. Corporations must have a board of directors or trustees (one of whom must be president), a clerk, a treasurer (to give bond), and such other officers as they choose; the directors to be elected annually, by the stockholders or members, and the time and manner of choice of officers and other officers to be regulated by the by-laws. A majority of the directors shall always constitute a quorum.

2. Officers conducting corporation elections shall take an oath and be sworn to the same office, or in case of violation of the general election of officers of the commonwealth, and an election held by an officer not so sworn may be set aside and a new election ordered.

3. All elections must be by ballot, each share representing one vote; the stock books shall be evidence of the right to vote, and the beneficial owner be preferred to the one in whose name the stock stands.

4. In case of vacancies, in any offices, the remaining directors may fill the same till the next election.

**LIABILITY OF STOCKHOLDERS.**—Except in corporations specially provided for by statute, stockholders are individually liable for labor done for corporations, to the amount of the stock they hold, but only when the property of the corporation in the county is not sufficient to satisfy the claims; and holders of paid-up stock are not liable for more than six months' wages.

**DAMAGES.** Damage for property taken must be assessed by five jurors appointed by the court of common pleas, upon whose award judgment shall be entered when approved by said court; but in case of failure to agree, the corporation may give a sufficient bond for the payment of damages, whereupon the right to take possession immediately vests in said corporation.

**ACTIONS AGAINST CORPORATIONS.**—1. Notices and process may be served upon the president or other principal officer, cashier, treasurer, secretary, chief clerk or toll gatherer, of any corporation, or, in their absence from the county, upon the agent, and in case of railroads, process may be served upon any manager or director.

2. Corporations having their principal offices out of this state may be sued in any county where their works or real estate are located or in which any officer or director may reside, and process may be served on such officer or director by publication of a copy of the process for six weeks before return day.

3. The sheriff of any county where any corporation has property located, or in which an agent may serve process upon such corporation in any other county.

4. In cases where judgment is rendered against a corporation, and no goods are found to levy upon, and the plaintiff suspects such corporation of having concealed its property, the court in which the judgment was obtained will issue a citation to the officers of said corporation to answer interrogatories, and, if property be found, a writ of sequestration.

5. Writs of execution against corporations may be granted in any county, and upon franchises besides the property ordinarily subject to levy.

6. Corporations having suspended business, or made a transfer or assignment at time of or after service of process, are excluded from the statute of limitations.

**MISCELLANEOUS.** 1. Corporations may be restrained by injunctions, in case of injury to private or public rights.

2. Any corporation failing to begin, in good faith, to organize and carry on its business for the purpose of the charter, or to finish its works within five years, from the date of issuing the letters patent (except when the time is extended by the court), or which, after organization, neglects to use its privileges for five years, thereby forfeits its charter; and the attorney-general is bound to proceed against such corporation, except bridge corporations, on the application of any citizen.

3. All corporations of the second class, except turnpike, bridge and ferry companies and loan associations, shall pay to the state treasurer a bonus of one-quarter of one per cent. upon the amount of the capital stock, and in case of increase of stock, the same corporations and also all first-class corporations, not for the purpose of chartering, or reducing shares, or unless otherwise provided by their charters, pay a like bonus on such increase.

4. The capital stock of corporations is transferable on the books, may not exceed \$1,000,000, and must be deemed personal property. And no shares are transferable until all previous calls thereon are paid, or until forfeited for non-payment thereof. In case of default in payment of subscriptions, any amount due on account of shares may be collected by the directors, by suit at law, or the stock of the subscribers in arrears may be sold by the directors. No note or other obligation given by a stockholder in arrears within thirty days preceding an election may not vote at such election.

**FOREIGN CORPORATIONS.**—1. Foreign corporations of the second class doing business in this state, and having three citizens shareholders, may be incorporated, and their powers, franchises, and conditions by having approved and recorded: 1. A certificate setting forth (a) the name, (b) purposes, (c) place of business, (d) term of existence, (e) names and residences of stockholders and the number of one's shares, (f) names of directors, and names and addresses of those elected for the current year, (g) amount of capital stock and number and par value of the shares, (h) the legislation under which it was created, and (i) financial condition (showing capital stock, real and personal property, and the value of property and cash assets, if any).

2. A certificate under the corporate seal, acknowledged and sworn to by at least three directors before the recorder of the

proper county, and approved and indorsed by the governor, showing the consent to such application of a majority in interest and to a remuneration of its original charter, and all privileges not enjoyed by second-class corporations in this state, said certificate to be recorded in the recorder's office of the proper county and in the office of the secretary of the commonwealth, and an abstract thereof furnished by him to the auditor-general.

2. A foreign corporation which has become domestic has the same rights, privileges, powers, immunities, lands, property and assets as the original corporation, not expressly withheld by general law and its certificate; and all previous claims, etc., for and against said corporations may be sued, prosecuted and collected under the laws governing the same prior to the new charter.

3. Foreign corporations may purchase real estate at judicial sales, but may not hold the same more than fifteen years.

4. Foreign glass, steel and iron companies may have factories and other necessary real estate not exceeding one hundred acres, to be subject to taxation and to the same regulations as domestic corporations as to amount of capital employed, taxation of same, and the making of returns to the auditor-general.

5. All foreign corporations except insurance companies and those paying other taxes, not availing themselves of their capital in this state, must procure annual licenses from the auditor-general, paying for the same one-quarter of one mill on each dollar of their capital stock.

6. No foreign corporation may do business in this state without an office and an agent therein, nor until it has filed a statement in the office of the secretary of the commonwealth, setting forth its title, object, location of office and name of agent; a certificate of such filing must be kept on file, and when given for public inspection. Non-compliance with this law is declared to be a misdemeanor.

7. Foreign corporations may not hold real estate unless specially authorized by law, but some of the provisions of a corporation reside abroad does not inoperative for holding real estate, if otherwise qualified.

8. In proceedings against foreign corporations, process may only be served upon any officer, agent or engineer, either personally or by copy left at their office, and when they have an office in any county of this state, service may be had upon any officer or agent within the county.

#### LENS.

All buildings, mines, iron-works, bridges, etc., are liable to a lien for the materials used in their erection, alteration, improvement or repair, or furnished under contract with the owner or his contractor, but no lien is created, unless the holder has notice of intention to file the same, given when the work begins, nor for less than \$20. The lien also covers the ground by which the improvement stands, and so much more contiguous as is necessary for personal use of the materials so supplied under a contract made with a tenant, the written consent of the owner is needed to make the claim valid. The lien takes precedence of every other incumbrance attaching after the commencement of the building. If husband erects a building on his wife's land with her knowledge or consent, a lien will attach for the materials, but must be filed against both husband and wife. To effect the lien a claim therefor must be filed in the office of the prothonotary of the court of common pleas within six months after the materials were supplied. Such claim must set forth the name of the lien claimant, of the owner, of the contractor, architect or builder (if the contract was made with such person), the amount claimed, the materials furnished, the dates when furnished and the prices, the locality, and such a description of the building or alterations as shall be sufficient to identify it.

The lien is enforced by the issuance of a writ of *scire facias* to compel payment by sale of the property. This may be done within five years from the time the materials were furnished, but if judgment is not obtained within five years from the issuance of the writ the lien is lost. Agreements between the owner and contractor bind sub-contractors, and a stipulation that no lien shall be filed will be enforced against the contractor, but not sub-contractors, unless bound by such stipulation unless he agrees to it in writing.

[NOTE.—The state of Pennsylvania has many local laws respecting corporations, mines and liens for materials. Some of these are only advisory in nature. To attempt to give a full statement of these many and varied local laws would serve no useful purpose.]

#### MILLDAMS.

By the common law every person had a right to have a mill on his own land, so long as he did not injure his neighbors and did not divert the water from its natural channel. The statute gives to persons owning lands adjoining navigable rivers, streams, or public highways, except a leugh and schuyld, the right to have milldams adjoining their own lands, and lead off as much water as they need, but not so as to impede navigation or the passing of fish, nor so as to infringe private rights.

#### MIXING.

The constitution forbids the passing of any local or special law regulating labor of miners.

CONSTRICTIONS. 1. Every mine must have two outlets, at least one hundred and fifty feet apart on the surface, and not more than twenty persons may work in said mine at one time before being abandoned, except in case of fire. If a mine is ever abandoned, it is necessary one of said openings may be made on adjoining lands, the damages to be assessed by viewers appointed by the court of common pleas. In bituminous mines worked by shaft, the shaft openings must be more than fifty feet apart. In slopes of anthracite mines, having an inclination of

not more than fifteen degrees, separate traveling ways must be provided, free from gas or steam.

2. Shafts and slopes must have speaking tubes from top to bottom.

3. Machinery must be fenced or protected by railing or otherwise.

4. Self-closing doors for purposes of ventilation, and safety holes to protect miners from falling miners, must be provided.

5. Convenient wash-bosses must be provided near the entrance for the use of workmen.

6. Anthracite mines in which more than seventy-five persons are employed must be divided into two or more districts; underground abandoned workings, and workings at the top of shafts must be properly fenced off, and owners of adjoining lands must leave sufficient pillars of coal in each vein on the dividing line.

DUTIES OF OWNERS, ETC.—1. It is the duty of owners, operators or superintendents of mines to make an annual report of progress to the mine inspectors, and to report all changes in workings which affect the safety of miners; in the anthracite coal field such reports must be made immediately; in the bituminous, once in every three months.

2. To have rules of conduct, approved by the mine inspector, posted in conspicuous places.

3. To drive bore-holes in front and on sides when approaching abandoned or dangerous parts of mines.

4. To provide safety lamps.

5. To provide stretchers at the entrance of all mines. In anthracite mines, sets of anthracite rails, must be laid on railings in dangerous places, props and timbers necessary to the safety of miners, and in certain mines, ambulances in addition to the stretchers; moreover they must not employ anyone as a miner who does not have a certificate of competency from the miners' examining board.

MINING INSPECTORS.—The anthracite and bituminous coal fields are each divided into eight districts, for each of which districts an inspector is appointed by the governor after examination and recommendation by a board of examiners appointed for that purpose. Said inspectors hold office five years in the anthracite field and four in the bituminous.

The duties of inspectors are (1) to examine mines and collieries, (2) to attend inquests, (3) visit places of and investigate accidents, (4) see that all mine laws are observed, (5) keep a record of all workings, (6) make care of maps, plans, records and other property of the state, and (7) make annual reports to the secretary of internal affairs.

BOSSSES AND FOREMEN. In all bituminous coal mines competent mining and fire-bosses, and in anthracite coal mines mine foremen, must be employed. The said mining bosses must have certificates from the mine inspector and two other examiners; the said fire bosses must have certificates from the inspector, and the said foremen or assistant foremen must be registered and have certificates from the secretary of the coal affairs, of qualifications and service, furnished after examination by a board of examiners appointed for the purpose.

The said bosses, foremen or assistants, as the case may be, have charge of the inside workings of mines. It is the duty of foremen and mining bosses to make weekly measurements of the currents of air, and make a report on the same to the inspector; of foremen and fire bosses to make daily examinations of all the workings.

In the anthracite region there must also be outside foremen in charge of breakers and outside workings.

MAPS. The owners, operators or superintendents of all mines or plans on a scale of not more than one hundred feet to the inch, copies of which must be kept at the office of the inspector, and at the colliery for the inspection of miners, upon which maps and copies all changes must be noted every six months. When any part of a mine is about to be abandoned a map thereof must be furnished to the inspector.

VENTILATION. Adequate ventilation, consisting of not less than one hundred cubic feet of air per minute in bituminous and two hundred cubic feet per minute in anthracite coal mines must be provided for every person employed. Abandoned mines and workings must be kept free from gas and water as far as possible.

POWERS OF THE COURTS. Any court of equity may, on petition, issue mandamus to the owner, lessee or operator of any mine to recover, if possible, the bodies of entombed workmen.

WOMEN AND BOYS. It is unlawful to employ boys under twelve years of age in bituminous coal mines or in the outside workings of anthracite mines, or under fourteen years in anthracite mines, or of any age in any mines, except in offices or for clerical work.

WAGES. Wage-workers must be paid in full, in money, twice in each month. Mining and quarrying companies may not, permit, authorize or direct the withholding of wages due employees for the payment of store-bills, except in obedience to process of law, and no assignments of future wages are valid. Wages due to the amount of \$200 are a lien upon real and personal property to the extent of the indebtedness, and are preferred and must be first paid out of the proceeds of a sale of such property. Such claim cannot become a lien upon real estate, unless filed in the prothonotary's office of the proper county, within three months after the date when it becomes due. No voluntary assignments for the benefit of creditors may delay a claim for wages more than thirty days.

MIXING AND QUARRYING COMPANIES.—No mining or quarrying company may carry on any other business than that for which it is incorporated.

**COAL LEASES.**—According to recent decisions a lease of coal is virtually a sale, and the lessee owns the hole from which such coal has been taken.

**COMPANY STORES.**—Mining companies are forbidden to be interested in or carry on general supply stores, called "company stores," or to lease, or to have the right to lease, any of their property. No contract may be made obliging employees to trade at such stores.

**DAMAGES.**—Parties injured, and in case of death the widow and legal heirs of said parties, have a right of action for injuries caused by the violation of mining laws against the party violating them.

## SOUTH CAROLINA

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### CORPORATIONS.

Under the general law, two or more persons desiring to form themselves into a private corporation for the purpose of carrying on in this state any manufacturing, mining, industrial labor, immigration or other business, except for railroad purposes, may file with the secretary of state a written declaration, signed by themselves, setting forth:

1. The names and residences of the petitioners.
2. The name of the proposed corporation; the place at which it purposes to have its principal or only place of business; the general purpose of the corporation, and the nature of the business which it purposes to do.
3. The amount of capital stock, the number of shares in which it is to be divided, showing the par value of each share.
4. Any other matters which it is desirable to set forth in the organic law.

Upon filing the declaration as above the secretary of state shall issue to the parties or any two of them a commission constituting them a board of corporators, giving them authority to open books of subscription to the capital stock of the proposed company, etc.

Subscriptions to the capital stock shall be made payable in money or in labor, or in property at its money value, to be named in the list of subscription. When not less than fifty per cent. of the proposed capital stock has been subscribed by bona fide subscribers, the board of corporators shall call the subscribers together, a majority of whom being present shall proceed to the organization of the company by electing a board of directors from among themselves of not less than three nor more than nine members.

The board of directors shall elect one of their number to be president or the executive officer, and such person as they may see fit as secretary. Upon the completion of the organization of the company, and the payment to the treasurer thereof of at least twenty per cent. of the capital subscribed with security for the remainder of the subscription, the board of corporators shall in writing over their signature certify the same to the secretary of state, who shall issue to the company a certificate of incorporation, a copy of which certificate shall be filed and recorded in the office of the register of mesne conveyances for each county where such corporation shall have a business office. The capital stock may be subsequently increased to an amount not exceeding \$100,000.

Corporations organized under this general law for mining or manufacturing purposes shall have power to construct and operate a railroad, tramway, turnpike or canal for their own use and to cross the same from the county of their incorporation to connect with some navigable stream or some existing railroad, turnpike or public highway, not to exceed ten miles in length, and shall have the right to condemn for the use of such road the right of way in lands over which the road may pass, on payment of just compensation to the owner thereof, to be determined in the manner provided by law for railroad corporations. See *ex parte Bacon*, 15 S. E. Rep., 204.

**FRANCHISE.**—Each corporation organized under this general law shall cease to exist by non-user of its franchises for five years or any one year.

**LIABILITY OF STOCKHOLDERS.**—Each stockholder in any such corporation shall be jointly and severally liable to the creditors thereof in any amount, besides the value of his share or shares therein, not exceeding five per cent. of the par value of the share or shares held by such stockholder at the time the demand of the creditor was created, provided that such demand shall be payable within one year, and that the proceedings to hold such stockholder liable be commenced within two years after the debt becomes due and while he remains a stockholder therein, or within two years after he shall have ceased to be a stockholder. This liability does not apply where the special law in reference to any corporations in this state, a different liability has been or shall be imposed.

**SPECIAL ACT, AMENDMENTS AND REPEAL.**—Corporations may also be organized under a special act of the general assembly. All charters under the general law and any charter granted, renewed or amended by act or joint resolution of the general assembly (unless such act or joint resolution in express terms declare the contrary) are subject to amendment or repeal.

**PRIVATE CORPORATIONS.**—Every private corporation as such has power:

1. To have succession, by its corporate name, for the period limited in its charter, and, when no period is limited, in perpetuity.
2. To sue and be sued.
3. To use a common seal, and to alter the same at pleasure.
4. To hold, purchase, lease, mortgage or otherwise dispose of and convey, in real and personal estate as a limited partner, by its charter, and, if not so limited, such an amount as the business of the corporation requires.
5. To appoint such subordinate officers and agents as the business of the corporation requires, prescribe their duties and the mode of their appointment.
6. To make by-laws, not inconsistent with any existing law, for the transfer of its stock, the management of its property, or the regulation of its affairs.
7. To give and to appropriate by-laws, a lien on the stock of any stockholder in such corporation, for such sum as the stockholder is or may be indebted to the corporation for his subscription to stock therein.

## RHODE ISLAND

### CORPORATIONS.

**HOW FORMED.**—Corporations are created by act of the general assembly of the state; but the general assembly cannot create any corporation for any other than religious, literary or charitable purposes until a bill has been presented and another election for members of the general assembly has taken place, and after public notice of the pendency of such bill, of the purpose of such corporation, and of the place where it is intended to be established, shall be given by the petitioners for such corporation by publication in some newspaper in the town or county for three weeks successively preceding the first Wednesday in April after the presentation of the bill to the legislature.

**TAXES ON.**—Corporations other than those for religious, literary or charitable purposes or military or fire companies cannot be organized under the charter granted by the legislature until the petitioners for the charter pay into the state treasury \$100 and one-tenth of one per cent. upon all capital stock over \$100,000. If a corporation increases its capital stock it must pay one-tenth of one per cent. on the increase. The secretary of state is forbidden to issue any charter or copy of act creating a corporation or increasing its capital stock until he receives a certificate of the state treasurer that this tax has been paid. If the corporation neglects to pay its tax the state treasurer issues a distress warrant against the corporation and delivers it to the sheriff of the county, who seizes the property of the corporation under it, the same as under an execution from court.

**POWERS OF.**—Corporations have the usual powers of having a common seal, owning and conveying property, suing and being sued, making by-laws, electing officers, providing methods for selling shares for non-payment of assessments, and managing their own affairs.

**DURATION OF.**—Corporations continue for the term for which they were chartered by the legislature, and for three years thereafter for the purpose of closing up their affairs.

**EXERCISE.**—The franchise of a corporation may be seized and sold on execution under a final judgment if the corporation be one which is entitled to collect tolls or other like revenue, and in the event of such sale the right to collect such toll passes with the franchise to the purchaser. The franchise may be redeemed within three months after such sale by payment of the purchase price with interest at twelve per cent.

**FRAUDULENT STOCK.**—The issuing of fraudulent stock by any officer or agent of a corporation is a crime punishable by fine of not less than \$1,000 or imprisonment not less than one nor more than ten years.

**INSOLVENT.**—If a corporation is insolvent and neglects to attend to its concerns, or its effects are in danger of being lost, or if it does any wrong which is not redressed, or if its charter under the supreme court may on petition of any stockholder or creditor decree a dissolution of the corporation and appoint a receiver of its property.

**DEBTS TO EMPLOYEES.**—Every corporation and city must pay the employees every week all wages earned by them up to within nine days of such payment, under penalty of fine not less than \$100 or more than \$1,000.

### LIENS.

The real estate built upon, repaired or improved at the request of the owner thereof is pledged, for the payment of materials furnished therefor, subject only to such incumbrances as were outstanding when the work commenced. If the real estate belong to a married woman and the request is made by the husband, the wife's written assent must be obtained. If the person making the request be a tenant, the leasehold interest is all that can be held subject to the lien. Sub-contractors have the same right of lien as the contractors, if they give written notice of their claim to the lien to the owner, and file with the town clerk of the town where the land is situated within sixty days after the materials are placed on the land. Contractors must file their claim within four months after default in payment under a written contract, or within six months after the work is commenced if the contract be oral. The claim must be verified by affidavit, and must contain a description of the property on which the lien is claimed, a list of the materials furnished and to whom supplied, the name of the owner and contractor (if any), the prices, the credits (if any), and the amount owing. The lien must be enforced at the next term of the superior court of the county after being filed. Mortgagees, owners and all other persons interested must be made parties to the suit.

## LIENS.

A lien is given upon the property, and the land upon which it is situated, to anyone who furnishes materials for the erection or repair of any building or structure or vessel, with the consent of the owner or person acting for him, for the value of such materials. If the improvement is a building belonging to a married woman, her consent should be obtained. Contractors must serve notice on owner, if such owner is not the purchaser, of their intention to furnish materials, specifically describing them, and that a lien will be claimed. The owner, if other than the party making the contract for improvements, may then advise by written notice contractor that he will not be responsible, and if he does no lien will attach. To make the lien effective a verified claim therefor, stating name of owner and contractor, containing a bill of items of materials furnished with prices, and a description of the property on which a lien is claimed, must be filed in the office of the clerk of the court of common pleas within ninety days after the materials are furnished. To enforce the lien, a suit must be commenced thereon within six months after the materials are furnished. These liens cannot affect the lien of a mortgage existing and recorded at the time of the contract.

## MINING.

The statutory law refers to the management and protection of the rights and interests of the state in the phosphate rock and phosphatic deposits in the navigable streams of this state and in the marshes thereof.

**BOARD OF PHOSPHATE COMMISSIONERS.**—A board of phosphate commissioners is composed of the governor, attorney-general, comptroller-general and two citizens of the state, the last two to be appointed by the governor, attorney-general and comptroller-general. The governor is chairman of the board, and three members constitute a quorum to do business. A secretary is appointed from among the members of the board.

**DUTIES OF THE BOARD.**—The board is charged with exclusive control and protection of the rights and interests of the state in such phosphate rock and deposits, except that the comptroller-general receives the reports of rock mined and dug and the royalty paid into the state treasury.

**LICENSES.**—The board is authorized to grant to all citizens of the state and bodies corporate applying for the same licenses granting a general right to dig, mine and remove phosphate rock and phosphatic deposits from all the navigable streams, waters and marshes of the state, and also from such creeks, not navigated, lying therein as contain phosphate rock and deposits, belonging to the state and not previously granted. Such licenses shall be for one year, renewable at the pleasure of the board. The licensee is required to give a bond, with security, in the full sum of \$500, for the proper making of the proper returns and payment of royalty. The board is authorized to require all licensees to make returns of the number of tons mined, and to pay a royalty to the state not to exceed \$2 per ton for all rock mined annually, providing six months' notice be given before raising the royalty more than \$1 per ton.

**PENALTIES.**—Anyone mining such rock without license or paying rock so mined is liable to a fine of \$10 for each ton mined, and the vessels, dredges or appliances used by him for such purpose are forfeited to the state.

## SOUTH DAKOTA

Compiled by MARTIN & MASON, Attorneys at Law, Deadwood, S. Dak.

## CORPORATIONS.

**FORMATION OF MINING.**—Articles of incorporation must set forth:

1. Name of the corporation.
  2. Purpose for which it is formed.
  3. Place where its principal business is to be transacted.
  4. Term for which it is to exist, not exceeding twenty years.
  5. Number of directors or trustees, and names and residences of each of them as are to serve until the election of such officers, and their qualifications.
  6. If there be a capital stock, its amount and the number of shares into which it is divided; they must be subscribed by three or more persons, one-third of whom must be residents of this state, and acknowledged by each before a notary public, or other officer authorized to take acknowledgments of conveyances of real property. At least two of the incorporators must also make oath that such corporation is not being formed for the purpose of enabling several corporations to avoid the provisions of Chapter CLIV, Laws of 1880, declaring certain combinations or trusts unlawful.
- Upon the filing of the articles of incorporation and anti-trust oath with the secretary of state, he will issue a certificate thereof, and thereupon the person or persons signing the articles, and their successors, become a body corporate.

**BY LAWS.**—By-laws must be adopted within one month after the filing of such articles, and may provide for:

1. Time, place and manner of calling and conducting meetings.
2. The number of stockholders or members constituting a quorum.
3. The mode of voting by proxy.
4. Time of annual election of directors, and mode and manner of giving notice thereof and qualifications.

5. Compensation and duties of officers.

6. Manner of election and tenure of office of all officers other than the directors.

7. Suitable penalties for violations of by-laws not exceeding in any case \$100 for any one offense.

All by-laws must be certified by a majority of the directors and secretary of the corporation, and copied into a book of by-laws, and may be amended by a vote of two-thirds of the subscribed stock.

**ELECTIONS.**—The directors of the corporation must be elected annually by the stockholders, and if no provision is made in the time of election, it must be held on the first Tuesday in June.

**PLACE OF MEETING.**—Any mining corporation may provide in the articles of incorporation for having a business office in the state at any place within the United States, and to hold any meeting of the stockholders or directors of the corporation at such office, but every such corporation must have its main office for the transaction of business within this state, to be also designated in such articles of incorporation.

**LIABILITY OF STOCKHOLDERS.**—Stockholders shall be jointly and severally liable in their individual capacities for all debts due to mechanics, workmen and laborers employed by the corporation, which liability may be enforced against any stockholder by an action at any time after an execution against such corporation shall be returned not satisfied, provided such action be commenced within four months; and provided that if any stockholder shall be compelled to pay the debts of any creditor, he shall have the right to call upon all the stockholders to reimburse their part of the sum paid by him, and may sue them jointly or severally, or any number of them, and recover in such action the ratable amount due from the person or persons so sued.

**REPORTS AND STATEMENTS.**—Every mining corporation shall annually, within twenty days from the 1st of January, make a report, which must be published in some newspaper published at or nearest to the place where the business of such corporation is carried on, which report must state the capital stock, and amount thereof, in the amount and nature of its indebtedness, and the amounts due the corporation, the number and amount of dividends, and when paid, and the net amount of profits. The said report must be signed by the president and a majority of the directors, and be verified by the oath of the president, or secretary, of the corporation, and filed in the office of the register of deeds of the county where the business of the corporation is carried on. A willful neglect or refusal to make and publish such report is a misdemeanor.

Upon a written request to the treasurer signed by persons owning twenty per cent. of the capital stock, he must make a written statement of the affairs of the corporation, under oath, embracing a particular account of all its assets and liabilities in detail, and a list of the names of all persons who have made the written request, within twenty days after such presentation, and must keep on file in his office for six months thereafter a copy of such statement, which shall at all times during business hours be exhibited to any person who may demand the same, and no officer shall be required oftener than once in every six months, for neglect or refusal to furnish such statements, the treasurer shall forfeit to the persons presenting such request the sum of \$50, and the further sum of \$10 for every twenty-four hours thereafter until such statement shall be furnished.

**FOREIGN CORPORATIONS.**—No corporation organized under the laws of any other state shall transact any business within this state, or acquire or hold any real or personal property in this state until such corporation has filed in the office of the secretary of state a duly authenticated copy of its charter, or articles of incorporation, and shall have appointed an agent residing in the county in the state where the principal business of the corporation is carried on, duly authorized to accept service of process. A duly authenticated copy of such appointment of such agent shall be filed and recorded in the office of the secretary of state and register of deeds of the county where such agent resides.

This statute does not make void the contracts of corporations, void, and no private person can raise the objection that its provisions have not been complied with.

## LIENS.

Every miner, or other person, who, at the request of the owner or owners, or his or their agents, of any lode, mine or deposit, bearing or containing any mineral or deposit, or any real bank or mine, or at the request of any contractor or sub-contractor, shall perform any labor whatever on said mine, or furnish any timber, rope, nails or any other materials for timbering shafts or for the mine owned by such owner or owners, or shall furnish any mine with any apparatus for erecting any windlass, whims, or any other hoisting apparatus or machinery, or for any ear track, cars, tunnels, drifts or openings thereon, or shall perform any labor on any tunnel, shall have a lien on such lode, mine, deposit, bank or tunnel, to secure the payment of the same.

Every such miner performing any work or furnishing any materials under a contract express or implied between the owner and any contractor working on such mine may deliver to the owner of such mine or tunnel, or to his or their agent or superintendent, an attested account of the amount and value of the work and labor thus performed, or of the materials thus furnished, and remaining unpaid, and thereupon such owner or owners, or his or their agent, shall be bound to make the subsequent payments to such contractor the amount so due; it shall be the duty of such owner to furnish such contractor with a copy of such papers, and if such contractor shall not within ten days after the receipt of these papers give such owner notice that he intends to dispute the claim or if, ten days after giving such notice, he shall refuse or neglect to have the matter adjusted, he shall be considered as assenting thereto, and such owner or

owners may pay the same when it becomes due, and for that purpose may deduct the amount out of any moneys due such contractor. The amount which may be due from any contractor to his creditor may be recovered from said owner or owners by the contractor or subcontractor at an action at law to the extent in value of any balance due by the owner or owners to his or their contractor under the contract with him at the time of the notice first given as aforesaid, or subsequently, according to such contract, or under the time.

Any person entitled to such a lien shall make an account of the items of labor or material furnished and, after verifying the same, shall within sixty days after the time of completing such labor, or furnishing the last item of material, file the same in the office of the clerk of the court in the county or subdivision in which the mine is situated; and also file at the same time a correct description of the property to be charged with said lien, and thereupon the same shall, from the time of the completion of the work, or furnishing the last item of materials, and for one year thereafter, operate as a lien upon the property charged in such description. When any work or labor has been performed, or materials furnished as aforesaid under a written contract, the same, or a copy thereof, shall be presented to the clerk with account and description. All such liens shall be concurrent liens.

In all actions to enforce any such lien, all persons claiming liens upon the property charged shall be made parties, and the rights of all parties shall be determined by the court. The foregoing law applies to oil wells, springs, iron and lead mines as well as all other mines not before specified so far as the same may be applicable.

MILLDAMS.

Any person desiring to erect a milldam upon his own land, and deeming it necessary to damage by overflowing, or otherwise, real estate owned by him, shall present to the judge of any court of record in the county a petition setting forth the place where said dam is to be located, the height to which it will be raised, the purpose to which the water power will be applied, etc., whereupon the judge shall appoint three commissioners, who shall, upon notice, hear testimony and make an assessment of damages. An appeal lies from such assessment to the court aforesaid by any party interested, excepting a petitioner, at any time within thirty days from the time of the notification of the filing of the commissioners' report. The appellant shall file an appeal bond in double the amount of the assessment appealed from, in the usual terms. Upon payment of the damages assessed, judgment shall be entered declaring the right to erect and maintain a milldam according to the petition, and shall be and remain in the petitioner, his heirs and assigns forever, subject to be lost by a failure for one year thereafter to begin to build said dam and to finish the same, and apply the water power thereby created to the purposes stated in his petition, within three years; or, in case the dam is destroyed, shall be lost by the petitioner's failure to rebuild in one year after such destruction, and finish in three years, or by failure to keep such mills in operation for one year at any one time. All action for damages occasioned by the erection and maintenance of the milldam shall be brought within two years after the erection of said dam, provided that such limitation shall not run against or apply to persons living on and holding government land under the pre-emption laws, until a patent for the land overflowed shall have been issued.

MINING.

SIZE.—Mining claims shall not exceed fifteen hundred feet along the vein by one hundred and fifty feet on each side of the center thereof.

RECORD.—The discoverer of a lode shall, within sixty days from the date of discovery, record his claim in the office of the register or clerk of the county in which such lode is situated by a location certificate which shall contain:

1. The name of the lode,
2. The name of the locator or locators,
3. The date of location,
4. The number of feet in length claimed on each side of the discovery shaft,
5. The number of feet in width claimed on each side of the claim or lode,
6. The general course of the lode as near as may be.

Any location certificate which does not contain the foregoing requirements and such description as shall identify the claim with reasonable certainty shall be void.

WAYSIDE OR LOCATIONS.—Before filing such location certificate, the discoverer shall first sink a discovery shaft sufficient to show a well-defined mineral vein or lode, within sixty days from the time of the uncovering of the lode.

By posting at the mouth of every opening on the surface a plain sign, or notice, containing the first five requisites of the location certificate above given.

By marking the surface boundaries of the claim by eight substantial posts, located on each of the side or sides facing the claim and plainly marked with the name of the lode, and the corner, end or side of the claim that they respectively represent, and sunk in the ground, or, when necessary, in a monument of stone to wit: the one at each corner and one at the center of each side line and one at each end of the lode.

RIGHT OF WAY.—All mining claims shall be subject to the right of way of any ditch or flume for mining purposes, or of any tramway, or pack trail, provided such right of way shall not be exercised against any lode claim, and not abandoned prior to the establishment thereof, without consent of owners, except by condemnation.

AMENDED CERTIFICATE.—If at any time the locator of any mining claim, or his assigns, shall apprehend that his original

certificate was defective, erroneous, or that the requirements of the law had not been complied with before filing, or shall be desirous of changing his surface boundaries, or of taking in any part of an overlapping claim which has been abandoned, such locator, or his assigns, may file an amended certificate, subject to the foregoing provisions; provided that such re-location does not interfere with the existing rights of others at the time of such re-location, and no such re-location or the record thereof shall prejudice or claimants from proving any such title or titles as he or they may have held under previous locations.

ANNUAL WORK.—Requirement as to annual work is the same as that of the United States statutes.

RE-LOCATING ABANDONED CLAIMS.—The re-location of abandoned lode claims shall be by sinking a new discovery shaft, and fixing new boundaries in the same manner as if it were the location of a new claim; or the re-locator may sink the original shaft, cut or add to a sufficient depth to disclose the vein, and adopt the old boundaries, renewing the posts if removed or destroyed. In either case, a new location stake shall be erected. In any case, whether the whole or a part of an abandoned claim is taken, the location certificate must state that the whole, or any part of the new location is located as abandoned property.

ONE CERTIFICATE, ONE LOCATION.—No location certificate shall claim more than one location, whether the location be made by one or several locators; and if it purport to claim more than one location, it shall be absolutely void, except as to the first location therein described, and if they are described together, or so that it cannot be told which location is first described, the certificate shall be void as to all.

DISPUTE PROPERTY.—In all actions wherein the title to any mining claim is in dispute, the court or judge thereof may, upon proper application, enter an order for an underground as well as surface survey of such part of the property in dispute as may be necessary to a just determination of the question involved.

APEX AND DIP.—South Dakota statutes are the same as statutes of the United States on all those subjects not hereinbefore digested.

QUARRIES.

Quarries located on other than public lands of the United States are governed by the ordinary rules applicable to real estate.

REAL ESTATE.

Sluice boxes, flumes, hose, pipes, railway tracks, cars, black-sluice shops, mills, and all other machinery or tools used in developing or working a mine are to be deemed real estate to the mine, and are real estate.

TENNESSEE

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CORPORATIONS.

FORMATION OF.—Articles of incorporation must set forth:

1. Names of five or more incorporators not under twenty-one years of age.
2. Name of the corporation and the purpose for which it is formed.

The signatures of said five or more incorporators must be acknowledged, or any one or more signatures proved by one witness before the clerk of the county court; the fact of acknowledgment or probate to be entered on the books of his office, and also certified on the instrument, which instrument, with the application, the acknowledgment or probate, shall be registered in the register's office of the county where the main business of the corporation is to be conducted. The fact of registration to be by the register indorsed on or attached to said instruments. The said instrument, registered as aforesaid, shall then be transmitted to the secretary of state, who shall copy the same in a book to be kept for that purpose, with the probates, acknowledgments, certificates of clerk, register, etc. The secretary of state shall then certify in the original instrument that the same has been registered in his office, to which certificate shall be affixed the great seal of the state, and upon the fixing of the great seal of the state to said certificate or said original instrument, and the registration of said secretary's certificate, and the fac simile of said seal in the register's office, where said instrument was originally registered, the formation of the association as a body politic and corporate is hereby declared complete, and the validity of the same shall not be in any legal proceeding collaterally impeached.

BY LAWS.—Corporations may by by-laws make regulations concerning the subscription for, or the transfer of stock, fix upon the amount of capital to be invested in the enterprise and the division of the same into shares.

DIRECTORS, BOARD OF.—The vote of each share representing a vote. The term of all officers may be fixed by by-laws, the same, however, not to exceed two years.

DIRECTORS, LIABILITY OF.—No loan of money shall at any time be made to any stockholder, and any such loan shall render the directors consenting thereto individually liable for the amount thereof. If the indebtedness of said company shall at any time exceed the capital stock paid in, the directors consenting thereto shall be individually liable to the creditors for said excess. If the directors declare and pay any dividend when the company is



insolvent, they shall be jointly and severally liable to creditors for the amount of dividend thus declared. But any director may avoid liability by voting against the dividend or by filing his objection in writing as soon as he ascertains the dividend has been made.

**ORDER OF MEETING.**—The stockholders may by three-fourths majority change, direct and appoint the time and place at which all subsequent meetings shall be held.

**STOCKHOLDERS, LIABILITY OF.**—Stockholders are severally liable individually at all times for all moneys due and owing to the laborers, servants, clerks and operators of the company, in case the corporation becomes insolvent.

**FOREIGN CORPORATIONS.** Every foreign corporation desiring to carry on its business in this state must first file in the office of the secretary of state a certified copy of its charter or articles of its incorporation, and have cause a transcript of the same to be recorded in the office of the register of each county in which such corporation proposes to carry on its business or to acquire any lands, then they shall be deemed to be corporations of this state. Nevertheless the creditors who may be residents of this state shall have the priority in the distribution of assets over all simple contract creditors being residents of any other country or countries. And also over judgment creditors for all debts which were made by said corporation before the rendition of such valid judgments. Upon the failure of any such corporation to commence in good faith to develop and work some portion of its property within this state within one year after filing its said charter, all rights and privileges shall lapse and become void.

#### LIENS.

All employes and day laborers of any corporation have a lien on the employer's property for wages or compensation in arrears three months. This lien is enforceable by attachment or otherwise in ordinary proceedings. If proceedings are not begun within three months from the time the lien attached, it will be lost. The rights of bona fide purchasers, and persons having valid liens at the time proceedings are begun, are superior to this lien. Employers shall not be compelled to purchase goods from company store.

A lien is given to whoever furnishes materials, by virtue of a special contract with the owner, for the construction or repair of a house, or the furnishing or erection of fixtures, machinery or improvements. If the contract be made with the mortgagee or vendee who holds the title to a vendor's lien, and the mortgagee or vendee do not object within ten days after being notified in writing, the lien for materials will take priority over the mortgage or vendor's lien. If the material be furnished for an improvement on lands owned by a vendor's lien, and the mortgagee must be in writing and signed by her, or else the material-man will have no remedy save to remove the building after ten days' notice. The lien covers the building or improvement and the lot or lands on which it is constructed and takes precedence of all encumbrances created after the material is furnished. Sub-contractors must notify the owner in writing, within thirty days after material is furnished, that a lien is claimed, and this will continue their lien for ninety days from date of such notice, provided a statement of the material furnished be filed with the county register and by him recorded in the "trust book." The liens of sub-contractors can in no case exceed the amount which the owner agreed to pay the original contractor. The lien of the original contractor continues for one year and until the final decision of a suit to enforce it brought within such year in a court of record of the county where the building or improvement is situated.

#### MILLDAMS.

The county court of each county has control of the erection of milldams under such conditions, restrictions and limitations as in its discretion may seem proper. No county court can permit a milldam to be constructed across a river or in any way injure or impair the navigation of such streams as are naturally navigable or as have been declared to be so by law.

Any person desiring to construct a milldam shall present a petition to the county court of the county where the dam is to be built on the first day of the quarterly session setting forth the nature and object of the dam.

If the petitioner is not the owner of the land on both sides of the stream, his petition shall be accompanied by the written consent of the owner or owners of the land, which consent shall be proven by two witnesses to the same. Notice of the intent on to present the petition shall be set up at the door of the court-house, at the same time at which it is presented. At the next succeeding term the county court shall hear and determine upon the application and fix the term of time for which the right or privilege shall be enjoyed.

**WATER RIGHTS.**—A stream is navigable in a legal sense when it is capable in the ordinary use of the land, which consists of shall be both ascending and descending by such vessels as are usually employed for purposes of commerce. A stream not navigable in a legal sense may yet be navigable in the common acceptance of the term, as when in certain stages of the water it may have sufficient depth to float rafts or rafts of logs, etc. If a stream be navigable in the legal sense, the riparian owner's land extends to the low-water mark of the stream. The bed of the stream as well as its use belong to the public. If a stream be navigable in the ordinary use of the land, the ownership of the stream is in the riparian owners, but the public have an easement for the purposes of transportation and commercial intercourse. If the stream be not navigable, the riparian owner's title extends to the center of the stream, both as to right of property and use of water.

The owner of land through which a non-navigable stream passes may turn the water from its channel for his uses, provided he returns it to the channel before it leaves his land. And such a person may have an action against an owner below him on the stream for interrupting such use of the stream by erecting a dam on the stream or for diverting the water to his property. A right to permanently overflow the land of another is a hereditament, and a conveyance of sale thereof must be in writing.

**NUISANCES.**—It is a public nuisance to obstruct or impede without legal authority the passage of any navigable river or collector of water. It is a public nuisance to corrupt or render unwholesome or impair the water of any river or stream or pond to the injury or prejudice of others.

#### MINING.

**RIGHTS AND POWERS, SPECIAL.** Mining corporations shall have the authority to condemn the right of way necessary for the transportation of the corporate business, not exceeding thirty feet in width over the lands of any private person or corporation. All mining corporations, three-fourths of the stock being represented and cast in the affirmative, may subscribe for, purchase, hold or dispose of stock in any railroad company whose title road shall be so near as to be used by them in carrying on their necessary operations. For the purpose of raising the money to pay for such stock, such corporations are authorized to indorse the bonds of said railroad or to issue company mortgage bonds. Said mining companies are authorized to mortgage their franchises and estates, real and personal, to secure the payment of bonds so indorsed or issued as aforesaid.

**STATEMENT ANNUALLY.** Annually during the month of January, the president shall make and publish in a newspaper printed in the county where the principal office of business is located, or, if no newspaper is printed in that county, then in an adjoining or the nearest county where a newspaper is printed, a sworn statement, showing the amount of capital stock and the existing liabilities and a list of names of the stockholders. The making of a false statement to be printed as aforesaid shall render all persons consenting thereto individually liable to all persons dealing or trading with said company on the faith of said fraudulent statement.

**INSPECTOR OF MINES.** One mine inspector for the entire state shall be appointed by the governor of the state, whose term of office shall be four years. He shall be a practical miner of not less than five years of experience in mining, having a full and perfect knowledge of the different systems of working and of all diluting coal mines and of the nature and property of all noxious gases in said mines. The office of the inspector shall be kept in the city of Chattanooga, together with all maps and plans of all mines worked in the state. Said inspector shall annually on or before the 1st day of January make a report to the governor of the state of the condition and operation of the mines in the state. Said inspector shall inspect all mines that are being worked in the state, and he shall, if he deems it necessary or by accident in any of the mines of the state or any serious accident should occur in said mines, the agent or person operating the same shall immediately notify the inspector; if any deaths should occur in any of the mines, the inspector shall be notified, who shall summon a jury to inquire into the cause of the death, and who shall make a report of the verdict to the inspector. Thereupon the inspector shall investigate the matter and take such steps as will prevent a recurrence of the accident.

**MAPS OR PLANS.** The agent or owner of every coal mine shall furnish an accurate map of the plan of workings of said mine to the inspector. On the 1st day of January and June in every year a statement of the plan of the progress of the workings of the mines shall be furnished said inspector. The penalty for furnishing false maps or plans shall be not less than \$50 nor more than \$200.

**OUTLETS OR ESCAPES.** There shall be at least two separate outlets separated by natural strata not less than one hundred and fifty feet apart, and by which the water from every lift and every ingress and egress are always available to the persons employed in the mines.

**VENTILATION.** The owner or agent of every coal mine shall provide an adequate amount of ventilation and not less than fifty cubic feet of pure fresh air for every lift and every person, and as much more as circumstances may require. The ventilation may be produced by air pumps or other appliances, but in no case shall a furnace be used inside of the mine where the coal breaker and chutes are built, directly over and covering the top of the shaft, for the purpose of producing an upcast of air.

**MINING BOSS.** Every agent or owner of coal mines shall employ a competent and practical inside overseer, who shall keep safe over the ventilating apparatus, etc., and all things pertaining to the safety of the miners. He has the duty to cause the ventilation at least once a week and report to the inspector once a month.

**HOISTING TRIPS, ETC.** The owner or agent of every coal mine shall employ suitable appliances for hoisting from top to bottom of the shaft and safe machinery for lowering or hoisting purposes.

**BOYS.** No boy under twelve years of age shall work or enter any mines.

**PENALTIES.** Violations of any of the above provisions will subject the agent or owner of the mine to a fine, and upon application of the inspector, acting in behalf of the state, such agent or owner shall be imprisoned for every lift and every person.

**CHECK-WEIGHING.** At all the mines, or a majority of those present at a meeting called for that purpose, have the right to employ a check-weigher, who shall be permitted at all times to be at weighing or at the weighing of coal, and to have the privilege to balance and examine the scales and to measure the cars.

**FURTHER DUTIES OF CHECK-WEIGHMAN.**—He shall credit each miner with all merchantable coal or other minerals mined by him, on a proper sheet or book kept by him for that purpose. When differences arise between the check-weighman and the agent of the mine, the same shall be referred to the mine inspector of the district, who shall settle the matter.

**PENALTIES FOR FALSE WEIGHING.**—Should any weighman, agent or check-measurer knowingly or willfully adopt or take more or less pounds for a bushel or a ton than is now provided by law, or willfully neglect the balancing or examining of the scales, or ears or willfully weigh coal with an incorrect scale, he shall be guilty of a misdemeanor.

#### QUARRIES.

**THE FORMATION OF QUARRYING CORPORATIONS.**—The charter granted to quarrying corporations and their general powers are similar to those granted to mining corporations. The regulations with reference to liabilities of stockholders and directors, the publication of statements, liabilities for false statements, capital stock, condemnation of property for right of way, place and time of meeting, are the same as in the case of mining corporations, the only difference between the power of a mining and quarrying corporation being that the power to subscribe or purchase stock in any railroad company is withheld from quarrying corporations.

#### WAGES.

All persons, firms, companies or corporations engaged in mining coal, ore or other mineral shall pay their laborers and employes the amount due them for their work in lawful money of the United States or by cash orders, and shall adjust accounts at least once in every thirty days. It shall not be lawful for them to issue for payment of labor any order or other paper whatever, unless the same purports to be redeemable for its face value in lawful money of the United States by said person, company or corporation.

## TEXAS

### CORPORATIONS.

Corporations are either public or private. A public corporation is one that has for its object the government of a portion of the state. Private corporations are of three kinds: First, religious; second, corporations for charity or benevolence, and third, corporations for profit.

**CREATION OF CORPORATIONS.**—Private corporations may be created by the voluntary association of three or more persons for the purposes and in the manner hereinafter mentioned. The purposes are—almost anything which is not unlawful. A charter must be prepared setting forth:

1. Name of corporation.
2. Purpose for which it is formed.
3. Place or places where its business is to be transacted.
4. Term of its existence.
5. Number of its directors or trustees and the names and residences of those who are appointed for the first year.
6. Amount of its capital stock, if any, and the number of shares.
7. The charter of a bridge or ferry company shall also state the stream to be crossed.
8. The charter of a road company must also state: First, the kind of road intended to be constructed; second, the places from and to which the road is intended to be run; third, the counties through which it is intended to be run; fourth, the estimated length of the road.

It must be subscribed by three or more persons, two of whom, at least, must be citizens of this state, and must be acknowledged before some officer authorized to take acknowledgment of deeds. Shall be filed in office of secretary of state, recorded and kept in his office; a copy thereof under state's seal shall be evidence of the corporation; its existence dates from date of filing. Corporations may amend or change their charters by causing the amendments or changes to be authenticated as original charter, and filing with secretary of state, etc., which amendment or change dates from filing. The original purpose of charter cannot be changed by amendment, and must not be contrary to the constitution or laws of this state.

All charters, or amendments to charters, under this chapter, 2, title XX, shall be subject to the power of the legislature to alter, reform or amend the same.

Fees for charter, or amendment or supplement thereto, of a private corporation for religious, literary, benevolent or scientific purposes, \$30; for any other purpose, \$25, except railroad or telegraph companies, which pay a fee of \$100, paid at time of filing charter.

**GENERAL POWERS AND DUTIES OF PRIVATE CORPORATIONS.** Every private corporation has power:

1. To have succession of its corporate name for the period limited in its charter, not to exceed fifty years; when no period is limited, for twenty years.
2. To maintain and defend judicial proceedings.
3. To use a common seal.
4. To hold, purchase, sell, mortgage or otherwise convey such real and personal estate as the purposes of the corporation shall require, or to secure any debt or liability due or belonging to the corporation.

5. To appoint and remove subordinate officers and agents, and to allow them suitable compensation.

6. To make by-laws, not inconsistent with existing laws.

7. To enter into any obligation or contract essential to its business.

8. To increase or diminish the number of its directors or trustees, to be not less than three nor more than thirteen, by vote of stockholders.

May increase its capital stock to not exceeding double the amount to be held at such times and places as by-laws direct, of its authorized capital, which shall be certified to secretary of state.

May borrow money, issue bonds or notes therefor and pledge the property and income of the corporation. May open books for subscription of stock within three months from filing charter, after giving thirty days' notice in a newspaper published or generally circulated in the places where books are to be opened.

A majority of the stockholders or trustees shall constitute a quorum to transact all business. Annual elections of directors or trustees to be held at such times and places as by-laws direct, who shall of their number choose a president, and shall appoint a secretary and treasurer and such other officers as deemed necessary.

Directors or trustees may adopt by-laws, which may be altered or changed by majority vote of stockholders, at any election or special meeting for that purpose by the directors or trustees on written application of majority of stockholders or members.

Elections, if not held on day appointed, may be held on any other, as per by-laws.

Books shall be kept wherein are to be recorded all business transactions, and open to inspection of all stockholders. And when required by one-third of the stockholders, shall report in writing to the directors of the corporation, and shall declare dividends, etc. The stock deemed personal estate and transferable only on books of corporation, as by-laws declare. Board of directors may require the subscribers to the capital stock to pay amount subscribed, as may business and by-laws direct. Directors may forfeit when stockholder shall neglect to pay his installments after being notified.

Directors who pay any dividend when its payment would render the corporation insolvent shall be jointly and severally liable for all debts of the corporation to the extent of the dividend so paid. But any director who shall file his objections to such payment shall not be so liable. Principal office to be kept in this state.

**LIABILITY OF STOCKHOLDERS.** If there is no property of the corporation to be found, execution may be issued against stockholders to the extent of unpaid stock, etc.

Whenever any banking, mercantile or other business firm desires to become incorporated without a change of the firm name, such firm shall, in addition to the notice of dissolution required at common law, give notice of such intention to the secretary of state, and to the editor of each newspaper published at the seat of government, and in the county in which such firm has its principal business office, if there be a newspaper in such county, and, if not, then in some adjoining county, and no change shall take place in the liability of such firm or the members thereof.

**FOREIGN CORPORATIONS.** That any corporation organized or created under any other state or territory, or any foreign government, desiring to transact business in this state, is required to file with the secretary of state a duly certified copy of its articles of incorporation, when such secretary shall issue a permit to such corporation to transact business in this state.

No such corporation can maintain any suit at law or equity, in any of the courts of this state upon any demand, whether arising under contract or tort, unless at the time such contract was made, or tort committed, the corporation had filed its articles of incorporation with the secretary of state to procure its permit.

Such corporation shall, if its capital stock be \$100,000 or less, pay a fee of \$10; if more than \$100,000 and less than \$500,000, a fee of \$20; if more than \$500,000 and less than \$1,000,000, a fee of \$30; if more than \$1,000,000, it shall pay a fee of \$200.

No permit shall be issued for a longer period than ten years.

The original permit or certified copies thereof shall be evidence of the compliance of said corporation with the requirements of the secretary of state that if any such corporation has failed to file in his office its articles of incorporation shall be evidence that such corporation has in no particular complied with the requirements of this act.

The provisions of this act shall not apply to corporations created for the purpose of constructing, building, operating or maintaining any railway, or to such corporations as are required by law to procure permits to do business from the commissioner of agriculture, insurance, statistics and history.

#### LIENS.

Mechanics, contractors, builders and material-men have a lien on the improvements made by them, and on the land on which they stand, for their debt, and may fix and secure the lien upon said property, by filing the contract and having it recorded in the county clerk's office within six months after it becomes due; if the contract is verbal, other formalities are required. In the case of honested no lien is allowed unless contract is in writing and the consent of the wife is given as required in case of sale of the honested.

Persons performing labor in the construction or repair of railroads or their property, or in the operation of a railroad, have a preferred lien upon such railroad and its equipments for their wages. Keepers of hotels and boarding houses have a lien on baggage and all property deposited with them for their bills.

## MINING.

By act of the legislature of April 14, 1883, all minerals in the public school, university, asylum and public lands of the state of Texas, were reserved from the operation of the sale of such lands. By the same act the state land board had the control and management of the disposition and use of said minerals. The mines could be worked under certain rules and regulations giving to the land board five per cent. of the gross proceeds of the mines, but not less than \$100.

By act of March 29, 1887, all public school, university, asylum and public lands containing valuable mineral deposits were reserved from sale or other disposition, except as provided in said act, and were declared free and open to exploration and purchase by citizens of the United States, and those who have declared their intention to become such. Locators under former act had the right to accept within thirty days the provisions of the latter act.

All unsold lands were to be classified by the commissioner of the general land office of the state, and may include showing location of all such lands and have all mineral lands so designated, and all locations to be put into mining districts with a surveyor.

Mining claims upon veins or lodes of quartz or other rock in place bearing embar, lead, tin, copper or other valuable metals, excluding deposits of iron ore, coal, kaolin, barite, salt, marble, fire clays, valuable building stones, oil or natural gas, may equal but shall not exceed one thousand five hundred feet along the vein or lode, not to exceed twenty-one acres in total area. Locator shall post notice, place monuments at corners, etc., and within three months file with the surveyor a certificate containing a tunnel ten feet in length, or open cross cut twenty feet in length, four feet wide and ten feet deep, and within said time file with surveyor application in writing for survey of the claim; and field notes to be returned to the commissioner of general land office. One hundred dollars' worth of work to be performed annually on each claim, but where claims adjoin the amount of work may be done on one for all belonging to same party. And claimant shall, in addition to this amount of work, annually pay to the treasurer of the state \$20 on each claim filed upon, which amount shall be a credit upon the final payment for such claim at \$25 per acre. Patent may be obtained within five years from filing application for survey.

Discovery tunnels may be run and owner of such tunnel shall have the right of possession of the veins or lodes discovered by such tunnel within two thousand feet of the face of such tunnel, on the line thereof.

Locators as individuals or associations of not less than four persons, shall have the right to locate and obtain patent for any quantity of these lands containing coal, iron ore, lead, zinc, barite, salt, marble, oil, natural gas, or valuable building stones, in legal subdivisions of the section, not exceeding one hundred and sixty acres to an individual person, or three hundred and twenty acres to an association or corporation, and the payment of not less than \$25 per acre, and for any such mine or lode more than ten miles from such railroad, and not less than \$20 when any association of not less than four persons shall have expended not less than \$2,000 in working and improving any such mine or mines, such association may enter not exceeding six hundred and forty acres, including such mining improvements, and further provided, that only one entry can be made by the same person or association of persons, and that where two or more persons, any number of which shall have taken the benefit of this act, either as an individual or as a member of any other association, shall enter or hold any other land under the provisions of this act, and no member of any association which shall have taken the benefit of this act shall enter or hold any other lands under its provisions. When any lands have been disposed of by the state since April 14, 1883, and a location is made thereon since said disposition by the state, and the locator or his assigns have not abandoned his claim, or his situation in good faith, he is entitled to the mineral and to the use of the superfluous area as in other cases; and if the case is such that the fee in the land cannot pass by patent, a patent may issue to all the mineral in the claims, and surveys and other proceedings may be taken upon and work done on each claim and extract the mineral therefrom. In such cases where the fee does not pass, the price shall be \$20 per acre, and the locator or his assigns shall, in addition, pay to the owner of the land in fee the fair valuation of the land so taken up by his survey and other proceedings, and no such locator may ingress and egress thereto, and be liable for any damages which may result to the owner of the land in fee. All other provisions of this act shall apply to said location.

Claims usually called placers, including all forms of metallic deposit, excepting veins of quartz or other rock, shall be subject to entry and patent under like circumstances and conditions and upon similar proceedings as are provided for vein or lode claims. All placer claims located shall conform as nearly as practicable with existing surveys and their subdivisions, and no such location shall include more than forty acres for each individual claimant, and shall not exceed three hundred and twenty acres for any association of persons. The price shall be not less than \$10 per acre.

Mill-sites may be located on non-mineral bearing lands. Owners of quartz lodes or reefs or veins of such rocks, when in connection therewith may also receive a patent for a mill-site as provided in this section.

All claims upon which patents have not been applied for within five years after application for survey, etc., are forfeited without judicial action and subject to location by any other person. The above and foregoing are the main points of the law.

## UTAH

Compiled by BOOTH, LEE & GRAY, Attorneys at Law, 64 and 65 Commercial Block, Salt Lake City, Utah.

## CORPORATIONS.

CONGRESSIONAL LEGISLATION.—The legislatures of the several territories are forbidden to grant private charters, or special or exclusive privileges, immunities or franchises whatever, but they may, by general incorporation acts, permit persons to associate themselves together as bodies corporate for mining, banking, manufacturing, etc.

The territory may form the political or municipal corporations or subdivisions of such territory are forbidden to make any subscription to the capital stock of any incorporated company, or in any manner loan its credit to, or use it for the benefit of any such company, or borrow any money for such company.

Corporations, when more than twenty per centum of the capital stock is owned by any person or persons, corporation or corporations, association or associations, not citizens of the United States, are forbidden to hold real estate in the territory.

All corporations, except those organized for the construction or operation of railways, canals or turnpikes, are forbidden to hold or own more than five thousand acres of land in the territory. TERRITORY. EX-YERFAXES.—No number of persons, not less than five, one-third of whom are residents of this territory, may associate themselves together and become incorporated, under a general act, for establishing and conducting any mining, manufacturing, commercial, or other industrial pursuit, or for the purpose of conducting the business of investment, trust or guarantee associations, or the construction or operation of wagon roads, irrigating ditches, or the colonization and improvement of lands, or for colleges, seminaries, churches, libraries, or any benevolent, charitable or scientific associations, or for any lawful subjects consistent with the constitution and laws of the United States and the laws of the territory.

They shall enter into a written agreement, signed by each of them, and acknowledged by at least three of them before the probate judge of the county in which they locate their principal place of business. That agreement must state:

1. The precinct or city.
2. The name of the association.
3. The incorporators' names and places of residence written in full.
4. The time of its duration, which shall not in any case be less than three years nor more than fifty years.
5. The pursuit or business agreed upon, specifying it in general terms.
6. The place of its general business.
7. The amount of stock each party has subscribed, the amount of the share, and the limit of the capital stock agreed upon.
8. The number and kind of officers for the association, with their qualifications and term of office, and the time and manner of their election, removal and resignation; how many of the entire board of directors shall be authorized to transact the business and exercise the corporate powers of the corporation.
9. Whether the private property of the stockholders shall be liable for its obligations or not.

Such additional clauses as they deem necessary for the conducting of the business and its future safety and welfare.

To this there shall be added the oath or affirmation of three or more of their number to the effect that they have commenced, or it is bona fide their intention to commence, and carry on the business mentioned in the agreement, and that the applicants verily believe that each party to the agreement has paid or is able to and will pay the amount of his stock subscribed for; provided that said acknowledgment shall not be made before the probate judge until ten per cent. of the stock subscribed by each shareholder has been paid in; and provided, further, that where the amount of the capital stock of any corporation which may be formed under the provisions of this act is computed by the value of property, for the purchase, development, management, use, sale or exchange, of which such corporation shall be formed, no actual subscription in money to the capital stock of such corporation shall be necessary; but each party to said agreement shall be bound to pay to the probate clerk the amount to the capital stock of such corporation as under the by-laws will represent the fair estimated cash value of so much of said property, the title to which he may, by deed of trust, convey, or may have conveyed, or may hereafter convey, or may hereafter be deemed to have been paid in upon the execution and delivery to such corporation of such conveyance or deed of trust; but these provisions shall not be so construed as to prohibit the stockholders of any corporation from regulating the amount of such subscription to its capital stock and calling in the same manner by-laws or express contract; but when subscriptions to capital stock are paid in other than money, the fact shall be so stated, and the kind of property, with a description thereof, specified in the articles of agreement.

The agreement with the oath or affirmation shall be deposited with the probate clerk within ten days after due execution, and recorded by him.

The officers must, before entering upon their duties, take and subscribe an oath of office, and enter into bonds to the acceptance of the probate judge, that they will discharge the duties of such office to the best of their judgment, and that they will do no act inconsistent with the duties of any other office which they hold in the name of the association with intent to defraud any stockholder, or creditor, or the public, which oath and bond shall be filed in the same office. Whereupon the probate clerk shall issue, under the seal of his court, a certificate of the filing of the agreement, and oath and the oath of office and bond have been filed in his

officer, which certificate, with a copy of the articles of agreement and oath, certified by him, must be filed in the office of the secretary of the territory, who shall issue, under seal of the territory, a certificate to that fact, and these proceedings and certificate shall be sufficient to constitute the association a body corporate with succession, and the latter certificate, or a certified copy thereof, shall be evidence of the due incorporation.

**POWERS OF.**—Corporations so created are authorized to exercise the usual powers of business corporations, use a common seal, to buy, hold or sell such real estate as may be necessary to their business or to collect debts, to make by-laws, to increase or diminish the capital stock by fractional proceedings.

Corporations now have the right to own and the power to buy and sell real estate as a business to the extent of the limitation imposed by Congress.

**FRAUDS.**—The omission to make the proper entries, or the making of false and fraudulent entries by the secretary or person in charge of the books, with intent to deceive or defraud, is declared to be forgery and punished as such.

**FRAUDulent MISAPPROPRIATION,** conversion or concealment of money by an officer, director or employe or other person, is embezzlement and punished as such.

**FOREIGN CORPORATIONS.**—Foreign corporations may enter into business in this territory, but all such corporations are required—

Within sixty days to file with the secretary of the territory, and also with the probate judge of the county wherein the principal office of the territory is situated, certified copies of the articles and certificates of incorporation, and in case of alteration and amendment of said articles or by-laws thereafter shall file certified copies of such alteration or amendment with each of said officers, within thirty days after their adoption.

Such corporation shall, in every day of its continuing business, designate some person, residing in the county in which its principal place of business in the territory is situated, upon whom process may be served, and shall file such designation with the probate judge and secretary of the territory.

Any corporation failing so to comply shall not be entitled to the benefits of the laws limiting the time for the commencement of civil actions.

**TAXATION.**—The property of all corporations for pecuniary profit is subject to taxation, the same as that of individuals.

Shares of stock in corporations are not taxable when the property of the corporation is taxable.

**SPECIAL PROVISIONS.**—Our laws contain special provisions for banking, domestic railroads, telegraphs, telephones, insurance, irrigation, loan, trust and guarantee associations, and building and loan associations.

There are no special territorial laws in regard to quarrying or in regard to milldams.

#### LIENS.

All persons who shall do work or furnish materials for the working or development of any mine, lode, mining claim or deposit yielding metals or mineral of any kind, or for the working or development of any such mine, lode or deposit in search of such metals or minerals, and all persons who shall do work or furnish materials upon any shaft, tunnel, incline, adit, drift or other excavation, designed or used for the purpose of draining or working any such mine, lode or deposit, are entitled to the benefit of the lien laws of this territory.

The lien shall attach in every case to such mine, lode and deposit, and to such shaft, tunnel, incline, adit, drift or other excavation, though such shaft, tunnel, incline, adit, drift or other excavation be not within the limits of such mine, lode or deposit; provided, that when two or more such mines, lodes or deposits owned or claimed by the same person or persons shall be worked through a common shaft, tunnel, incline, adit, drift or other excavation, then all such mines, lodes or deposits so worked shall, for the purpose of this act, be deemed one mine; and provided further, that this section shall not be deemed to apply to the owner or owners of any mine, lode, deposit, shaft, tunnel, incline, adit, drift or other excavation, when the same shall be worked by a lessee. The aforesaid provisions apply to surveyors, civil and mining engineers, doing any work of surveying or platting of any mines, mining claims, lodes or mineral deposits, and they shall have a lien and claim as other persons.

The lien shall likewise attach to rights of water and rights of way that may in any manner pertain to any kind of property hereinbefore specified and to which such lien attaches. In case of corporations said lien shall attach to all the franchises and charter privileges that may in any manner pertain to said specified property.

**NOTICE OF LIEN.**—Any party claiming a lien shall file in the office of the recorder of the county wherein said land is situated, a statement containing—

1. A notice of intention to hold and claim a lien.
2. A description of the property to be charged therewith.
3. A verified abstract of indebtedness showing the whole amount of debt, the whole amount of credit, and the balance due or to become due.

The principal contractor must file such statement within sixty days after the time when the last work shall have been done or that material furnished. A sub-contractor must file such statement within forty days.

A notice of intention to hold a lien may be filed before the work is commenced or material furnished.

Sub-contractors must serve a copy of notice on the owner.

**LITIGATION OF ACTIONS.**—No action shall be maintained for the recovery of real property or the possession thereof, unless it appears that the plaintiff, his ancestor, grantor or predecessor was seized or possessed of the premises in question, within seven

years before the commencement of such action; and this includes possessory rights in claims and mining claims.

**RIGHTS OF WAY AND EASEMENTS.**—The legislature of the territory by an act approved March 12, 1890, provided for rights of way and easements for the development of mines.

Such right may be secured by petition and hearing in the district court, and on payment of the damages assessed therein. This act contains a provision preventing injury to land through which such right of way passes and providing for the construction of safe crossings, etc., and for keeping same in good repair.

**SCHOOL OF MINES.**—The legislature of the territory has established a chair of geology and mineralogy in the territorial university "to form the basis of a future school of mines.

**TRANSFERS.**—All transfers of mining claims are made by deed as in case of lands.

**COAL MINES.**—All coal mines in which more than ten men are employed in each twenty-four hours shall be provided with an escapement shaft, slope or tunnel for the purpose of securing the safe egress of workmen in case of danger. Punishment for failure to comply with this law is \$1,000 fine, or one year in the penitentiary.

#### MINES AND MINING.

**MINING CLAIMS.**—Discovery and appropriation are the sources of right to mining claims on the public mineral lands, and development of continuing value is the condition of title.

**EXTENT OF GROUNDS OPEN FOR LOCATION.**—The locator may claim fifteen hundred feet along the vein or lode, and three hundred feet on each side of the middle of the vein or lode at the surface. (See Com. Laws, Sec. 2790.)

**HOW LOCATED.**—The location shall be along the vein or lode, and it shall be distinctly marked on the ground so that its boundaries can be readily traced, and the record shall contain such description by reference to some natural object or permanent monument as will identify the claim. The notice of location must be recorded with the mining recorder of the mining district in which the claim is located, and if the claim is not located in an organized district, or if there is a vacancy in the office of the recorder of any mining district, then with the county recorder of the county in which such claim is located.

**WORK (ANNUAL).**—Assessment work to amount of \$100 must be performed annually on lode claims. (No territorial law.)

**DRAWING.**—Drawings right now attaches to mining claims.

**EVIDENCE.**—Copies of notices of location of mines, lodes and veins and of tunnel sites recorded in the several mining districts, and of the mining rules and regulations in the several mining districts, are made prima facie evidence of such notices, rules and regulations, provided they are properly certified.

In actions respecting mining claims, proof must be admitted of the customs, usages or regulations established and in force at the bar, diggings or camp embracing such claim; and such customs, usages or regulations, when not in conflict with the laws of this territory, or of the United States, must govern the decision of the case.

**Fraud.**—Fraudulently procuring titles of mining claims by false certificates of assays, etc., is a misdemeanor.

#### VERMONT.

Compiled by J. W. RUSSELL, Attorney at Law, Burlington, Vt.

#### CORPORATIONS.

**FORMATION.**—Corporations are formed for the purpose of carrying on manufacturing, mercantile, mechanical, mining or quarrying business by articles of private association. They are as follows:

"We, the subscribers, hereby associate ourselves together as a corporation, under the laws of the state of Vermont, to be known by the name of \_\_\_\_\_, for the purpose of \_\_\_\_\_, in the county of \_\_\_\_\_, in said state, with a capital stock of \_\_\_\_\_, divided into \_\_\_\_\_ shares of \_\_\_\_\_ dollars each.

Dated at \_\_\_\_\_, this \_\_\_\_\_ day of \_\_\_\_\_, A. D. \_\_\_\_\_.

Such articles of association, signed by the corporations, are filed with the secretary of state, and a certified copy thereof printed in a newspaper in the county.

The corporation is managed by not less than three directors, who shall be stockholders, and one at least shall reside in Vermont. They shall be annually chosen at such time and place as by-laws provide, and shall hold office until their successors are appointed. They appoint one of their number president, and appoint a clerk and treasurer. The clerk shall be a resident of the state. A majority of directors constitute a quorum when convened according to the by-laws. A majority of stockholders at a meeting may transact any business, and each share shall entitle the holder to one vote. Directors paying a dividend, knowing the corporation to be insolvent, are personally liable for debts due from the corporation.

The capital stock shall not be less than \$500 nor more than \$500,000, the shares not to exceed \$100 each.

**LIABILITY OF DIRECTORS AND STOCKHOLDERS.**—One-half the stock must be paid in before debts are contracted, and no

part of it shall be withdrawn or diverted from the proper business of the corporation. Directors consenting to an indebtedness in excess of two-thirds of capital stock paid in are personally liable for the excess. Stockholders are individually liable to creditors of the corporation to an amount equal to their amount of stock, until the whole amount of stock fixed by the company is paid in. If the capital stock is withdrawn or refunded while debts are owing, each stockholder is personally liable to the creditors to the amount he receives.

The clerk shall keep in the town where the corporation is located and has its principal office a book containing a record of articles of the association, number of shares sold by each, amount paid in by each, the time when they became owners, and a record of transfers. All books of the corporation to be subject to inspection of the stockholders at the annual meeting or at any suitable time.

**LIEN.**—The corporation has a lien on the stock of its members for debts due from them to the corporation.

The legislature retains the privilege to vacate or amend the powers of the corporation for just cause.

**FOREIGN CORPORATIONS.**—There are no statutes relating to foreign corporations engaged in manufacturing, mercantile, mining or quarrying business (or any such business), as to the method of their entering or doing business in the state, and they are allowed to do business without interference or regulation. This does not apply to insurance companies or banking institutions.

#### LIENS.

Persons performing labor or furnishing material in building, repairing, fitting or furnishing a ship, vessel or steamboat have a lien on the same for eight months, and may secure same by attachment, which shall have precedence of all other claims. A person erecting, repairing, moving or altering a building, or furnishing labor or materials therefor shall have a lien to secure payment therefor on such building and the land on which it stands, which lien continues in force three months, but does not take effect until a memorandum of the claim is recorded in the town clerk's office of the town where the real estate is situated. It does not avail sub-contractors and does not take precedence of any former mortgage or lien.

**EMPLOYEES LIEN.**—When a person or company is compelled to stop business by reason of attachment and does not resume in thirty days, and is indebted to an employer for wages, such employer has a preference to the amount of \$50, and this attachment will take precedence of others to secure that amount. In insolvency his claim to that amount is preferred.

**EXEMPTIONS.**—Manufacturing establishments and quarries and mines when first opened, including buildings and machinery necessary for the prosecution of the business, may be exempt from taxation for five years by a majority vote of the legal voters of the town or city where the same is situated.

#### MINING AND QUARRYING.

There is no legislation in Vermont relating to mining or quarrying exclusively, and no other general legislation affecting those matters.

## VIRGINIA

Compiled by FLEMMING & JOHNSON, Attorneys at Law, Christiansburg, Va.

#### CORPORATIONS.

**FORMATION OF.**—The legislature may grant charters for any purpose. The circuit and corporation courts and judges thereof, in vacation, may grant charters to five or more persons, who desire to form a joint-stock company for the conduct of any enterprise or business, which may lawfully be conducted by an individual or by a body politic or corporate, except to construct a turnpike to be constructed beyond the limits of the county, or a railroad, street railway or canal, or to establish a bank of circulation. Application for incorporation by every stockholder by five or more persons, and acknowledged by them before a justice, notary, judge or clerk, and must set forth:

1. The name of the company.
2. The purpose for which it is formed.
3. Capital stock and its division into shares.
4. Amount of real estate proposed to be held.
5. The place at which principal office is to be kept.
6. The chief business to be transacted.
7. The names and residences of officers who for the first year are to manage the affairs of the company.

This certificate must be presented to the circuit or corporation court of the county or city in which the principal office is to be, who may grant, amend or refuse the charter.

**WHERE RECORDED.**—If granted, the charter must first be recorded in the charter-book of the court, and then certified to the secretary of the commonwealth, who also records it.

**TAX.**—A tax or fee must be paid by every charter, whether granted by a legislature, court or judge, before it is operative or effectual for any purpose whatever. The fee is graduated according to maximum capital stock. If maximum does not exceed \$5,000, fee is \$2; from \$5,000 to \$10,000, fee is \$30; over \$10,000 to \$25,000, fee is \$47; over \$25,000 to \$50,000, fee is \$65; over \$50,000 to \$100,000, fee is \$80; over \$100,000 to \$200,000, fee is \$97; over \$200,000 to \$500,000, fee is \$130; over \$500,000 to \$1,000,000, fee is \$175; over \$1,000,000 to \$1,500,000, fee is \$210; over \$1,500,000, fee is \$250. If no

maximum is named in charter, fee is \$200. Company cannot organize until copy of charter is lodged with secretary of commonwealth.

**HOW STOCK PAID FOR.**—Two dollars per share shall be paid at time of subscription, and the residue as required by the president and directors.

**MEETINGS.**—Annual meetings of stockholders are required. The same may be fixed by charter or by the stockholders in general meetings. Either the board of directors or stockholders owning one-tenth of the capital stock may call a general meeting at any time by publication for thirty days in some newspaper published in the place or in the county in which the company is located.

**ELECTIONS.**—President and directors are elected by stockholders, except so far as named in the charter, or to fill a vacancy, which last the directors may do. They can receive no compensation, unless authorized by the stockholders.

**ACCOUNTS AND REPORTS.**—The board of directors is required to have regular books of accounts kept and balanced annually or semi-annually, and to make annual reports to the stockholders of the receipts, disbursements and condition of the company.

**STOCKHOLDERS.**—The persons in whose names the shares stand on the books of the company are deemed the owners, as it regards the company. Dividends shall be applied to any indebtedness of stockholder to company. Stock is not assignable without company's consent until all assessments have been paid. When assigned, assignor and assignee are both liable for past and future assessments. Are not liable for more than their subscriptions.

**DIVIDENDS.**—Directors required to declare semi-annually dividends of so much of net profits as they deem to do. They are personally liable to company's creditors, if they declare a dividend of any part of the capital stock.

**FORFEITURE.**—Charters granted by the legislature are forfeited if the company does not organize in two years from passage of the charter, or if after organization it suspends its operation for two years.

**BY-LAWS.**—Company may adopt any which are not inconsistent with charter or the general laws of the state.

**LIEN.**—No corporation can plead insolvency.

**LIMITATIONS.**—Charters in mining and manufacturing companies expire thirty years after their date.

**ASSIGNMENTS AND ENCUMBRANCES.**—Any lien or incumbrance on its work or property, created by any company chartered by a court or judge, for the purpose of giving a preference to any creditor, except to secure a debt contracted or money borrowed at the time of the creation of the lien or encumbrance, shall ensure to the benefit ratably of all the creditors of the company at the time existing.

**OFFICE.**—Every company incorporated by this state or by another state, and doing business in it (except insurance companies incorporated by another state), must have an office in this state at which claims against it due residents can be audited, settled and paid.

**FOREIGN CORPORATIONS.**—Every company incorporated by another state is required to record in the county where its office is, and also to have transmitted to the secretary of the commonwealth its charter and a power of attorney appointing some person residing in such county an agent on whom all lawful process against such company may be served. All mining and manufacturing companies chartered elsewhere can do business in this state and acquire, lease, sell, mortgage, convey, buy, real estate or interests therein and personal property suitable for their business, except they cannot at one time hold more than ten thousand acres of land in any one county. Such companies must pay the fees required of companies chartered in the state before they can do business here.

#### LIENS.

**LABORERS' LIENS.**—All clerks, mechanics and laborers who furnish their services or labor to any mining or manufacturing company, no matter where chartered, shall have a prior lien on the franchise, gross earnings and on all the real and personal property of such company which is used in operating the same to the extent of the money due by such company for such wages, and no mortgage, deed of trust, sale or hypothecation or conveyance executed since March 21, 1877, shall defeat or take precedence over such lien.

**SUPPLIES LIENS.**—All persons furnishing supplies to a mining or manufacturing company, necessary to the operation of the same, shall have a prior lien upon the personal property of such company, other than that which forms part of its plant, to the extent of the money due them for such supplies, and also a lien on all the estate, real and personal, of such company, which said last lien, however, on all such real and personal estate, shall be subject and inferior to any lien by deed of trust, mortgage, conveyance, sale or conveyance made or purporting to be made, and duly admitted to record, prior to the date at which said supplies are furnished, provided, however, that the lien to parties furnishing supplies shall be subsistent up to that date, clerks, mechanics and laborers or services furnished as aforesaid.

**HOW LIEN PERFECTED.**—No person shall be entitled to such lien unless, within ninety days after the supplies are furnished or labor done, he file in the clerk's office of the county or city where the principal office of the company is located, a written copy of the amount and consideration of his claim, and have the same recorded.

**MINING.**—No person shall open, sink, dig, excavate or work in any mine or shaft on land containing coal, sulphur or other minerals, or in the territory of the state, without first obtaining the written consent of every person having any interest or title whatever in the adjoining land. A person violating this provision forfeits \$500 to anyone who may sue him therefor.

The owner or tenant of any land on which a coal or other mine is opened and worked, or his agent, shall permit any person interested in or having title to certain lands to have ingress and egress with surveyors and assistants to explore and survey such mine at his own expense, not often than once a month, for the purpose of ascertaining whether or not work is being done within five feet of the line. Each refusal causes forfeiture of the person so refused. A justice of the peace may by warrant on complaint and trial command the sheriff to attend and prevent obstructions to such entry.

## WASHINGTON

Compiled by LEO & JORDAN, Attorneys at Law, Rooms 200 and 201 National Bank of Commerce Bldg., Tacoma, Wash.

### CORPORATIONS.

Corporations may be formed for manufacturing, mining, milling, wharfing, docking, mechanical, banking, mercantile, improvement and building purposes, for building, equipping and managing water flumes for transportation of wood and lumber; for building, equipping and running railroads, for constructing canals, and for carrying on or conducting any other species of trade or business.

No corporation (except those engaged exclusively in loaning money on real estate) shall commence business until the whole amount of capital stock is subscribed.

Two or more persons may form a corporation. Must make and subscribe and acknowledge articles in triplicate, file one copy in the secretary of state's office, one copy in county auditor's office in county where principal place of business is located, and retain third to corporation's possession.

Articles shall state corporate name, object, amount of capital stock, time of its existence (not more than fifty years), number of shares of stock, the number of trustees and their names, who shall manage the concerns of the company for such length of time (not less than two nor more than six months) as may be designated in such articles, name of locality and county in which principal place of business is to be located. Amendments may be made by supplemental articles executed and filed same as original articles. Copy of articles filed as aforesaid and certified by officer with whom filed in court.

When articles are filed as aforesaid corporation has power to sue and be sued, to make and use common seal and change the same, to purchase and hold, mortgage, sell and convey real and personal property and to employ officers, agents, servants, etc., and define their powers and duties, and fix their pay, to make by-laws, etc., the management of its property, to manage and regulate its affairs, transfer its stock and carry on all kinds of business within its objects.

Corporate power exercised by boards of trustees, of not less than two, who shall be stockholders and a majority of them citizens of United States and residents of state. Trustees must take oath; to be annually elected after term of first trustees. Election to be held according to by-laws. All elections by ballot. Each share has vote by holder or proxy, unless by-laws limit each shareholder to one vote; two-thirds of stockholders may expel trustee. Any vacancy except by expulsion may be filled by appointment by trustees. Notice of meeting to expelled trustee must be on notice according to by-laws. Failure to elect trustees at appointed time does not dissolve corporation. Majority of trustees may transact any business.

First meeting of trustees may be called by notice signed by one or more trustees named in articles, specifying time and place; notice to be served personally on each trustee, or published in some paper in county where principal place of business is located for twenty days. If no paper in county then in paper nearest thereto in state.

Stock shall be personal property, transferred according to by-laws. No transfer valid except between parties, unless entered in detail on company books.

By-laws may provide time and manner of payment for stock, etc.; if they do not, trustees may demand payments as needed. Notice of such calls may be personal or by publication in newspaper in county; if none in county then in nearest newspaper in state. If stockholder fails to pay, shares of trustees (except those who have their dissent entered in minutes of meeting) personally liable for amount so withdrawn or divided. Upon payment of all debts and dissolution capital divided among shareholders.

Stock held by executor, administrator, guardian or trustee may be represented and voted by said executor, etc., as a stockholder.

Stock may be pledged by delivery of certificate, but pledger may represent and vote stock.

No dividends declared except from net profits. In case of an accidental dividend or withdrawal of capital, trustees (except those who have their dissent entered in minutes of meeting) personally liable for amount so withdrawn or divided. Upon payment of all debts and dissolution capital divided among shareholders.

No corporation organized under the law shall have power to issue bills, notes or other evidence of indebtedness for circulation for money, except bonds by railroad company, which bonds shall not exceed the amount of paid-up stock. Each stockholder (except banking corporations) personally liable to the creditors of the company to the amount unpaid on

his stock subscription, but personal liability does not apply to persons holding stock as executor, administrator, guardian or trustee, holding the same as collateral security, but estates shall be liable as stockholders.

Books must be kept, containing names of stockholders (alphabetically arranged), showing number of shares of stock held by each, and time when they became owners of the same, books to be open to stockholders and creditors, who shall also have right to make and carry on books and demand of company copies of any part of books or papers; said certified copies are presumptive evidence of facts therein stated against said company, or any stockholder. Any false entry or refusal to comply with the foregoing provisions is a misdemeanor and punishable by fine from \$100 to \$1,000, etc., etc.

Capital stock may be increased or diminished, but before stock is diminished debts must be reduced so as not to exceed amount to which capital is reduced. To change amount of capital meeting must be called by notice signed by majority of trustees and published eight weeks in newspaper published in county where principal place of business is located, or, if no newspaper there, then the nearest newspaper in the state. Notice must specify object, time and place, and amount to which capital is to be changed. Vote of two-thirds of all stock necessary to change amount of capital. If amount of capital is to be changed, a certificate of proceedings showing compliance with foregoing provisions shall be made, and showing amount of capital actually paid in, and the number and names of stockholders, and if capital is changed, Certificates to be signed and verified by chairman and secretary of meeting, and certified by a majority of trustees and filed the same as original articles.

Upon dissolution of trustees at the time of dissolution shall be trustees of the creditors and stockholders, and shall have power to sue and recover property, etc., by the name of the trustees of said corporation, and to settle and adjust all business of the corporation.

**DISSOLUTION.—**Proceedings. Corporations may be dissolved by presenting a petition to the superior judge of the county in which the office is located, accompanied with certificate of proper officers, stating that at a meeting called for that purpose it was decided by a two-thirds vote, a majority of the corporation, setting forth its nature and specifying the time and place it is to be heard, shall be given by the clerk of the court by publication in some newspaper of the county once a week for eight weeks. If no newspaper be published in county then in nearest paper published in the state. At time appointed the judge shall consider application, and if satisfied that facts stated in application and certificate are true, and that all claims against corporation are discharged, he shall enter an order declaring the corporation dissolved.

Principal place of business may be removed into another county by filing certified copy of articles with the county auditor. If place of business is removed to some other place in the same county, the relocation shall be certified to the county auditor in two weeks in the newspaper published nearest to the present place.

All the foregoing provisions shall apply to corporations formed for the purpose of supplying pure and fresh water to cities, towns, etc., and their inhabitants.

**FOREIGN CORPORATIONS.**—Foreign corporations (except those organized to do real estate business, and those having a majority of its capital stock owned by aliens) may do business in this state upon compliance with the following provisions, to wit:

1. Filing and recording in secretary of state's office a certified copy of its charter and articles of incorporation.
2. Appointing an agent residing in this state at the place where the principal business of said corporation is to be carried on. Such appointment shall be in writing, signed by the president or chief officer of said corporation, and shall authorize said agent to accept service of process in all suits, etc.

**MINE CORPORATIONS.**—In incorporations already formed, or which may hereafter be formed under this chapter, where the amount of the capital stock of such corporation consists of the aggregate valuation of the whole number of feet, shares or interest in any mining claim in this state, for the satisfaction of which such subscription shall be necessary, or have been formed, no actual subscription to the capital stock of such corporation shall be deemed to have subscribed such an amount to the capital stock of such corporation as under its by-laws will represent the value of so much of his interest in said mining claim, the legal title to which he may by deed, deed of trust or other instrument vest or have vested in such corporation or in which he has such subscription (even though it has been made in the execution and delivery to such corporation of such deed, deed of trust or other instrument; nor shall the validity of any assessment levied by the board of trustees of such corporation be affected by the reason of the fact that the full amount of the capital stock of such corporation, as mentioned in its certificate of incorporation, shall not have been subscribed as provided in this section; provided, that the greater portion of said amount of capital stock shall have been so subscribed or pledged further, that this section shall not be so construed as to prohibit the stockholders of any corporation formed or which may be formed for mining purposes as provided in this section from regulating the mode of making subscriptions to the capital stock and calling in the same by by-laws or express contract.

Any person or persons, or company now incorporated, or that may hereafter become incorporated under the laws of this state, for mining or for other purposes, shall have the right to purchase, or appropriate, and take possession of and divert from its natural channel, and use and hold the waters of any river,

creek or stream in this state that may be required for the mining and manufacturing purposes of any such person or persons, corporation or corporations, and to construct all dams, canals, reservoirs, ditches, pipes, flumes and aqueducts suitable and necessary for the controlling, directing and running such waters from any mines or manufacturing establishments of any such person or persons, corporation or corporations, where the same may be intended to be utilized for such purposes; provided, that no such appropriation or diversion of the waters of any such river, creek or stream from its natural channel, nor shall any such dam, canal, reservoir, ditch, pipe, flume or aqueduct be constructed, to the detriment of any person or persons, corporation or corporations, occupying the lands or being located below the point or place of such appropriation or diversion on any such stream or its tributaries, or below such dam, canal, reservoir, ditch, pipe, flume or aqueduct, or of the owners of the lands through which the waters run in the natural course for the deprivation of the same, or the owners of the land through or upon which such dam, canal, reservoirs, ditches, pipes, flume or aqueduct may pass through or over, or be situated upon, unless just and adequate compensation be previously ascertained and paid therefor.

#### LIENS.

Every person performing labor upon or furnishing material to be used in the construction, alteration or repair of any mining claim, building, wharf, bridge, dike, flume, tunnel, fence, machinery, wagon road, or any other structure, etc., etc., or who performs labor in any mine or mining claim, has a lien upon same for the work or labor done or material furnished.

A claim of lien must be filed in county auditor's office within ninety days after the completion of the structure or improvement upon which said work or labor was done or performed, or for which said material was furnished.

The claim of lien must contain a statement:

1. Of the debtor and all joint and credits and offsets.
2. The name of the owner or reputed owner of the property upon which lien is claimed (if known).
3. Name of person by whom claimant was employed, or to whom he furnished the materials.
4. A statement of the terms and conditions of the contract (if any).
5. A description of the property to be charged with the lien sufficient for identification.

The claim of lien must be verified by the oath of the claimant or some other person to the effect that the affiant believes the same to be just.

The lien can be foreclosed in an equitable action.

#### MINING.

**MINING BUREAU.**—For the purpose of encouraging and developing the production of ore, natural gas, and other valuable minerals, and for the purpose of accumulating valuable information concerning mines and milling through the ministerial powers of the state, a "mining bureau" has been created consisting of the governor, lieutenant-governor and state treasurer.

**GENERAL DUTIES OF MINING BUREAU.**—To collect reliable statistical information concerning the production and reduction of all precious and useful minerals of this state; to examine different processes for the treatment of ores used in this state, and to inquire into the merits of any process, or to help in determining the relative merits of the various inventions, machines and mechanical contrivances for mining and metallurgical purposes, to keep on file, etc., reports and papers which may be published, and all correspondence in relation to mines and mining, and to address and correspond with all parties and corporations engaged in mining, etc., etc.

**LOCATION AND POSSESSION OF MINING LODES.**—All mining claims shall be governed by law in force at time of location.

Mining claims located after February 2, 1888, upon any vein or lode, etc. (whether located by one or more persons), shall not exceed fifteen hundred feet in length along the vein, and three hundred feet on each side of the middle of the vein at the surface, but no location shall be made until the discovery of the vein or lode within the limits of the claim located.

**RIGHTS OF LOCATION.**—The locators of all mining claims on any mineral vein, lode or ledge on the public domain and their heirs and assigns, as to the mining claim, with the law in relation thereto shall have exclusive right to possession and use of all the surface included in the location, and all veins, lodes and ledges throughout their entire depth, and the top or apex of which lies within the surface line of their location extending downward vertically, although they may so far depart from the perpendicular as to extend outside of the vertical side line of the surface location.

**CLAIMS.**—The owners of each mining district may make rules and regulations governing location and amount of work necessary to hold possession not in conflict with the laws of the United States or this state, but on each claim one hundred dollars' (\$100) worth of work must be done in each year. First year shall date with date of location. Failure to comply shall work forfeiture and claim may be re-located.

**RECORDER.**—Miners of each district may elect a recorder. Recorder when elected shall record all notices, transfers, bonds, conveyances and assignments in mining claims within the district. Such records declared to be public records and shall have same effect as to notice, etc., as the records of deeds and mortgages in this state. Recorder shall hold office for one year and until successor is elected, shall act with county auditor. Shall be certifying officer; fees shall be same as county auditor. When vacancy in office, records shall be transmitted to county auditor and auditor shall keep such records as part of the records of his office, in districts where there is no mining recorder. Notices of

location, etc., and other instruments shall be recorded in county auditor's office within thirty days after execution thereof. All records made prior to February, 1888, validated.

**PROTECTION OF PERSONS WORKING IN COAL MINES.**—The state is divided into two inspection districts. The governor shall appoint one or more competent inspectors for term of four years, subject to removal for neglect or malfeasance; appointments shall be made on recommendation of board of examiners consisting of three practical coal miners and one mining engineer, the majority appointed by the governor. All inspectors must be citizens with at least two years' practical experience in this state, and shall have resided within the district at least one year. Inspectors shall not be interested in any coal mine or company in this state; shall be of good moral character and habits, and shall not commit any act injurious to mines or operators of mines, and shall devote entire time to duties of office. State shall provide modern and best instruments, said instruments to remain property of state, inspectors shall receive salaries approved by board of superior court; salary \$1,500 per year and actual traveling expenses; shall examine each mine in district at least once in every three months and make records of examination, number of mines in district, employees in each mine, number of accidents, deaths, etc. Record must be completed by December 31st each year, and be filed in secretary of state's office 1st day of February following; two thousand copies thereof to be printed and distributed biennially by the state in pamphlet form for free distribution.

**BOARD OF EXAMINERS.**—Board of examiners, appointed by governor, hold office for two years, meet biennially at state capitol building in January, and may adjourn at any time; by governor when office of inspector becomes vacant, receive \$5 per day for each day's service and actual traveling expenses, but per diem shall not exceed \$50 per annum.

**MAPS.**—The owner, agent or operator, etc., of all coal mines shall cause inspection of inspector to furnish accurate maps or tracings of mines showing workings thereof up to at least six months' prior to any given date. Within three months next after abandonment of mine accurate map or plan must be filed with secretary of state as mining records and shall be property of state. (Maps must be on scale not to exceed one hundred feet to inch.) In case of failure or neglect to make maps aforesaid inspector shall have maps made at expense of owners, etc., cost recoverable by suit from owners, etc.

**OPENINGS, ETC.**—Mines worked by shaft, slope or drift must have at least two openings, separated by natural strata by a distance of not less than one hundred feet (in mines already opened a distance may be less), and a second opening must be made twenty-four persons may be employed before second opening reached. Second opening must be made without unnecessary delay, and in case furnace ventilation used before second opening is reached, furnace shall not be placed within forty feet of shaft, iron, or other strata, and shall be protected by a cage of brick, stone or other fire-proof walls, until said second opening is secured.

**SAFETY, ESCAPE, ETC.**—Escapement shafts shall be equipped with stairways or ladders, with landing places, or in lieu thereof with other means to be approved by the inspector. Hoisting apparatus and hoisting apparatus to be kept in good order and inspected every twenty-four hours by competent persons employed for that purpose.

**VENTILATION OF COAL MINES, ETC.**—Ventilation must be equal to least cubic feet per minute for each person measured at the foot of the downcast, the same to be increased at discretion of inspector. Air must be forced to face of every working place throughout mine, so that mine shall be free from smoke and fumes. Mines must be inspected every morning for firetrap, with safety lamp. Result of inspection shall be marked at face of each working place. After March 5, 1892, unlawful to use furnace for ventilation. Bore-holes shall be kept twenty feet in advance of the face of the mine, and if necessary on both sides when driving toward abandoned mine.

**CAGES.**—In all shaft or slope mines suitable provisions for separating between top and bottom shall be maintained, together with approved hoisting apparatus and cage cover, with roller, iron, etc., struts, and every drift, slope, catches, covered cages not required in mines less than one hundred feet in depth.

**COMPETENT ENGINEERS, ETC.**—Competent, experienced and sober engineers and firemen, not less than eighteen years of age, must be employed. No person shall ride on hoisted cage or hoisting machine; not more than twelve persons shall ride on any part of cage at one time; not more than five persons for each ton's capacity of hoisting apparatus in any cage or car, except those employed as top or rope riders or competent persons who shall be hoisted while persons are descending into such mine, notice of which shall be posted at said mines. Persons shall not be lowered into or hoisted out of any mine at a greater rate of speed than six hundred feet per minute, and persons ascending and descending at any one time to be regulated by mine inspector.

**MINORS AND FEMALES.**—No boy under the age of fourteen years and no female shall be employed or permitted to be in mine; when employer is in doubt about age must require certificate from parents. No boy under twelve to be employed in underground structures except clerks in office, etc.

**BOILERS TO BE EXAMINED, ETC.**—All boilers must be kept in good order and inspected once in six months, by competent person, and annual inspection of all steam boilers. Every steam boiler must be furnished with steam gauge and safety valves.

**SIGNALS.**—All underground, self-acting or engine planes on which coal cars are drawn and persons travel shall be provided with proper means for signaling between the sloping places and

of said plane, and sufficient places of refuge shall be provided at the sides of said plane, not more than sixty feet apart and to extend six feet at right angles from the rail. (Such places of refuge not required when separate traveling road is provided for employees.)

**ACCIDENTS, ETC.**—When loss of life and serious personal injury should occur from any accident in a coal mine the parties in charge of said mine shall give notice thereof to inspector of district, and, if death results, to the coroner of the county, who shall give notice of inquest. Mine inspector may testify at inquest and shall give full and true relation to jury. Mine inspector may question witnesses, etc., etc. Upon receiving notice of accident mine inspector shall at once repair to scene of accident and do what he can to procure present and future safety of men; shall investigate cause of accident and keep record of same; may compel witnesses to attend, testify, etc. Cost of investigation to be paid by county.

**POWER OF INSPECTORS.**—Inspectors may enter and inspect all mines and machinery used within their district at all times day or night. Owners must furnish all facilities. If owners refuse, inspector shall file affidavit with superior judge and obtain order from such judge commanding owner, etc., to allow inspection and comply with law, or in default thereof to be in contempt of court and to be punished accordingly. If mines are worked contrary to law, inspector must proceed by injunction (without bond) to close said mine.

On petition of not less than ten reputable citizens, or miners, mine inspectors may be ordered by superior court to answer charges of neglect of duty, or incompetency, or malfeasance in office. If court finds charges true, he shall so certify to the governor and the governor shall declare office vacant, and proceed to fill vacancy according to law. If not against petitioner, against inspector if found guilty, true; if not against petitioner, against mine owners.

**INJURIOUS EXPOSURES.**—Any person who shall knowingly injure any water gauge, barometer, air-course or brattice, or shall obstruct or throw open any airways, or carry any lighted lamp or matches into places worked by the use of safety lamps, or shall handle or disturb any part of the machinery of the hoisting engine, or open a door in the mine and not have the same closed again, whereby danger is produced either to person or property, or who shall enter any part of the mines against caution, or who shall interfere with or attempt to interfere with any engineer, fireman or employe employed in or about such mine in the discharge of his duty or employment, or who shall disobey any order made in the pursuance of the mining law of this state, or violate any of the rules established by said law, or who shall do any willful act whereby the health of any person working in any mine or mines is injured or endangered, or any act or acts endangering any machinery therein, shall be deemed guilty of a misdemeanor and upon conviction be fined not less than \$20 nor more than \$50, or by imprisonment in the county jail for a term not exceeding six months nor less than three months, or by both fine and imprisonment.

**LUMBER FOR PROPS.**—The owner, etc., of mines shall keep sufficient supply of lumber for all needed props at or near opening of mine and shall at all times send down same when needed or demanded.

**STEAM PUMP.**—In all mines where coal is hoisted by steam power and there is no means of ingress or egress afforded to persons except by hoisting apparatus by way of shaft or slope, a steam pump conveniently situated with sufficient supply of water shall be maintained always ready for use in any part of the buildings or premises within a foot of each hoisting machinery. In case of failure to comply, mining inspector shall proceed by injunction to close said mine.

**STRETCHERS.**—Stretchers for purpose of removing injured persons shall be constantly kept at or near mouth of all drifts, shafts or slopes.

**DOORS.**—All main doors in coal mines shall be so placed that wherever one door is open another having the same effect on the same current of air shall be and remain closed and thus prevent any stoppage of the current.

**RULES.**—At all mines printed rules, approved by mining inspector, regulating the duties of persons employed, shall be kept posted in conspicuous places.

**NEARLY ADJACENT MINES.**—Where two or more mines are so located as to allow connection by permanent entries between, the right of way for such entry may be obtained in the manner provided by any law of eminent domain.

**TOOLS.**—All iron tools used on iron tamping bars must be tipped with five inches of copper. Failure or neglect to comply here-with punished by fine.

**REPORTS OF COAL SOLD.**—All owners, etc., of coal mines shall keep accurate account of all coal used or sold from their mines and deliver same to inspector once in every three months and shall send certified copy of same to the state treasurer.

**TAXES.**—Every ton of coal used or sold from any mine shall be taxed four mills, said amount to be paid in July and October quarterly, on the 1st day of January, April, July and October each year.

**WEIGHING COAL.**—All coal mined at bushel or ton rates must be weighed and credited to mine before being received by the railway. The weigher, if not an owner, shall take an oath to do justice between employer and employe, and miners may employ at their own expense check-weighman, etc.

**EXCAVATIONS TO BE FENCED.**—All shafts, excavations and holes, whether used for mining or otherwise, must at all times be securely fenced. These requirements in relation to fencing may be enforced in statutory proceedings before justice of the peace or police court.

**SAFETY CAGES.**—All vertical shafts of more than one hundred and fifty feet in depth shall be provided with iron bonneted safety cages. The safety apparatus, whether consisting of eccentric springs or other device, shall be securely fastened

to the cage and shall be of sufficient strength to hold the cage loaded at any depth, provided the cable shall break. Fine for violation of this provision not less than \$50 nor more than \$100.

#### OIL WELLS, SALT WELLS, ETC.

Whenever twenty-six taxpayers (each paying taxes on at least \$1,000) shall petition county commissioner for appropriation of specific sum for boring for minerals, such as coal, oil, gas, salt, etc., the county shall make estimate of cost of proposed well, etc., and shall call general election to vote for or against. The notice of election shall state fully the amount to be raised, purpose for which used and locality where to be used, etc., and no money shall be spent on land not owned by the county or held by the county on lease of not less than twenty years. The tract of land used must be nearly square and contain not less than ten acres, and the well bored or drilled near the center. If there are at one time the petitioners for more than one well, commissioners shall select the site. No one shall vote who did not pay taxes in county preceding year. Ballot shall read "tax, yes" or "tax, no." In making estimate of cost, etc., commissioner may add fifteen per cent. for delinquency and expense of collecting. Tax collectible same as school tax and payable on order of majority of commissioners. Commissioners shall advertise in the newspaper in said county having largest circulation for four consecutive weeks for bids, etc., for boring or drilling well. If no newspaper in county then in nearest one. When bids are opened, if it appears to the majority of commissioners that any of them are reasonable, they shall let to lowest bidder; shall require from contractor good and sufficient bond, within one year after well is completed, county commissioner may after advertisement, by order of majority of commissioners that any of them are reasonable, they shall let to lowest bidder; shall require from contractor good and sufficient bond, within one year after well is completed, county commissioner may after advertisement, by order of majority of commissioners that any of them are reasonable, they shall let to lowest bidder; shall require from contractor good and sufficient bond, within one year after well is completed, county commissioner may draw on general county fund to make up deficit not to exceed \$1,000. Election expenses paid out of general fund. No election for this purpose in any county oftener than once in two years.

## WEST VIRGINIA

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### CORPORATIONS.

**FORMATION OF MINING.**—The agreement for incorporation should set forth:

1. Name of the corporation.
2. The purpose for which it is formed.
3. Place where its principal office or place of business shall be kept.
4. Term for which it is to exist, not exceeding fifty years.
5. The amount subscribed to the capital stock, the number and value of each share, and the amount to which incorporators desire the privilege of increasing the capital.
6. The agreement must be subscribed by by or more persons, who may not be residents of the state. It must be acknowledged before a notary public or some other authorized to take the acknowledgment of deeds, and two of the incorporators must make affidavit that at least ten per cent. of the capital subscribed has been paid in in good faith, and without any intention of withdrawing it before the dissolution of the corporation. Upon the filing of such agreement and affidavit with the secretary of state, he will issue a certificate of incorporation, declaring the persons named in the agreement to be the incorporators.

**ORGANIZATION BY LAWS.**—The first stockholders' meeting must be held not less than twenty-one nor more than ninety days after the date of filing of the agreement for incorporation. At this meeting by-laws should be adopted providing for:

1. Officers, including directors, and the duties and tenure of office, and compensation, except where this latter is left to the board of directors.
  2. Time of annual election.
  3. Time, place and manner of calling meetings of stockholders and directors.
  4. The general business of the corporation.
  5. If desired, resolutions on the usual powers of officers.
- These by-laws may be adopted by a majority vote of those present, and may be subsequently amended as provided by the by-laws.

The by-laws should be entered on the record and certified by the chairman of the stockholders' meeting and the secretary. The directors may adopt by-laws governing their action, provided they do not conflict with the by-laws adopted by the stockholders.

**ELECTIONS.**—Directors must be elected annually by the stockholders, and such election shall be on the fourth Tuesday of January unless the by-laws prescribe a different time.

**PLACE OF MEETING.**—The principal office or place of business of a corporation organized in the United States or District may be in any state or territory of the United States or District. The meeting of the directors and stockholders may be held out of the state; but this cannot be done without the concurrence of persons holding a majority in value of the stock, nor without reasonable notice.

**LIABILITY OF STOCKHOLDERS.**—Stockholders are not liable beyond the amount of stock subscribed by them. When that is paid up their personal liability ceases. There is no personal liability for debts or wages due to mechanics, workmen or laborers employed by the corporation.



**REPORTS AND STATEMENTS.**—The board of directors shall make a report to the stockholders, at the annual meeting, of the condition of the corporation. The report shall show:

1. Profits and funds of the corporation.
2. Estimated value of the real estate owned.
3. Debts due to it, distinguishing such as are deemed to be good from those considered doubtful or hopeless.
4. Debts of the corporation.
5. The capital paid in and the estimated surplus or deficiency of the same may be.
6. Dividends declared, and losses incurred and profits accruing during the preceding year.

A copy of this report shall be furnished to each stockholder receiving it, with a list of the stockholders and their residences. But this report is not required to be published.

**FOREIGN CORPORATIONS.** No corporation incorporated under the laws of another state may hold property or transact business in this state, until it shall have filed with the secretary of state a copy of its articles of association and of the law and authority under which it is incorporated. A certificate that this has been done will be issued by the secretary of state, and this certificate shall be filed and recorded in the office of the clerk of the county court of one of the counties in which the business of the corporation is conducted. Every such corporation which shall do business in this state without complying with said provisions shall be guilty of a misdemeanor, and upon conviction thereof shall be fined not more than \$500, for each month its failure so to comply shall continue.

### LIENS.

There are no liens specially applying to a mining corporation, or to miners, but every workman, laborer or other person who shall do or perform any material or machinery for any contract for any incorporation doing business in this state, shall have a lien for the value of such work or labor upon all the real estate and personal property of said company, and such lien shall have priority over any lien created by law or otherwise on such real estate or personal property, subsequent to the time when the said labor was performed, but there shall be no priority between the persons claiming such mechanics' liens. Such lien shall be discharged unless the person claiming it shall file with the clerk of the county court of the county in which such work or labor was performed, or in which the principal office, works, real estate or personal property of the company is situated, a just and true account of the amount due him after allowing all credits, which account shall be sworn to by him or someone for him, but no such lien may be claimed for labor performed more than nine months before such lien was recorded.

In addition to the above, every mechanic, builder, artisan, workman, laborer or other person who shall perform any work or labor for or furnish any material or machinery for constructing, altering, repairing or removing a house, mill, manufactory or other building, appurtenances, fixtures, bridge or other structure by virtue of a contract with the owner or his agent shall have a lien thereon on the interest of the owner in the property. Such lien will be lost unless an account duly sworn to as above is filed in the same manner, within sixty days from the time the last work was done or material furnished. Such liens will be lost unless suit is brought thereon within six months from the time the lien is recorded.

### MILLDAMAS.

A person having on his land or proposing to build on his land a water mill, or other machine, manufactory or engine useful to the public, and desiring to erect a dam across or in the water-course on which the same is situated, or to cut or enlarge a canal through lands above or below, or to raise a dam, may apply to the circuit court of the county for the appointment of five commissioners to ascertain a proper location for the owners of the estate proposed to be taken. They shall give notice, hear evidence, and make report of their assessment of damages. Exceptions may be made to the report, and either party may demand a jury to ascertain the compensation. From such trial the jury may be appealed as in all other civil cases. On payment to the parties entitled of the amounts ascertained the application by such judgment and payment will become seized in fee simple of the lands proposed to be taken. If work is not begun within one year and if the mill completed or used within three years; or if the mill be destroyed, or become unfit for use, and the work of rebuilding be not commenced within two years, and completed within five years, then the title to the land shall revert to the owner of the same.

**RIGHT OF WAY.**—Mining property is not subject to a right of way more than any other real estate, nor does it have in its favor such right of way. Mine owners desiring to drain their mines or lands through the land of others may apply to the circuit court for the condemnation of such right in the manner provided for as to milldams. But it is doubtful if the statute can be enforced, as such condemnation can only be had for public uses, and the West Virginia supreme court have held a similar use not a public use.

A coal mine cannot be mined within five feet of adjoining land, and the owner of such land shall have the right once a month to enter the mine and if necessary to survey it. This right will be enforced by a justice of the peace on complaint made.

### MINING.

**MINING CLAIMS ON THE PUBLIC DOMAIN.**—This state has no statutes regulating the location of such claims, and no lands on which they could be located.

### COAL MINES.

**INSPECTORS.** The state is divided into two mining districts, and two mine inspectors, one for each district, are appointed by the governor and hold their office four years. The inspector's duties shall be to examine each mine at least twice a year and see that the provisions of the mining law are observed and strictly carried out. These examinations particularly apply to ventilation, drainage and general safety. He must make a record of such examinations, and annually as of June 30th make a list of the districts and mines in his district. This report shall be filed not later than December 30th following.

**MAPS.** The operator or agent of each coal mine shall make, or cause to be made, an accurate map or plan of each mine, and file a copy of the same with the inspector of the district. The original shall be kept in the mine office, subject to examination and use by the inspector. Twice a year the mine must be surveyed and the map corrected to show the extensions and changes in the mine. If the operator fails to do this the inspector may have it done at the expense of the operator.

**OUTLETS OR ESCAPES.** There shall be at least two outlets separated by natural strata of not less than one hundred feet if the mine be worked by shaft, and not less than fifty feet in breadth if worked by slopes or drift. There shall be a safe and available roadway from the interior of the mine to each of said outlets, which shall be kept free from all obstructions that might prevent travel in case of an emergency, and if either of said outlets be a shaft, there shall be a safe and available roadway from the interior to the shaft for immediate use, whereby persons employed may readily escape. This will not apply while work is being actually prosecuted to communicate between said outlets, nor as to work being done in the final abandonment of the mine, or in more than twenty persons employed in the mine at any one time.

If the owner of a coal mine has no suitable ground to make a second outlet from the mine he may condemn ground therefor from adjoining lands.

**SAFETY APPLIANCES.** A metal speaking tube from top to bottom of the shaft, and the usual and necessary safety appliances in the hoisting apparatus, must be provided, and once in every twenty-four hours inspected by a competent person. Every sober and competent engineer shall be put in charge of the machinery. Not more than ten persons shall ride in a car or cage, and on a loaded car or cage no persons shall ride. Refuge holes every sixty feet shall be provided on one side of each slope.

**VENTILATION.**—Adequate means of ventilation shall be provided, affording not less than one hundred cubic feet of air per minute for each person employed in the mine, and as much more as may be necessary, which shall be thoroughly circulated in all parts of the mine. It shall be kept free from obstructions, and all doors, not more than two persons shall be permitted to enter until examination is made. Fine coal dust shall be watered down. Safety lamps so used shall be furnished by the operator of the mine.

Any person shall be employed who shall be an experienced coal miner, or having two years' experience in a coal mine, who shall see to all the interior workings of the mine, ventilation, safety appliances, excavations, timbering, drainage and other matters. The "mining boss" or his assistant shall visit every working place at least once in three days and see that safety in all respects is assured.

**INSPECTION.**—Proper facilities for entering and examining the mines shall always be afforded the inspector, and if his requirements are not complied with, he may enforce them by enjoining the working of the mine by injunction obtained from the circuit court of the county.

**BOYS AND WOMEN.**—No boys under twelve years of age, and no girls shall be permitted to work in any mine.

**DANGEROUS ACTS.**—Any person who shall knowingly injure any shaft, lamp, air-course or brattice, or do other acts, or fail to obey orders, whereby the life or health of any person employed or the safety of the mine is endangered, shall be liable to a fine of not less than \$50 nor more than \$500.

**ACCIDENTS.** The inspector shall be notified of any accident occasioning loss of life, or serious personal injury, by mail, at once. In case of loss of life an inquest shall be held, and the report delivered to the inspector a report of the preceding twelve months ending with June 30th. The report must include the details required by the inspector.

**PENALTIES.**—A fine of not less than \$20 nor more than \$50 for violating the provisions of this law. The act applies only to those mines employing ten or more persons in the twenty-four hours.

**SCALES.** Each company or person operating a coal mine shall provide suitable standard scales to be tested by the scaler of weights and measures.

**WEIGHMAN SWORN.**—A weighman shall be employed by the operator of the mine, and the miners working therein shall employ one. If they fail to do so, then the weighman employed by the operator of the mine shall weigh the coal. Each of the persons so employed shall be sworn.

**WEIGHED BEFORE SCREENING.**—All coal under contract for payment for the same shall be weighed before screening, and if paid for by measure it shall be ascertained before screening.

**WAGES.**—It shall be unlawful for any company, firm or person, directly or indirectly, to issue, sell, give or deliver to any person employed by him, or if, in payment of wages due such employe, or as the wages of such employe, or for any other work, token, draft, check or other evidence of indebtedness payable otherwise than in their face value in money. The company or person doing

it shall be liable to a fine of not less than \$30 nor more than \$100, and at the discretion of the court imprisoned not less than ten nor more than thirty days.

**COERCION.**—The compelling or attempting to compel an employee to purchase goods or supplies from a particular person is a misdemeanor, punishable by fine and imprisonment.

#### QUARRIES.

Quarries are subject to the laws relating to real estate generally.

#### REAL ESTATE.

The statutes do not indicate what shall be considered real estate, but fixtures and machinery would no doubt be counted such by the courts.

## WISCONSIN

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#### CORPORATIONS.

**GENERAL PROVISIONS RELATING TO CORPORATIONS.**—Every corporation organized under any law of this state, whether by other provision or specially made by law or by its articles of organization, shall have the usual powers vested in corporations; of making all necessary and proper contracts to effect its purposes and conduct its business; to sue and be sued and to appear and defend in all courts and proceedings in its corporate name; to have a common seal and alter the same at pleasure; to elect and appoint all necessary officers, define their duties and obligations, fix their compensation, and to establish branch offices or places of business in this state or elsewhere; to make, amend and repeal by-laws and regulations for its own government and such others as shall be necessary or convenient for the accomplishment of its purposes; to take and hold property, both real and personal, and sell, convey or otherwise dispose of the same; to mortgage its franchises, tolls, revenues and property, both real and personal, to secure the payment of its debts, or to borrow money for the purposes of the corporation, and no other, with the consent of a majority of its stockholders, or, if not a stock corporation, of a majority of its members; and to establish, with the like consent, a sinking fund for the payment of its debts. A majority of the directors or trustees of every corporation, convened according to the by-laws thereof, shall constitute a quorum for the transaction of business, and the members owning a majority of the stock in stock corporations and a majority of the members of other corporations shall constitute a quorum at any meeting of the stockholders or members, and be capable of transacting any business thereof, except when otherwise specially provided for by the laws of this state in relation to the corporation.

**OFFICE TO BE IN STATE—BOOKS TO BE PRODUCED—STATEMENT OF ASSETS TO BE FILED.**—Every corporation organized under the laws of this state, except such railroad corporations as own or operate railroads in another state as well as in this state in connection with their railroad in this state, shall have its principal office in this state, and shall keep in such office its general and principal books of account, including its stock-books; and within this state, if corporations not having their principal office or books of account within this state shall, when required by the railroad commissioner, the legislature or any committee thereof, or any court of record, produce its books of account and stock-books. At least once in each year each stock corporation shall file in its principal office, and keep on file there for the use of its stockholders, a statement of the assets and liabilities of such corporation, and of its financial transactions for the previous year, which statement shall be audited by the principal officer, treasurer or other proper officer of such corporation, and shall contain a brief statement of the sources whence its receipts have been received, stated in classes, and a similar statement of its expenditures, showing the amount disbursed for each class of objects and purposes.

**FOREIGN CORPORATIONS TO APPOINT ATTORNEYS TO RECEIVE SERVICE OF PROCESS.**—Every foreign or domestic corporation, not only organized under the laws of this state, but also the purpose of transportation of either passengers or property, shall, before doing any business in this state, deposit in the office of the secretary of state a written instrument, duly signed by the president and secretary thereof, and by their seal, if officer thereof, and therein appoint an attorney to reside in this state and have an office therein, specifying his place of residence and office, upon whom and where any summons, notice, pleading, etc., may be served, and in such instrument stated that any service of any such summons, notice, pleading, etc., upon such attorney, or in his absence at his said office, in any action brought against it in this state upon any cause of action arising out of any business or transactions of such corporation, unless another party shall be a valid service upon such corporation, unless another attorney shall be subsequently appointed, with like authority, in his stead. Such corporation can do no business in this state until it complies with these provisions.

**CAPITAL STOCK. NOTICE OF HOW TRANSFERRED.**—Capital stock is deemed personal property, and when certificates thereof are issued shares may be transferred by indorsement of the owner, his attorney or legal representative, or by the owner or the certificatee, in delivery of a stock certificate to a bona fide purchaser or pledgee, for value, together with a written transfer of the same, shall be sufficient delivery to transfer the title as against all parties; such transfer to be recorded upon the books

of the corporation or a new certificate issued before the rights of the corporation are affected. Transfer of stocks on books can, by proceeding, be compelled.

**CONSIDERATION FOR WHICH STOCK MAY BE ISSUED.**—Stock shall not be issued except in consideration of money or labor or property actually estimated at its true money value, actually received by it equal to the par value thereof, nor any bond or other evidence of indebtedness, except for money, labor or property estimated at its true money value, actually received by it, equally in secreted value of the value thereof, and all stocks and bonds issued contrary to these provisions, and all stock dividends or other fictitious increase of the stock of any corporation shall be void; provided, however, that any certificate of stock so issued shall be validly admitted to the stock exchange of Chicago, New York, Boston or Philadelphia, or of either of said cities, may sell such stock or bonds so admitted at the best price or prices current for the time being, obtainable by the owner or any of the said exchanges at which the same shall be offered for sale. Payment of subscriptions to stock may be enforced, or in case stockholder shall neglect or refuse payment of any installment on the stock for the space of sixty days after the due and after notice, such stock may be sold at public auction and the proceeds applied in payment of the installment called for and expenses attending the sale, and residue refunded to owner; if proceeds are insufficient, the stockholder remains liable to the corporation for the deficiency.

**STOCKHOLDER'S LIABILITY ON REDUCTION OF CAPITAL.**—Whenever the capital stock of any corporation shall be diminished by any corporate vote, the stockholders thereof shall be liable for the payment of all debts then remaining unpaid on an account by such stockholder actually appointed receiver or assignee of such corporation, to an amount equal to the sum respectively refunded to them, or credited upon their debts for unpaid stock, or both. And also the stockholders voting for such diminution shall be jointly and severally liable for any credit whose debt shall then remain unpaid, to an amount equal to the whole amount refunded to the stockholders or credited upon their debts for unpaid stock, or both; but all stockholders shall be liable for contribution to every stockholder compelled to discharge corporate debts under this section proportionally to the amount so refunded or credited to them respectively.

**STOCKHOLDER, HOW RELEASED FROM LIABILITY.**—If any stockholder shall be transferred which is not fully paid, the corporation may, by agreement, to be acted on by its stock-book, discharge the stockholder making such transfer from liability to it for the unpaid part of his stock subscription, and accept that of the person to whom the stock is transferred in his place; and the person transferring such stock shall be liable for the amount untransferred to the then creditors of such corporation, and those who may become such within six months after such transfer, or to any lawfully appointed receiver or assignee of the corporation for their use.

Every stockholder may at all reasonable times inspect the books of the corporation. Every creditor of a corporation shall be informed at any time of the amount of capital stock of such corporation subscribed, the amount paid thereon, the amount owned by each, and the amount unpaid by each stockholder upon the shares owned by him; and if any shares of stock which were not fully paid for have been transferred within six months of the date of inquiry to the name of the person who transferred the same and the amount thereon at the date of such transfer. A complete record of the proceedings of the corporation shall be kept. Every stockholder is entitled to one vote for each share of stock. When all the members of any corporation shall be present at any meeting, however notified, and shall sign a written consent to the holding of such meeting on the records thereof, they may transact any business at such meeting which could lawfully be transacted at any meeting of the members of such corporation regularly called and notified. Unless otherwise provided, election of officers shall take place annually.

**SURRENDER OF CORPORATE RIGHTS.**—Whenever any corporation shall have remained insolvent, or shall be adjudged a debtor, or shall have suspended its ordinary and lawful business for one whole year, it shall be deemed to have surrendered the rights, privileges and franchises granted or required by the law, and shall be liable to be dissolved by the court of law, in any manner and for all purposes. In case of the dissolution of a corporation it may still continue as a body corporate for a period of three years for the purpose of settling its affairs.

**DIVIDENDS NOT TO BE PAID, WHEN.**—No dividends shall be paid to the stockholders of any corporation until the capital stock has been fully paid in. All subsequent dividends shall be paid out of the net proceeds of the corporation, and the directors of their stock for debts due to its clerks, servants and laborers for services performed for the corporation, but not exceeding six months' service in one year.

**NOTICE OF CAPITAL STOCK OF FOREIGN MANUFACTURING CORPORATIONS.**—Every foreign corporation engaged in manufacturing within this state shall, upon the written request of any resident creditor, within sixty days in the office of the secretary of state, file a statement showing the capital stock subscribed, the amount thereof actually paid in, the full name of each of its stockholders and the amount of stock owned by each and shall at the time of so filing a statement also file in and send to the secretary of state a true and correct copy of its articles of organization. Request may be served upon an officer of the corporation by mail, or upon any officer thereof who may be in this state.

**ORGANIZATION OF CORPORATIONS.**—Every more adult persons, residents of this state, may form a corporation for one

or more of the following named purposes. For any lawful mercantile, trading, mining, smelting, quarrying, prodding, lumbering, manufacturing business, etc. Articles of incorporation containing certain statutory requirements shall be made, signed and acknowledged, and the original articles, or a copy verified as such by the affidavit of the secretary, to be recorded by the register of deeds of the county in which the corporation is located, and a like verified copy shall be filed within thirty days with the secretary of state. The first meeting of any such corporation may be held after the recording of the articles, if the same have been subscribed. At least twenty per cent. of the capital stock must be actually paid in before a corporation can transact business with others than its members. The business of every stock corporation shall be managed by a board of directors, who shall meet annually by the stockholders from among their number as provided by the articles of organization or the by-laws, and shall hold one year and until their respective successors are chosen, except that when classified by the articles of organization they may be elected to hold accordingly.

#### LIENS.

**WHO MAY HAVE WHAT SUBJECT TO.**—Every person who, as principal contractor, architect, civil engineer or surveyor, performs any work or labor, furnishes any materials or prepares any plans or estimates for, in or about the erection, construction, repairs, protection, remodeling, any dwelling-house, or other building, or any machinery erected or constructed so as to be or become a part of the freehold upon which it is to be situated, or of any bridge, or in the filling up of any water lot, or the completion thereon of any wharf, or in the construction of any dam, or dredging of the channel in front of such water lot, or in digging or constructing any well or fountain, or in digging, building or repairing any tunnels upon land, and the making or repairing of any walk, sidewalk or edging, upon any dwelling-house, or other building, or on or over said land, doing manual labor thereon, shall have a lien thereupon, and upon the interest of the owner of such dwelling-house, building, machinery, etc., in and to the land upon which the same is situated, or of the person causing such manual labor to be done, and upon the water lots so filled or in front of which such dredging is done, not exceeding forty acres, or, it within the limits of an incorporated city or village, upon the piece or parcel of land used or designed for use in connection with such dwelling-house, building, machinery, etc., or on land in which such manual labor is done, not exceeding one acre. Such lien shall be prior to any other lien which originates subsequent to the commencement of the construction, repairs, removal or reconstruction of such building, machinery, etc., or on land, and shall also attach to and be a lien upon the real property of any person on whose premises such improvements are made, such owner having knowledge thereof and consenting thereto, and may be enforced in any court of law. In case of any person who orders or contracts for the purchase of any machinery to be placed or connected to or with any building or premises, and such person not having an interest in such building or premises in or connected with which such machinery is placed, such person shall be entitled to set off against the person furnishing such machinery, and shall have the right to remove from such building or premises such machinery, in case there shall be default in the payment for such machinery when due, leaving such building or premises in as good condition as they were before such machinery was placed in or on the same. And whenever the doing of manual labor on land for which a lien is given by this section shall consist of the building of a continuous roadbed or structure designed or intended for use as a single thing, or as a part of a single thing, and such roadbed or structure is not limited in extent to one acre of land in an incorporated city or village, or to forty acres of land outside such city or village, but extends over and across more than forty acres of land, whether within or without or partly within and partly without such city or village, then in every such case, the limitation to an acre or forty acres, as the case may be, in this section contained, shall not apply to the lien so given by this section, but only to the interests of the owner in and to the whole of said continuous roadbed and structure and the whole of the land of the owner on which the same is constructed, or which is intended to be used or connected for the purpose of such machinery, he shall have notice of the claimant may make and file a single petition or claim for a lien on all of the same, which petition, or a copy thereof, shall be filed in the office of the clerk of the circuit court of such county in which such roadbed or structure is situated, and the same shall be enforced or entered by the party entitled thereto in the circuit court of any of the said counties in which the said claim or petition is so filed, and in the enforcement of such lien the said roadbed or structure, if sold, shall be sold as one continuous and single thing.

**LIEN OF SUB-CONTRACTOR AND EMPLOYEES MISREPRESENTATIONS AS TO USE OF MATERIALS.**—Every person who, as sub-contractor of a principal contractor, or employee of any principal contractor or sub-contractor, performs any work or labor, or furnishes any materials to a principal contractor or sub-contractor, or in any of the cases mentioned in the preceding section, shall be entitled to a lien, if, within sixty days after performing such work or labor, or furnishing such materials, he shall have notice in writing to the owner or his agent of the property to be affected by such lien, setting forth that he has been employed by such principal contractor or sub-contractor to perform or furnish and has performed or furnished such materials, he shall have notice in writing to the owner of the labor performed or materials furnished, and the amount due therefor from such principal contractor or sub-contractor, and that he claims the lien given by law. In all cases where a lien shall be filed by any person other than the principal contractor it shall be the duty of the principal contractor to defend

any action brought thereupon at his own expense, and during the pendency of such action the owner may withhold from the contractor the amount of money for which such lien shall be filed; and in case of judgment against the owner or his property upon the lien, he shall be entitled to deduct from any amount due by him to the contractor the amount of such judgment and costs, and, if he shall have settled with the contractor in full, shall be entitled to recover back from the principal contractor any amount so paid by the owner, for which the principal contractor is liable, and the contractor or sub-contractor or employee who shall purchase materials on credit, and represent at the time of purchase that the same are to be used in a designated building or other improvement, and shall thereafter use or caused to be used in any other building or other improvement, or in any building or other improvement other than that designated, without the written consent of the person from whom the materials were purchased, with intent to defraud such person, shall be deemed guilty of a misdemeanor, and on conviction shall be punished by imprisonment in the county jail not more than three months, or by a fine not exceeding \$500.

Such claim for lien shall contain a statement of the contract or demand upon which it is founded, the name of the person against whom the demand is claimed, the name of the claimant or assignee, the last date of the performance of labor or furnishing of materials, a description of the property affected thereby, a statement of the amount claimed, and a statement of the date of the filing of the claim. It shall be signed by the claimant, or his attorney, and need not be verified, and may be amended in case of action brought by order of the court as pleadings may be. Lien shall be filed in the office of the clerk of the circuit court of the county in which the affected property is situated. The statutory procedure provides for the manner of foreclosing liens.

**LIENS ON MINING AND SMELTING PROPERTY.**—Any person who shall do or perform any work, labor or services, for any person or corporation engaged in mining, smelting, quarrying, or in mining, smelting or manufacturing iron, copper, silver or other ores or minerals in this state, and any bona fide holder of any draft, time-check or order for the payment of money due for any such labor issued or drawn by any person or corporation, shall have a lien of the size of the claim, or for the amount due on such draft, time-check or order, upon all the personal property connected with such mining, smelting or manufacturing industry belonging to such person or corporation, including the ores or products of such mining or manufacturing, together with the machinery and other personal property used in the operation of such mining, smelting or manufacturing industry, and all the interest of such person or corporation in any real estate belonging thereto and connected with such business, and shall also have the preference of all other debts, judgments or decrees, liens or mortgages, against such person or corporation, except liens accruing to this state for taxes, fines or penalties, subject to the exceptions and limitations set forth in the law.

#### MINING.

**RULES GOVERNING MINING RIGHTS.**—Where there is no contract between the parties, or terms established by the landlord to the contrary, the following rules and regulations shall be applied to mining contracts and leases for the digging of ores and minerals, viz.: 1. No license or lease, verbal or written, made to a miner, shall be revocable by the major thereof, after a valuable discovery or prospect has been struck, unless the miner shall forfeit his rights by negligence. 2. The discovery of a vein or fault containing ores or minerals shall entitle the discoverer to the ores or minerals pertaining thereto, subject to the rest due his landlord, before as well as after the ores or minerals are separated from the freehold; but such miner shall not be entitled to recover any ores or minerals, or the value thereof, from the person digging on his range in good faith, and known to be mining thereon, until he shall have given notice of his claim, and he shall be entitled to the ores or minerals dug after such notice. 3. Usages and customs among miners may be proved in explanation of mining contracts, to the same extent as usage may be proved in other classes of business.

Every corporation, company or person engaged in mining may, when it is necessary in order to prosecute their work in mining, upon compliance with the provisions of the statutes for the discovery of mining, or the opening, conducting or conveying the water away from their shafts, levels or land upon, over or below the surface of the land of any adjoining owner, in pipes, ditches, races or tunnels, doing as little damage as the case will admit of. The nature of the work to be done, or the nature of the shaft, level or tunnel, or the commissioners upon petition to the county judge. Either party may appeal from the award of the commissioners within twenty days after the same is filed, by filing with the clerk a written notice of appeal.

**SMELTERS TO KEEP ACCOUNT OF ORE RECEIVED.**—Every smelter and every purchaser of ores and minerals shall keep a substantially bound book, ruled into suitable columns, in which shall be entered from day to day, a record of the amount of the following items: The day, month and year when received; the name of the person from whom purchased; the name of the person by whom hauled and delivered; the name of the owner of the land from which the ores, or minerals, were obtained, or, if not known, the name of the digger, or mine, or lode, or vein, or level of the land. Said book shall be kept at the furnace, or at the usual place of business of such smelter or purchaser, or his agent, in this state, and shall be open to all persons at reasonable times for the purpose of making extracts therefrom.

**POWER TO HOLD STOCK IN OTHER CORPORATIONS.**—Any corporation formed for the purpose of mining, smelting, quarrying or any mechanical or manufacturing purpose, upon and after the first month of the year 1890, shall have the right to exercise its power, in its corporate capacity, to subscribe for, purchase, take

and hold stock in any corporation, foreign or domestic, formed for the purpose of manufacturing, creating or generating any kind of power or light, to be used as a mechanical agency, when such power or light is wholly, or in part, in facilitating the operations of such mining, smelting, quarrying or manufacturing company, or the transaction of its business.

## WYOMING

### CORPORATIONS.

**CREATION AND REGULATION.**—Three or more persons who may desire to form a company for the purpose of carrying on any kind of manufacturing, mining, chemical, macadamizing or mechanical business, constructing wagon roads, railroads, telegraph lines, ditches, building furnaces, tunnels, or carrying on any branch of business designed to add to the industrial or productive interests of the country, may make, sign and acknowledge, before some officer competent to take acknowledgment of deeds, duplicate certificates in writing, which shall be stated in the corporate name, the object, the capital stock, the term of its existence, not to exceed fifty years, number of shares, the number of trustees and their names, the name of the town and county in which the operations are to be carried on, and the names of the trustees, one of the said certificates in the office of the county clerk of each county wherein the business of the company is to be carried on, and one thereof in the office of the secretary of state.

**CERTIFICATES AS EVIDENCE.—CORPORATE POWERS.**—When said certificate is certified to by the secretary of state, it shall be evidence of the existence of such company, which shall be a body politic and corporate, and by its name have succession, be capable of suing and being sued, and have a common seal; it shall be capable of acquiring by purchase, prescription, donation or otherwise, holding or conveying by deed or otherwise, any real or personal estate necessary to enable the said company to carry on the operations named in the certificate.

**TRUSTEES.**—Not less than three nor more than nine trustees, who shall respectively be stockholders, and annually elected by the stockholders at such time and place as shall be directed by the by-laws, shall manage the property and concerns of the company. The elections shall be by ballot, and each stockholder shall be entitled to vote as he owns shares of stock. When a vacancy shall happen among the trustees it shall be filled for the remainder of the year as the by-laws provide. The failure to elect trustees shall not dissolve the company.

**ASSESSMENTS OF CAPITAL STOCK.**—The trustees may demand from the stockholders, respectively, all such sums of money by them subscribed as the trustees shall deem proper, not to exceed ten per cent, per month, under the penalty of forfeiting the shares of stock subscribed and all previous payments.

**BY-LAWS.**—The stockholders, if the certificate so provides, shall have the power to make by-laws for the management of the business affairs and disposition of the stock of the company, not inconsistent with the state laws.

**TRANSFER OF STOCK.**—The stock shall be transferable as the by-laws prescribe. The company cannot use any of its funds in the purchase of stock in any other company, nor in its own; provided, however, it can hold and own any stock and to any amount in any other company that is or may be subsidiary to and that does contribute to the objects and purposes of the first company named.

**LIABILITY OF STOCKHOLDERS.**—The stockholders shall be severally and individually liable to creditors to the amount of the unpaid assessments on capital stock held by them respectively, for debts and contracts made by the company.

**GENERAL POWERS OF CORPORATIONS.**—Every corporation under the provision of this chapter, as soon as organized, shall have:

1. To have succession by its corporate name, for the period limited in its certificate of charter.
2. To sue and be sued, complain and defend in any court of law or equity.
3. To make and use a common seal, and alter the same at pleasure.
4. To hold, purchase and convey such real estate and personal estate as the purpose of the corporation may require.
5. To appoint such subordinate officers and agents as the business of the corporation shall require, and to allow them a suitable compensation.
6. To make by-laws, not inconsistent with any existing law, for the management of its business, the regulation of its affairs, and for the transfer of its stock.

Full-paid stock may be issued for property.  
Any corporation may increase or diminish its capital stock to any amount which may be deemed sufficient and proper for the purposes of the corporation.

**ACCEPTANCE OF CONSTITUTION BY CORPORATIONS.**—No corporation organized under the laws of Wyoming or any other jurisdiction other than the state, or coming shall be permitted to transact business in this state until it shall have accepted the constitution of the state. Every acceptance of the constitution shall be filed and recorded in the office of the secretary of state, who shall note on the margin of the record the corporation filing such acceptance, and the fact that the same is filed.

### LIENS.

**LIENS ON PERSONAL PROPERTY.**—Any mechanic, artisan or other person who shall bestow labor upon any article of personal

property at the request of the owner, or who shall furnish materials for making or repairing same, shall have a lien thereon for his reasonable charges therefor.

**ENFORCEMENT OF ARTICLES.**—If the foregoing charges are not paid within thirty days, the person to whom such lien is given may apply to a justice of the peace of his county to appoint appraisers to appraise the several articles of personal property on which such lien is claimed. The justice shall thereupon appoint three appraisers, who shall, with the party claiming such personal property, and return the appraisal to the justice within ten days after their appointment.

**NOTICE OF SALE.**—A person to whom such lien is given shall give ten days notice of the time, place and terms of sale, which shall be personally served upon the owner, if he reside within the county; if not, by publication in some newspaper, and shall transmit by mail to the owner a copy of such notice. The notice being personally served, or the copy being published, after four weeks the party claiming a lien may proceed to sell such property at public auction, for cash, in accordance with the notice, between the hours of 10 A. M. and 4 P. M. of the day appointed, and from the proceeds pay the costs of such appraisal, notice and sale, and satisfy his lien. If the entire property unsold he shall surrender unto the owner. No such sale shall be made for less than two-thirds of the appraisal value of the articles sold.

**LIENS ON MONEY AND LABOR.**—He who shall work at the request of the owner thereof, in a vein or lode, mine or bank, shall have a lien thereon to the amount due at any time when a demand shall be made upon such owner and payment shall be refused.

**LIENS FOR MATERIALS.**—Any person who shall labor as a mechanic or otherwise, or who shall furnish materials, tools, fitting or constructing apparatus upon any mine referred to in the preceding section, shall also have a lien upon the mine for his reasonable charges.

**LIENS ON REAL ESTATE.**—All persons performing labor or furnishing materials shall have liens upon the terms of sale, which he labored or furnished materials, as miners or other laborers upon or in mines, as provided in this chapter.

**SUB-CONTRACTOR, CLAIM OF.**—Any sub-contractor, whose demand has not been paid, by giving notice to the owner and attested copy of his claim performed and material furnished, is entitled to the amount of his claim out of the money due the contractors; and the owner shall thereupon notify the contractors, so that, if they have any disagreement as to the true amount due, the amount may be amicably adjusted. But if, within thirty days after the receipt of such notice, the contractor does not notify the owner that he intends to dispute the claim, he shall be considered as assenting to the demand, and the owner shall be justified in paying the sum which he sues for.

**AGAINST WHOM LIENS HOLD.**—The lien shall hold not only against the owner of the mine, but against all persons who shall have purchased such mine.

**PRIORITY OF LIENS.**—Any person entitled to a lien under this chapter shall make an account in writing of the items of labor, skill, machinery and material, and making oath thereto, shall within sixty days from the time of completion file the same in the office of the register of deeds of the county wherein the mine is located, with a correct description of the property, which account so made and filed shall for one year thereafter operate as a lien upon the described property. All lien claims for labor performed or material furnished shall be concurrent and paid pro rata out of the proceeds arising from the sale thereof. If they suit proceed by civil action, and the lien shall continue until such suit or suits be finally determined. All persons claiming liens shall be made parties defendant, and their rights therein shall be determined by the court. Such action shall be brought in the county where said lien is filed. Service therefor may be had in any county in the state.

**MECHANICS' AND BUILDERS' LIENS.**—Every mechanic who shall be employed to furnish materials, tools, building or improvement upon land shall have for his work or materials a lien upon such building or improvements, and upon the land belonging to such owner on which the same are situated, to the extent of one acre, to secure the payment of his work or materials furnished. Such lien is a prior incumbrance upon such land and improvements, and any person enforcing such lien may have such building or improvements sold under execution. Purchaser may remove the same within a reasonable time.

**PRIORITY OF CONTRACTORS' LIENS.**—Every original contractor or shall within ninety days, and every sub-contractor or laborer within fifty days, file in the office of the register of deeds of the proper county a just and true account of the demand due, which he sues for, be a lien upon such building or improvements, with a description of the property, with the name of the owner or contractor, which shall be verified by oath, provided the original contractor shall not file a lien prior to the expiration of sixty days after the completion of his contract.

**PLEDGINGS AND PRACTICES.**—The practice under this chapter shall be the same as in all ordinary civil actions, except as otherwise provided. Every person, except the original contractor, shall give ten days notice of his claim, by writing, with a demand, to the owner, stating therein the amount of his claim, and from whom it is due. It is then the duty of the contractor to defend at his own expense, and during the pendency thereof the owner may withhold a sufficient sum of money to pay the claim and the costs of court, which includes \$25 for attorneys' fees.

**PRIORITY OF LIENS.**—The lien for work and labor performed and material furnished, as aforesaid, shall be preferred to all other incumbrances which may be attached to such building or ground subsequent to the commencement of such buildings or improvements.

## MINING.

**LODGE AND PLACER CLAIMS.**—In any mining district the miners may meet and organize and elect a recorder and make regulations, not in conflict with the laws of the United States or this state, governing the location, manner of recording and amount of annual work necessary to hold possession, subject to the following requirements:

1. Any five miners owning in part or in whole claims within the proposed district shall give at least three written notices of a meeting called by them for organizing such district.

2. The meeting must be attended by at least ten persons, owning in part or in whole claims within the proposed district.

3. The recorder elected shall hold office until his successor is elected and qualified; he shall give bonds for at least \$1,000, and shall be approved by the probate judge, and filed in the office of the county clerk.

4. When a district is once organized it cannot be subdivided, except in accordance with the local laws of the district, or by action of the legislature. In case of abandonment the recorder shall deposit all records pertaining to his office in the office of the register of deeds of the county.

5. Each mining district may regulate the fees for recording certificates and other instruments.

The laws and records of each mining district shall be filed with the county register of deeds.

**MINING WATER RIGHTS.**—Any person mining or milling in the state shall have the right to bring water from mines, or any natural water courses, as their business interests may require, provided it shall not infringe on vested rights.

**RIGHTS OF WAY.**—All mining claims shall be subject to the right of way of any ditch or flume for mining purposes, or of any railway, pack trail or wagon road across such claim or property; provided, such right of way shall not be exercised against such property without the consent of the owner, except in condemnation, as in the case of land taken for public highways. The owner of the surface property may demand satisfactory security from the miner, which, if refused, will give the right to said occupant of the surface to enjoin miner from working such mine.

**RE-LOCATIONS.**—When there is error in the original location certificate, or where it is desired to change the surface boundaries of the claim, such locator may file an additional location certificate in compliance with and subject to this act, provided such re-location shall not infringe upon the rights of others. No location certificate shall contain more than one claim or location. Where there is collusion for the purpose of obtaining possession of any mineral claim then in the actual possession of another, by force, threats or stealth, and they shall proceed to carry out such purpose, such persons so engaging shall be guilty of a misdemeanor, and upon conviction shall be fined a penal sum not exceeding \$5, and be imprisoned in the county jail for not less than sixty days nor more than six months.

**MISDEMEANOR.**—Any person who shall unlawfully destroy any mining property shall be guilty of a misdemeanor, and upon conviction thereof shall be fined a penal sum of money not less than \$50 nor more than \$1,000, or be imprisoned not less than thirty days nor more than one year, or both.

**FRAUD.**—Any person who shall engage in any swindling, in relation to any mine or mining property, designed to cheat and deceive others for the purpose of gain, shall be guilty of a felony, and upon conviction thereof shall be fined any penal sum of not less than \$50 nor more than \$5,000, or imprisoned in the penitentiary for not less than thirty days nor more than three years, or both.

**PROTECTION OF SHAFTS.**—Any persons who have sunk mining shafts upon any mining claim shall forthwith secure such shafts and openings against the injury of live stock running at large upon the public domain, by covering them in a manner to render them safe, or by making a strong fence around such shaft or openings aforesaid. Any persons who shall fail to comply with this section shall be guilty of a misdemeanor and, upon conviction, shall be liable for damages sustained by loss of live stock thereby.

**SIZE OF CLAIM.**—The length of any mining claim located within the state shall not exceed fifteen hundred feet horizontally along such vein. The width shall not exceed three hundred feet on each side of the discovery shaft. A discoverer of a mineral vein shall, within ninety days, record such claim with the recorder of the mining district, if such district be organized, and shall, within one hundred and twenty days, record the same with the county clerk and ex officio register of deeds by location certificate, which shall contain the following facts: 1. The name of the lode claim; 2. The name and names of the locator or locators; 3. The date of location; 4. The length and width of the vein as far as it is known; 5. The amount of the surface ground claimed on either

side; 6. A description of the claim by such designation of fixed objects as shall identify the claim beyond question.

**DISCOVERY RIGHTS.**—The discoverer of any mineral vein shall have a period of one hundred and thirty days in which to sink a discovery shaft. A discoverer of any placer claim shall, within thirty days, record such claim with the recorder of the mining district, if such district be organized, and shall, within ninety days, record such claim with the recorder of deeds of the county by a location certificate, which shall contain: 1. The name of the claim, designating it as a placer claim; 2. The name of the locator; 3. The date of location; 4. The number of days it takes to reach the claim; 5. A description of the claim, such a designation of natural or fixed objects as shall identify it beyond question.

**PATENTS FOR PLACER CLAIMS.**—When any person has held and worked his claim in conformity with the laws of this state and the regulations of the mining district for five successive years after the 1st day of January succeeding the date of location, he shall be entitled to proceed to obtaining a patent for his claim from the United States without performing further work.

Coal mines are not included in this act.

## COAL MINES.

**MAPS.**—Every operator of a coal mine shall cause to be made an accurate map of such coal mine, of a scale not to exceed two hundred feet to the inch, which shall exhibit all the openings, and shall show the direction of the air currents therein, and the boundary lines. Said map shall be kept at such mine for the use of the state inspector of coal mines. Said operator shall as often as once every six months accurately trace a plan of the excavation made, and of all the working places during the preceding six months, exhibiting clearly the parts abandoned, or parts in proximity to the boundary line. Said map will be the property of the state, and shall remain in the care of the inspector of coal mines. If said inspector believes said plan to be inaccurate, he may authorize a correct plan made at the expense of the operator of said mine.

**OPENINGS TO BE MAINTAINED.**—No person shall work in any coal mine, unless such mine is in communication with at least two openings by a distance of not less than fifty feet. When a second opening is made, not to exceed seventy-five feet in vertical depth, it shall be set apart exclusively for ingress and egress, shall be clear of any obstructions, and not to exceed an angle of sixty degrees in descent. The hoisting machinery and stairs shall be kept in safe condition and inspected once in each twenty-four hours by one employed for that purpose. The operator of any coal mine shall maintain therefor ample means of ventilation, amounting not less than one hundred cubic feet per minute for each and every person employed in said mine.

**MINING BOSS—DUFFERS AND POWERS.**—The owner shall employ a competent and practical inside mining boss, who shall keep a careful watch over the ventilating apparatus, the drainage and traveling ways; he shall measure the air current at least once a week at the inside and outside; he shall keep a record of such measurements, which shall be open for examination by the state inspector. Any workman who shall intentionally injure any mining apparatus or disobey any order given in carrying out the provisions of this chapter shall be deemed guilty of misdemeanor.

**INSPECTOR OF COAL MINES.**—The governor shall nominate a state inspector of coal mines, who shall hold his office for two years, and until his successor is duly appointed and qualified. He shall be not less than thirty years of age, a citizen of the United States, and of temperate habits; he shall receive a salary of \$2,500 and actual traveling expenses, to be paid quarterly by the state treasurer upon warrants of the auditor. He is authorized to procure such instruments and chemical tests as may be necessary to discharge his duties, at the cost of the state, subject to the approval of the governor. He shall give a bond for the faithful discharge of his duties in the sum of \$10,000 to the state of Wyoming.

**APPEALS UPON DECISIONS OF THE INSPECTOR.**—The inspector shall report in writing to the governor the determination of the aforesaid provisions, and if the operator shall not be satisfied with his decision he may, within fifteen days thereafter, appeal to the district court of the county in which the mine concerned is located, and said court shall speedily determine the point involved, which said decision shall be binding and conclusive.

**PROBATION.**—Boys under the age of fourteen years and girls or women of any age shall not be permitted to be employed in and about any coal mine. The state inspector, on each visit to any mine, shall make a written report of the condition in which he finds it, and post the same in the office of the mine.



# MINING LAWS

OF

# THE DOMINION OF CANADA

## REGULATING THE DISPOSAL OF LANDS CONTAINING MINERAL OTHER THAN COAL

1892

EMBRACING RULES AND REGULATIONS GOVERNING QUARTZ MINING, PLACER MINING, NATURE AND SIZE OF CLAIMS, RIGHTS AND DUTIES OF MINERS, ADMINISTRATION, BED ROCK FLUMES, DRAINAGE OF MINES, DITCHES, GENERAL PROVISIONS, INTERPRETATION, HEARING AND DECISION OF DISPUTES, LEAVE OF ABSENCE, MISCELLANEOUS, FORFEITURE AND SCHEDULE OF FORMS.

1. These regulations shall be applied to all Dominion lands, with the exception of those situated in the province of British Columbia, containing gold, silver, emerald, lead, tin, copper, iron or other mineral deposit of economic value, with the exception of coal.

2. Any person or persons may explore vacant Dominion lands not appropriated or reserved by government for other purposes, and may search therein, either by surface or subterranean prospecting, for mineral deposits, with a view to obtaining under these regulations a mining location for the same, but no mining location or mining claim shall be granted until actual discovery has been made of the vein, lode or deposit of mineral or metal within the limit of the location or claim.

### QUARTZ MINING.

3. A location for mining, except for iron, on veins, lodes or ledges of quartz or other rock, shall not exceed the following dimensions: Its length shall not be more than fifteen hundred feet, its breadth not more than six hundred feet. Its surface boundaries shall be four straight lines and the side-lines and end-lines shall be parallel lines, except where prior locations may prevent, in which case it may be such shape as may be determined by the superintendent of mines. Its length shall not be more than three times its breadth. Its boundaries beneath the surface shall be the vertical planes in which its surface boundaries lie.

4. Any person having discovered a mineral deposit may obtain a mining location therefor, under these regulations, in the following manner:

(a) He shall mark the location on the ground by placing at each of its four corners a wooden post, not less than four inches square, driven not less than eighteen inches into the ground, and showing that length above it. If the ground be too rocky to admit of so driving such posts, he shall build about each of them, to support it and keep it in place, a cairn or mound of stones at least three feet in diameter the base, and eighteen inches high. If the location be timbered, a line shall be run and well blazed joining the post posts. If it be not so timbered, and the ground is of such a nature that any one post could be seen from the ends of either of the lines which form the angle at which the said post is placed, posts flattened on two sides (such flattened portions facing the directions of the line) shall be planted or mounded along the side-lines wherever necessary, so that no difficulty may be experienced by a subsequent prospector or explorer in discovering or following the boundaries of any location. If the location be laid out with its boundaries due north and south and east and west, then he shall mark on the post designating the northeast angle of the location, legibly, with cutting instrument, or with colored chalk, his name in full, the date of such marking, and the letters, M. L. No. 1, to indicate that the post is mining location post No. 1. Proceeding next to the southerly angle of the location, he shall mark the post planted there with the letters M. L. No. 2, and his initials; next to the southwesterly angle of the location, the post planted at which he shall mark with the letters M. L. No. 3, and his initials; and lastly, to the northwesterly angle of the location, the post planted at which he shall mark with the letters M. L. No. 4, and his initials. If the location be laid by other than due north and south and east and west lines, the first-mentioned post shall be the one at the northerly angle; the second the one at the easterly angle; the third the one at the southerly angle; and the fourth the one at the westerly angle. Furthermore, on the post of each post, which face shall in the planting thereof be turned toward the post which next follows it in the order in which they are named and numbered, there shall be marked in figures the number of yards or feet in a line following the means of measurement are not available, the distance to be so marked on each of the posts may be that estimated. If the corner of a location falls in a ravine, bed of a stream, or any other situation where the character of the locality may render the planting of a post impossible, the said corner may be indicated by the erection at

the nearest suitable point of a witness-post, which in that case shall contain the same marks as those prescribed in this clause in regard to corner posts, together with the letters W. P., and an indication of the bearing and distance of the site of the true corner from such witness-post. (In this manner any subsequent prospector, informed of these regulations, will, on finding any one of the posts or mounds, be enabled to follow them all around, from one to another, and avoid encroachment, either in search of or in marking out another location in the vicinity for himself.)

(b) Having so marked out on the ground the location he desires, the claimant shall, within sixty days thereafter, file with the agent in the Dominion lands office for the district in which the location is situate a declaration, under oath, according to Form A in the schedule to these regulations (which may be sworn to before the said agent, or may have been previously sworn to before a Justice of the peace or commissioner), setting forth the circumstances of his discovery, and describing, as nearly as may be, the locality and dimensions of the location marked out by him as herefrom, and dispose of any mineral deposit contained within its boundaries, provided that during each of the said five years after the date of such receipt he or they shall expend in actual mining operations on the claim at least \$100, and furnish to the agent of Dominion lands within each and every year a full detailed statement of such expenditure, which evidence shall be in the form of an affidavit corroborated by two reliable and disinterested witnesses; and the agent shall thereupon, subject to the payment by the claimant of a fee of \$5, issue a receipt in the Form C, in the schedule hereto, which shall entitle the claimant to hold the location for another year.

(c) The agent upon such payment being made shall grant a receipt according to the Form E in the schedule to these regulations. The receipt shall authorize the claimant, his legal representatives or assignees, to enter into possession of the location applied for, and subject to its renewal from year to year as hereafter provided, during the term of five years from its date, to take therefrom and dispose of any mineral deposit contained within its boundaries, provided that during each of the said five years after the date of such receipt he or they shall expend in actual mining operations on the claim at least \$100, and furnish to the agent of Dominion lands within each and every year a full detailed statement of such expenditure, which evidence shall be in the form of an affidavit corroborated by two reliable and disinterested witnesses; and the agent shall thereupon, subject to the payment by the claimant of a fee of \$5, issue a receipt in the Form C, in the schedule hereto, which shall entitle the claimant to hold the location for another year.

(d) Any party of miners, not exceeding four, whose claims are adjoining, and each of which has been entered within a period of three months, may, for the better development of their locations, and upon being authorized to do so by the agent, make upon any one of such locations, during the first and second years after entry, but not subsequently, the expenditure required by these regulations to be made upon each of the said locations. The authority herein provided for shall be in the Form D in the schedule hereto, and shall be granted by the agent upon application made in writing to that effect by each of the claimants interested, and payment of a fee of \$5, upon such payment the agent shall also grant a receipt in the Form E in the schedule hereto. Provided, however, that the expenditure made upon any one location shall not be applicable in any manner or for any purpose to any other location.

5. At any time before the expiry of five years from the date of his entry for his mining location, the claimant shall be entitled to purchase the said location upon filing with the agent proof that he has expended not less than \$500 in actual mining operations on the same, and that he has in every other respect complied with the requirements of these regulations.

6. The price to be paid for a mining location shall be at the rate of \$5 per acre, cash.

7. An application to purchase a mining location, and paying the price therefor, as hereinbefore provided, the claimant shall also deposit with the agent the sum of \$50, which shall be deemed payment by him to the government for the survey of his location; and upon receipt of the plans and field-notes, and the approval thereof by the surveyor-general, a patent shall issue to the claimant in the Form F in the schedule hereto. If, on account of its remoteness or other cause, a mining location cannot at the time of the deposit of \$50 by the applicant for the purpose he surveyed by the government for that sum, he shall be subject to the

alternative of waiting until the employment of a surveyor by the government on other work in the vicinity of the claim renders it convenient to have the survey made at a cost not exceeding \$50, or, in case of a placer claim, its survey by a duly commissioned surveyor of dominion lands, under instructions from the surveyor-general; in the latter case, on receipt of the plans and field-notes of the survey and approval thereof by the surveyor-general, the patent, if the surveyor of his location, then entitled to receive his patent, and to have returned to him the \$50 deposited by him to defray the cost of survey.

8. Should the claimant, or his legal representatives as aforesaid, fail to give within the time hereinbefore prescribed, or, having proved such expenditure, fail within the prescribed time to pay in full, and in cash, to the agent the price hereinbefore fixed for such mining location, and also to pay the sum of \$50 hereinbefore prescribed, the survey of his location, then taken in the location or claim on his or their part to acquire it shall lapse, and the location shall thereupon revert to the crown, and shall be held, along with any immovable improvements thereon, for disposal, under these regulations, to any other person, or as the minister of the interior may direct.

(a) In cases where applications for mining locations are made in respect of lands within surveyed townships, they must conform to the regular system of surveys; that is, the location shall be either legal subdivisions or regular subdivisions thereof, and prior to the application being granted it shall be necessary to stake out the location, at least approximately, on the ground, and it shall be surveyed by a dominion land surveyor, acting under instructions from the surveyor-general, within one year thereafter.

(b) If applications for mining locations are made within a township of which at least one boundary has been surveyed, to protect himself the discoverer may stake out his claim in conformity with these regulations; but before the issue of the patent, the claim shall, if required by the minister of the interior, be described by legal subdivisions or fractional portions thereof, upon a survey made by a dominion land surveyor, acting under instructions from the surveyor-general.

9. Where two or more persons lay claim to the same mining location, the right to acquire it shall be in him who can prove he was the first to discover the mineral deposit involved and to take possession, by demarcation in the manner prescribed in these regulations, of the location covering it.

10. Priority of discovery shall not give the right to acquire; but a person subsequently and independently discovering, who has complied with the regulations in this respect, in and in conformity with the precedence of the first discoverer if the latter has failed to comply with the said other conditions; provided, however, that in any case where it is proved that a claimant has, in bad faith, used the prior discovery of another, or fraudulently obtained a valuable mineral deposit, and demarcation, he shall, apart from other legal consequences, have no claim, and shall forfeit the deposit made with his application, and shall be absolutely debarred from obtaining another mining location.

11. Not more than one mining location shall be granted to an individual claimant upon the same lode or vein.

12. Where land is used or occupied for milling purposes, reduction-works or other purposes incidental to mining operations, claims by the proprietor, or any other person, in respect of such land may be applied for and patented, either in connection with or separate from a mining location, in the manner hereinbefore provided for in the application for and the patenting of mining locations, and may be held in addition to any such mining location; but such additional land shall in no case exceed five acres in extent, and shall be paid for at the same rate as a mining location.

13. The minister of the interior may grant a location for the mining of iron not exceeding one hundred and sixty acres in extent, which shall be bounded on the north and south and east and west lines, and its breadth and length shall be equal: Provided, that should any person making an application purporting to be for the purpose of mining iron thus obtain, whether in good faith or fraudulently, possession of a valuable mineral deposit other than iron, his right in such deposit shall be restricted to the area hereinbefore prescribed for other minerals, and the rest of the location shall thereupon revert to the crown for such disposition as the minister may direct.

14. When there are two or more applicants for any mining location, no one of whom is the original discoverer or his assignee, the minister of the interior, if he sees fit to dispose of the location, shall invite their competitive tenders, or shall put it up to public sale, in the manner hereinbefore provided.

15. An assignment of the right to purchase a mining location shall be indorsed on the back of the receipt or certificate of assignment (Forms B and C, in the schedule hereto), and the execution thereof shall be attested by two disinterested witnesses; upon the deposit of the receipt or certificate with such assignment executed and attested as herein provided, in the office of the agent, accompanied by a registration fee of \$2, the agent shall give to the assignee a receipt in the Form G in the schedule hereto, which certificate shall entitle the assignee to all the rights and privileges of the original discoverer in respect of the claim assigned; and the said assignment shall be forwarded to the minister of the interior by the agent, at the same time and in the same manner as the claims for mining lands, and shall be registered in the department of the interior; and no assignment of the right to purchase a mining location which is not unconditional and in all respects in accordance with the provisions of this section, or which is not accompanied by the fee herein provided for, shall be recognized by the agent or registered in the department of the interior.

16. If application be made under the next preceding clause by the assignee of the right to purchase a mining location, and such claim is duly recognized and patented, as hereinbefore provided, the assignee shall, by complying with these regulations, become entitled to purchase the location for the price and on the terms prescribed thereby.

PLACER MINING.

17. The regulations hereinbefore laid down in respect of quartz mining shall be applicable to placer mining so far as they relate to entries, entry fees, assignments, marking of locations, agents' receipts, and generally where they can be applied, save and except as otherwise herein provided.

NATURE AND SIZE OF CLAIMS.

18. The size of claims shall be as follows: (a) For "bar diggings," a strip of land one hundred feet wide at high-water mark, and thence extending into the river to its lowest water level.

(b) For "dry diggings," one hundred feet square. (c) Creek and river claims shall be one hundred feet long, measured in the direction of the general course of the stream, and shall extend in width from base to base of the hill or bench on each side, but when the hills or benches are less than one hundred feet apart the claim shall be one hundred feet square; provided, however, that in any case where the distance from base to base of the hill or bench exceeds ten chains, such claims shall be laid out in areas of ten acres each, the boundaries of such areas to be due north and south and east and west lines, and drawing parallel to the boundaries of the said area of ten acres shall consist of one-fourth of a legal subdivision, and shall be marked on the ground in the manner prescribed by these regulations for marking quartz mining locations: provided further, that any such claims intersected by creek or river shall, in addition to the stakes at the four corners thereof, have the points at which its boundaries may be intersected by the high-water mark of the creek or river, on both sides of the creek or river, designated by posts of the same size which shall be driven into the ground the same depth and showing the same length above it as the posts prescribed by these regulations in respect of quartz mining locations, and the said posts shall have marked upon them legibly, with a cutting instrument or with colored chalk, the name of the claimant in full and the date of such marking.

(d) "Bar diggings" shall be one hundred feet square. (e) Every claim on the face of any hill, and fronting on any natural stream or ravine, shall have a frontage of one hundred feet, and drawing parallel to the stream or ravine, and shall be laid out, as nearly as possible, in the manner prescribed by Section 4 of these regulations.

(f) If any person or persons shall discover a new mine, and such discovery shall be established to the satisfaction of the agent, claims of the following size, in dry, bar, bench, creek or hill diggings, shall be allowed:

To one discoverer..... 300 feet in length.
" a party of two..... 600 "
" " " three..... 900 "
" " " four..... 1000 "

and to each member of a party beyond four in number, a claim of the ordinary size only.

A new stratum of auriferous earth or gravel, situated in a locality where the claims are abandoned shall, for this purpose, be deemed a new mine, although the same locality shall have been previously worked at a different level; and dry diggings discovered in the vicinity of bar diggings shall be deemed a new mine and vice versa.

RIGHTS AND DUTIES OF MINERS.

19. The forms of application for a grant for placer mining and the grant of the same shall be those contained in Forms H and I in the schedule hereto.

20. The entry of every holder of a grant for placer mining must be renewed and his receipt relinquished and replaced every year, the entry fee being paid each time.

21. No miner shall receive a grant of more than one mining claim, or more than one mining locality, but the same miner may hold any number of claims by purchase, and any number of miners may unite to work their claims in common upon such terms as they may arrange, provided such agreement be registered with the agent and a fee of \$5 paid for each registration.

22. Any miner or miners may sell, mortgage or dispose of his or their claims, provided such disposal be registered with and a fee of \$2 paid to the agent, who shall thereupon give the assignee a certificate in Form J in the schedule hereto.

23. Every miner shall, during the continuance of his grant, have the exclusive right of entry upon his own claim, for the miner-like working thereof and the construction of a residence thereon, and shall be entitled to exclusive possession and enjoyment thereof; but he shall have no surface rights therein; and the superintendent of mines may grant to the holders of adjacent claims such right of entry thereon as may be absolutely necessary for the working of their claims, upon such terms as may, to him, seem reasonable.

24. Every miner shall be entitled to the use of so much of the water naturally flowing through or past his claim, and not already lawfully appropriated, as shall, in the opinion of the superintendent of mines, be necessary for the due working thereof; and shall be entitled to drain his own claim free of charge.

25. A claim shall be deemed to be abandoned and open to occupation and entry by any person when the same shall have remained unworked for a period of seventy-two hours, or the space of seventy-two hours, unless sickness or other reasonable cause be shown or unless the grantee is absent on leave.



26. A claim granted under these regulations shall be continuous and in good faith worked, except as otherwise provided, by the grantee thereof or by some person on his behalf.

27. In tunneling under hills, on the frontage of which angles occur or which may be of an oblong or elliptical form, no party shall be allowed to tunnel from any of the said angles or from either end of such hills so as to interfere with parties tunneling from the main frontage.

28. Tunnels and shafts shall be considered as belonging to the claim for the use of which they are constructed, and as abandoned or forfeited by the expiration of the term of the claim itself.

29. For the more convenient working of back claims on benches or slopes, the superintendent of mines may permit the owners thereof to drive a tunnel through the claims fronting on an error, ravine or water-course upon such terms as he may deem expedient.

#### ADMINISTRATION.

30. In case of the death of any miner while entered as the holder of any mining claim, the provisions as to abandonment shall not apply either during his last illness or after his decease.

31. The minister of the interior shall take possession of the mining property deceased and may cause mining ground to be duly worked or dispense therewith, at his option, and he shall sell the property by private sale or after ten days' notice thereof, by public auction, upon such terms as he shall deem just, out of the proceeds of such sale, to the heirs and next of kin, and by and pay the balance, if any, to the legal representatives of the said deceased miner.

32. The minister of the interior, or any person authorized by him, shall take charge of the property of deceased miners until the issue of letters of administration.

#### BED-ROCK FLUMES.

33. It shall be lawful for the minister of the interior, upon the application hereinafter mentioned, to grant to any bed-rock flume company, for any term not exceeding five years, exclusive rights of way through and entry upon any mining ground for the purposes of constructing, laying and maintaining bed-rock flumes.

34. Three or more persons may constitute themselves into a bed-rock flume company; and every application by them for such grant shall state the names of the applicants and the nature and extent of the privileges sought to be acquired. Ten full days' notice thereof shall be given between the months of June and November, and between the months of November and June one month's notice shall be given, by affixing the same to a post planted in some conspicuous part of the ground, and of the rock and a copy thereof conspicuously upon the inner walls of the land-office of the district. Prior to such application, the ground included therein shall be marked out in the manner prescribed in sub-clause (c) of the regulations, and the applicant shall be competent for any person to protest before the agent within the times hereinbefore prescribed for the notice of such application, but not afterward, against such application being granted. Every application for a grant of such right of way shall be accompanied by the sum of \$100, which shall be returned if the application be refused, but not otherwise.

35. Every such grant shall be in writing in the Form K, in the schedule hereto.

36. The holders of claims through which the line of the company's flume is to run may pit in a bed-rock flume in their claims to connect with the company's flume, upon giving the company ten days' notice in writing to that effect; but they shall maintain the like grade and build their flume as thoroughly and of as strong materials as that built by such company.

37. Every bed-rock flume company shall lay at least fifty feet of flume during the first year and one hundred feet annually thereafter until the completion of the flume.

38. Any miners lawfully working any claims where a bed-rock flume exists shall be entitled to tail their sluices, hydraulics and ground sluices into such flume, but so as not to obstruct the free working of such flume, and to cause any damage they may sustain by the construction of such tunnel or drain, and such compensation, if not agreed upon, shall be settled by the superintendent of mines and be paid before such drain or tunnel is constructed.

39. Upon a grant being made to any bed-rock flume company, the agent shall register the same and the company shall pay for such registration a fee of \$10. They shall also pay, in advance, an annual rent of \$10 for each quarter of a mile of right of way legally held by them.

#### DRAINAGE OF MINES.

40. The minister of the interior may grant to any person or persons permission to run a drain or tunnel for drainage purposes through any occupied mining land, and may give such persons exclusive rights of way through and entry upon any mining ground for any term not exceeding five years, for the purpose of constructing a drain or drains for the drainage thereof.

41. The grantee shall compensate the owners of lands or holders of claims entering by means of any drainage they may sustain by the construction of such tunnel or drain, and such compensation, if not agreed upon, shall be settled by the superintendent of mines and be paid before such drain or tunnel is constructed.

42. Such drain or tunnel, when constructed, shall be deemed to be the property of the person or persons by whom it shall have been so constructed.

43. Every application for a grant shall state the names of the applicants, the nature and extent of the proposed drain or drains, the amount of toll (if any) to be charged and the privileges sought to be acquired, and shall, save where the drain is intended only for the drainage of the claim of the person constructing the same, be accompanied by a deposit of \$25, which shall be returned in case the application is refused, but not otherwise. Notice of the application shall be given and protests may be made in the same manner as provided in regard to bed-rock flumes.

44. The grant of the right of way to construct drains and tunnels shall be made in the Form L, in the schedule hereto. The grant shall be registered by the grantee in the office of the agent, to whom he shall at the time pay a registration fee of \$5, or, if the grant gives power to collect tolls, a fee of \$10. An annual rent of \$10 shall be paid, in advance, by the said grantee for each quarter of a mile of right of way legally held by him, save where the drain shall be for the purpose of draining only the claim of the person constructing the same.

#### DITCHES.

45. The minister of the interior may, upon application hereinafter mentioned, grant to any person or persons, for any term not exceeding five years, in any stream, lake, river or lough, the right to divert and use the water therefrom, and to alter the time as he may determine, the right to divert and use the water from any stream or lake at any particular part thereof, and the right of way through and entry upon any mining ground, for the purpose of constructing ditches and flumes to convey such water; provided, always, that every such grant shall be deemed as appurtenant to the mining claim in respect of which it has been obtained, or is required in connection with reduction works, sampling works, stamp mills, concentrating works, or other works connected with mining operations, and whenever the claim shall have been worked out or abandoned, or whenever the occasion for the use of such water upon the claim or in connection with such works shall have permanently ceased, the grant shall cease and terminate.

46. Twenty days' notice of the application shall be given, in accordance with Form M in the schedule to these regulations, by affixing the same to a post planted in some conspicuous part of the land-office for the district, and any person may protest within any such twenty days, but not afterward, against such application being wholly or partially granted.

47. Every application for a grant of water exceeding two hundred inches shall be accompanied by a deposit of \$25, which shall be refunded in case the application is refused, but not otherwise.

48. Every such application shall state the names of the applicants, the name or description of the stream or lake to be diverted, the quantity of water to be taken, the locality for its distribution, the price (if any) to be charged for the use of such water, and the time necessary for the completion of the ditch. The grant shall be in the Form N in the schedule hereto.

49. Every grant of a privilege to divert water in occupied creeks shall be subject to the rights of such miners as shall, at the time of such grant, be working on the stream above or below the ditch head, and of any other persons lawfully using such water for any purpose whatsoever.

50. If, after the grant has been made, any miner or miners locate and bona fide work any mining claim below the ditch head, on any stream so diverted, he or they collectively shall be entitled to forty inches of water if two hundred inches be diverted, and to sixty inches if three hundred inches be diverted, and no more, except upon paying to the owner of the ditch, and all other persons interested therein, compensation equal to the amount of damage sustained by the diversion of such extra quantity of water, and any fee required, and in computing such damage, the loss sustained by any claims using water therefrom and all other reasonable losses shall be considered.

51. No person shall be entitled to a grant of the water of any stream for the purpose of sluicing the water to present or future claim-holders on any part of such stream. The minister of the interior may, however, grant such privileges as he may deem just, when such ditch is intended to work bench or hill claims fronting on any such stream, provided that the rights of miners then using the water so applied for be protected.

52. The minister of the interior may, on the report of the superintendent of mines that such action is desirable, order the enlargement or alteration of any ditch, and fix the compensation of any parties interested therein.

53. Every owner of a ditch or water privilege shall take all reasonable means for utilizing the water granted to him; and, if he willfully take and waste any unreasonable quantity of water, the minister may, if such offense be persisted in, declare all rights in the water forfeited.

54. The owner of any ditch or water privilege may distribute the water to such persons and on such terms as he may deem advisable, within the limits mentioned in this grant, provided, always, that such owner shall be bound to supply all miners who make application therefor in a fair proportion, and shall not demand more from one person than from another, except where the difficulty of supply is enhanced.

55. Any person desiring to register any stream, claim or other place, for any purpose, or to mine under or through any ditch or flume, or to carry water through or over any land already occupied, may, in proper cases, do so with the written sanction of the agents; that such order shall be deemed to supply all miners who party first in possession shall prevail so as to entitle him to compensation if the same be just.

56. In measuring water in any ditch or sluice, the following rules shall be observed: The water taken into a ditch or sluice shall be measured at the ditch or sluice head; no water shall be taken into a ditch or sluice except in a trough placed horizontally at the place at which the water enters it, and which trough shall be extended two feet beyond the orifice for the discharge of the water; the water shall be held in a trough or flume that shall pass through a rectangular orifice two inches high by half an inch wide, with a constant head of seven inches above the upper side of the orifice.

57. Any person shall be intended, in forming or upholding any ditch, to enter upon and occupy any part of an entered claim, or to dig or loosen any earth or rock, within four feet of any ditch not belonging solely to the registered owner of such claim, three

days' notice, in writing, of such intention shall be given, before entering or approaching within four feet of such other property.

58. Any person engaged in the construction of any road or work may, with the sanction of the minister of the interior, cross, divert or otherwise interfere with any ditch, water privilege or other mining rights whatsoever, for such period as the minister shall approve.

59. The minister shall order what compensation for every such damage or interference shall be paid, and when, and to whom, and whether any and what works damaged or affected by such interference as aforesaid shall be replaced by ditches or otherwise repaired by the person or persons inflicting any such damage.

60. The owners of any ditch, water privilege or mining right shall, at their own expense, construct, secure and maintain all works necessary for conveying water to their operations, water flowing through or over any such ditch, water privilege or right.

61. The owners of any ditch or water privilege shall construct and secure the same in a proper and substantial manner, and maintain the same in good repair, to the satisfaction of the superintendent of mines, and so that no damage shall occur to any road or work in its vicinity from any part of the works of such ditch, water privilege or right.

62. The owners of any ditch, water privilege or right shall be liable, and shall make good, in such manner as the superintendent of mines shall determine, all damages which may be occasioned by or through any part of the works of such ditch, water privilege or right breaking or being injured.

63. Nothing herein contained shall be construed to limit the right of the lieutenant-governor of the North-West Territories in council, or of the proper authority in any province containing a Dominion land, to grant or to refuse to grant, for any purposes, through, along or under any ditch, water privilege or mining right, without compensation.

GENERAL PROVISIONS.

INTERPRETATION.

64. In these regulations the following expressions shall have the following meanings respectively, unless inconsistent with the context: "Minister" shall mean the minister of the interior. "Agent" or "local agent" shall mean the agent of Dominion lands for the district, or other officer appointed by the government for the particular purpose referred to. "Mineral" shall include all minerals whatsoever other than coal and petroleum. "Close season" shall mean the period of the year during which placer mining is generally suspended. "Mining claim" shall mean a person holding a mining location or a grant for placer mining. "Claim" shall mean the personal right of property in a placer mine or diggings during the time for which the grant of such mine or diggings is made. "Claimant" shall mean a person who has obtained an entry for a mining location with a view to patent. "Bar diggings" shall mean any mine over which a river extends when in its flooded state. "Dry diggings" shall mean any mine over which a river never extends. "The mines on benches shall be known as bench diggings." "Ditch" shall mean a ditch, of whatever size the size of such claims, be excepted from "dry diggings." "Streams and ravines" shall include water-courses, whether usually containing water or not, and all rivers, creeks and gulches. "Ditch" shall include a flume or race, or other artificial means for conducting water by its own weight, to be used for mining purposes. "Ditch head" shall mean the point in a natural water-course or lake where water is first taken into a ditch. "Placer mining" shall mean the working of all forms of deposits, excepting veins of quartz or other rock in place. "Quartz mining" shall mean the working of veins of quartz or other rock in place. "Location" shall mean the land entered by, or patented to, any person for the purpose of quartz mining.

HEARING AND DECISION OF DISPUTES.

65. The superintendent of mines shall have power to hear and determine all disputes in regard to mining property arising within his district, subject to appeal by either of the parties to the commissioner of Dominion lands.

66. No particular forms of procedure shall be necessary, but the matter complained of must be properly expressed in writing, and a copy of the complaint shall be served on the opposite party not less than seven days before the hearing of the said complaint.

67. The complaint may, at the discretion of the superintendent of mines, be amended at any time before or during the proceedings.

68. The complainant shall, at the time of filing his complaint, deposit therewith a bond fee of \$20, which shall be returned to him if the complaint proves to have been well founded, and not otherwise, except for special cause, by direction of the minister of the interior.

69. In the event of the decision of the superintendent of mines being made the subject of an appeal to the commissioner of Dominion lands, the appellant shall, at the time of lodging the appeal, deposit with the agent a bond fee of \$20, which shall be returned to the said appellant if his appeal proves to have been well founded, and not otherwise, except for special cause, by direction of the minister of the interior.

70. The appeal must be in writing and must be lodged with the superintendent of mines not more than three days after his decision has been communicated in writing to all the parties interested, and must state the grounds upon which the said decision is appealed from.

71. If the commissioner of Dominion lands decides that it is necessary to a proper decision of the matter in issue to have an investigation made in any or cases of disputed boundaries or measurements, to employ a surveyor to measure or survey the land in question, the expense of the inspection or re-measurements or re-survey, as the case may be, shall be borne by the

litigants, who shall pay into the hands of the said commissioner, in equal parts, such sum as he may think sufficient for the same, before it takes place; otherwise, it shall not proceed, and the party who refuses to pay such sum shall be adjudged in default. The said commissioner shall subsequently decide in what proportion the said sum shall be paid by the parties respectively, and the surplusage, if any, shall then be returned to the parties, as he may order.

72. All bond-fees adjudged as forfeited and all payments retained under the last preceding section shall, as soon as decision has been rendered, and all entry and other fees or moneys shall, as soon as they have been received by him, be paid by the said agent or commissioner to the credit of the receiver-general in the same manner as other moneys received by him on account of Dominion lands.

LEAVE OF ABSENCE.

73. The agent in each district shall, under instructions from the minister of the interior, declare the close season in his district.

74. Each holder of a mining location or of a grant for placer mining shall be entitled to be absent from his mining location or diggings and to suspend work thereon during the close season. The agent shall have power to grant leave of absence to the holder of a mining location or grant for placer mining pending the decision of any dispute in which he is concerned under these regulations.

75. In cases where water is necessary to the continuance of mining operations, and the supply of water is insufficient, the superintendent of mines shall have power to grant leave of absence to the holder of the grant during such insufficiency, but no longer, except by permission of the minister of the interior.

76. Any mines or mines shall be entitled to be free of absence for one year from his or their diggings, upon proving to the satisfaction of the superintendent of mines that he or they has or have expended on such diggings, in cash, labor or machinery, an amount not less than \$200 on each of such diggings, without any return of gold or other minerals in reasonable quantities for such expenditure.

78. The time reasonably occupied by the locator of a claim in going and returning from the location of the agent or superintendent of mines to enter his claim, or for other purposes prescribed by these regulations, shall not be counted against him, but he shall, in such cases, be deemed to be absent on leave.

MISCELLANEOUS.

79. The minister of the interior shall, from time to time, as he may think fit, declare the boundaries of mineral and mining districts, and shall cause a description of the same to be published in the *Canada Gazette*.

80. In any mining location adjacent to the agent or superintendent of mines to be laid out within such districts wherever, from report of the director of the geological survey, or from other information, he has reason to believe there are mineral deposits of value, in his opinion, are able and intend in good faith to work the same, or he may, from time to time, cause the said locations to be sold by public auction or tender. Such sales shall be for cash, and at prices in no case lower than those prescribed for locations sold to original discoverers, and shall otherwise be subject to all the provisions of these regulations.

81. The minister of the interior may grant to any person or persons who have a mining location and are actively developing the same, an additional location adjacent to, and not exceeding it in area, provided the person or persons holding such location shall show to the satisfaction of the minister of the interior that the vein or lode being developed on the location will probably extend outside of either of the vertical lines forming the side boundaries of the location before it has reached the depth at which it cannot be profitably mined.

82. Persons desirous of obtaining quarries for stone on vacant Dominion lands may do so under these regulations, but the minister of the interior may require the payment of a royalty not exceeding five per cent, on account of the sales of the product of such quarries, or the land may be sold not subject to such royalty at such price as may be determined.

83. The grant may be made to the grantee, sworn to by him, or by his agent or other employe in charge of the mine, at monthly or other such intervals as may be required by the minister of the interior, of all products of his mining location and of the price and amount to be received for the same.

84. The minister of the interior shall have the power to summarily order any mining works to be so carried on as not to interfere with or endanger the safety of the public, any public work, or highway, or any mining property, mineral lands, mining claims, bed-rock drains or flumes, and any abandoned works may, by his order, be either filled up or guarded to his satisfaction, at the cost of the parties who may have constructed the same, or in their absence upon such terms as he may think fit. The superintendent of mines, acting under instructions to be from time to time issued by the minister of the interior, shall cause to be laid out, at the expense of the person or persons applying for the same, a space of ground for deposits of leavings and deals from any tunnel, claim or mining ground.

FORFEITURE.

85. In the event of the breach of these regulations, or any of them, by any person holding a grant for quartz or placer mining from the crown other than crown patents, or from the minister of the interior, or from any duly authorized officer of Dominion lands, such person shall be absolutely forfeited ipso facto, and the person so offending shall be incapable thereafter of acquiring any such right or grant, unless for special cause it is otherwise decided by the minister of the interior.

## SCHEDULE TO MINING REGULATIONS.

## FORM A.—APPLICATION AND AFFIDAVIT OF DISCOVERER OF QUARTZ MINE.

I (or we), (A. B.), of hereby apply, under the dominion mining regulations, for a mining location in (here give general description of locality) for the purpose of mining for (here name the metal or mineral) and I (or we) hereby solemnly swear:

1. That I (or we) have discovered therein a deposit of (here name the metal or mineral) in (here name the locality) and I (or we) believe that there is therein a deposit of (here name the metal or mineral) in (here name the locality) for the purpose of mining for (here name the metal or mineral) and I (or we) hereby solemnly swear:

2. That I (or we) am (or are), to the best of my (or our) knowledge and belief, the first discoverer or discoverers of the said deposit.

3. That I (or we) am (or are) unaware that the land is other than vacant dominion land.

4. That I (or we) did, on the day of mark out on the ground, in accordance in every particular with the provisions of Sub-section (a) of Clause 4 of the said mining regulations, the location for which I (or we) make this application; and that in so doing I (or we) did not encroach on any mining location previously laid out by any other person.

5. That the said mining location contains, as nearly as I (or we) could measure or estimate, an area of acres, and that the description and sketch if any, of this date hereto attached, signed by me (or us), sets (or set) forth in detail, to the best of my (or our) knowledge and ability, its position, form and dimensions.

6. That I (or we) make this application in good faith to acquire the land for the sole purpose of mining, to be prosecuted by myself (or us) or by myself and associates or by my (or our) assigns, sworn before me (or us) at, (Signature) this day of (Signature) 18.

NOTE.—In case of abandoned ground it may be necessary to omit No. 2.

## FORM B.—RECEIPT FOR FEE PAID BY APPLICANT FOR MINING LOCATION.

No. DEPARTMENT OF THE INTERIOR,  
DOMINION LANDS OFFICE,  
Agency 18

Received from (A. B.) of \$5, being the fee required by Sub-section (a) of Clause 4 of the dominion mining regulations, accompanying his (or their) application No. dated 18, for a mining location in (insert general description of locality).

This receipt authenticates the said (A. B.) his (or their) legal representatives or assigns, to enter into possession of the said mining location, and, subject to the payment of a fee of \$5 and the renewal of this form of receipt on or before the beginning of each year, during the term of five years from this date, to take thereon and to dispose of any mineral deposit contained within its boundaries, and, on due compliance at any time within that period with the several requirements in that behalf of the said mining regulations, entitles him or them to purchase the said location, which provisionally, and until survey thereof, may be known and described as follows: (insert description in detail).

If the said (A. B.) or his (or their) legal representatives or assigns fail to comply, as aforesaid, with the conditions that would entitle him or them to purchase within five years from this date, or, having so complied, do not within that time make payment in full for the land, and also pay the sum of \$50 prescribed in the said regulations for the survey of the location, then the right to purchase shall lapse, and the mining location shall revert to the crown, to be otherwise disposed of as may be directed by the minister of the interior.

Agent of Dominion Lands.

## FORM C.—RECEIPT FOR ANNUAL FEE FOR RENEWAL OF LOCATION CERTIFICATE.

DEPARTMENT OF THE INTERIOR,  
DOMINION LANDS OFFICE,  
Agency 18

Received from (A. B.) of \$5, being the fee required by Sub-section (c), Section 4, of the dominion mining regulations, accompanying his (or their) application No. dated 18, respecting the mining location described as follows: (insert description in detail) for which he (or they) obtained entry No. on the 18.

From evidence furnished in support of the said application No. it would appear that (A. B.) his (or their) legal representatives or assigns, are entitled to continue in possession of the said mining location, and during the term of year from the 18, to take thereon and to dispose of any mineral deposit contained within its boundaries, and, on due compliance at any time within that period with the several requirements in that behalf of the mining regulations, to purchase the said location, which provisionally, and until survey thereof, may be known and described as above.

If the said (A. B.) or his (or their) legal representatives or assigns, fail to comply, as aforesaid, with the conditions that would entitle him or them to purchase within year from this date, or, having so complied, do not within that time make payment in full for the land, and also pay the sum of \$50 prescribed in the said regulations for the survey of the location, then the right to purchase shall lapse, and the mining location shall revert to the crown, to be otherwise disposed of as may be directed by the minister of the interior.

Agent of Dominion Lands.

## FORM D.—CERTIFICATE IN CASES OF PARTNERSHIP THAT ANNUAL EXPENDITURE BE MADE FOR FIRST TWO YEARS AFTER RECORDING CLAIMS BE MAY FOR ANY ONE OF THE CLAIMS AFFECTED BY SUCH PARTNERSHIP.

No. DEPARTMENT OF THE INTERIOR,  
DOMINION LANDS OFFICE,  
Agency 18.

This is to certify that in accordance with the provisions of Sub-clause (d) of Clause 4 of the dominion mining regulations:

(A. B.) of who obtained entry No. for the mining location described as follows: (insert description in detail) on the day of 18, and (C. D.) of who obtained entry No. for the mining location described as follows: (insert description in detail) on the day of 18, and (E. F.) of who obtained entry No. for the mining location described as follows: (insert description in detail) on the day of 18, and (G. H.) of who obtained entry No. for the mining location described as follows: (insert description in detail) on the day of 18, having complied with the conditions required by said Sub-clause (d) in so far that they have filed a certificate of a partnership entered into at dated the day of 18, and all their claims having been entered within three months of each other and in the office of No. of the Dominion Lands Office, have filed the documents required, may make within one year from this date the annual expenditure required by each on any one of the mining locations aforesaid, amounting to \$1000, this being the amount under said regulations required to be expended within the first and second year after said claims were located.

## FORM E.—RECEIPT TO BE GIVEN FOR FEE PAID IN CASE OF PARTNERSHIP.

No. DEPARTMENT OF THE INTERIOR,  
DOMINION LANDS OFFICE,  
Agency 18

Received from (A. B.) of \$5, being the fee required by Sub-clause (d) of Clause 4 of the dominion mining regulations accompanying his (or their) application No. dated 18, respecting the mining location described as follows: (insert description in detail), for which he (or they) obtained entry No. on the day of 18.

From evidence furnished by the said application No. it would appear that (A. B.) his (or their) legal representatives or assigns, are entitled to continue in possession of the said mining location, and during the term of year from this date, to take thereon and to dispose of any mineral deposit contained within its boundaries, and, on due compliance at any time within that period with the several requirements in that behalf of the said mining regulations, entitles him or them to purchase the said location, which provisionally, and until survey thereof, may be known and described as above.

If the said (A. B.) or his (or their) legal representatives or assigns, fail to comply, as aforesaid, with the conditions that would entitle him or them to purchase within year from this date, or, having so complied, do not within that time make payment in full for the land and also pay the sum of \$50 prescribed in the said regulations, for the survey of the location, then the right to purchase shall lapse, and the mining location shall revert to the crown, to be otherwise disposed of as may be directed by the minister of the interior.

The said (A. B.) and the foregoing mining location are those referred in No. Form B, dated at the day of 18.

Agent of Dominion Lands.

FORM F.—PATENT OF A MINING LOCATION.  
Victoria, by the Grace of God, of the United Kingdom of Great Britain and Ireland Queen, Defender of the Faith, to all to whom these presents shall come. Greeting.

Know ye that We do by these presents, for Us, Our heirs and successors, in consideration of the fulfilling by the dominion mining regulations of our dominion of Canada law, grant unto (A. B.) his (or their) legal representatives or assigns, all that parcel or lot of land situate and numbered on the official plan or survey of the said (insert description of locality) to have and to hold the said parcel of land and all minerals, previous and base, which may be found therein, unto the said (A. B.) his (or their) legal representatives or assigns forever.

Provided, that it shall at all times be lawful for Us, Our heirs and successors, or for any person by Our authority, to resume any portion not exceeding one-twelfth part of the said lands for making roads, emalls, bridges, towing paths or other works of public utility or convenience; but no such resumption shall be made of land on which any permanent buildings may have been erected, and compensation shall be made for any such resumption.

Provided, also, that it shall be lawful for any person duly authorized by Us, Our heirs and successors, to take and occupy such water privileges and to have and enjoy such right of carrying water over, through or under any part of the hereditaments hereby granted as may be reasonably required for agricultural or other purposes in the vicinity of the said land, upon paying therefor a reasonable compensation to the aforesaid (A. B.) his (or their) legal representatives or assigns.

## FORM G.—CERTIFICATE OF THE ASSIGNMENT OF A MINING LOCATION.

No. DEPARTMENT OF THE INTERIOR,  
DOMINION LANDS OFFICE,  
Agency 18.

This is to certify that (B. C.) of (A. B.) has (or have) filed an assignment in due form, dated the day of 18, and accompanied by a registration fee of \$2, of the right of

(A. B.) of ..... to purchase the mining location in .....  
*(here insert general description of locality)* applied for by the said  
 ..... (A. B.) on the ..... 18.....  
 This certificate entitles the said ..... (B. C.) ..... or his (or  
 their) legal representatives or assigns, to all the rights and privi-  
 leges of the said ..... (A. B.) ..... in respect of the claim  
 assigned and hereinafter described, that is to say, to enter into  
 possession of the said mining location, and during the term of  
 ..... year from the date of the receipt No. .... granted to the  
 said ..... (A. B.) ..... dated the ..... day of ..... 18.....  
 to take therefrom and dispose of any mineral deposit contained  
 within its boundaries, and on due compliance at any time within  
 that period with the several requirements in that behalf of the  
 dominion mining regulations, entitles him or them to purchase the  
 said location, which, provisionally and until survey thereof,  
 may be known and described as follows: ..... *(insert description  
 in detail)*

If the said ..... (B. C.) ..... or his (or their) legal representa-  
 tives or assigns fail to comply as aforesaid with the conditions  
 that would entitle him or them to purchase within ..... year of  
 the date of the receipt granted to ..... (A. B.) ..... and now  
 deposited with me, or, having so complied, do not within that  
 time make payment in full for the land and also pay the sum of  
 \$20 prescribed in the said regulations for the survey of the loca-  
 tion, then the right to purchase shall lapse and the mining loca-  
 tion shall revert to the crown, to be otherwise disposed of, as  
 may be directed by the minister of the interior.

FORM H.—APPLICATION FOR GRANT FOR PLACER MINING  
 AND AFFIDAVIT OF APPLICANT.

I (or we), ..... (A. B.) ..... of ..... hereby apply under  
 the dominion mining regulations, for a grant of a claim for placer  
 mining as defined in the said regulations, in the following *(here describe  
 the locality)* ..... and I (or we) solemnly swear:  
 1. That I (or we) have discovered therein a deposit of *(here  
 name the metal or mineral)* .....  
 2. That I (or we) are true to the best of my (or our) knowl-  
 edge and belief, the first discoverer of the said deposit; or—  
 3. That the said claim was previously granted to ..... *(here  
 name the last grantee)* ..... but has remained unworked by the  
 said grantee for not less than ..... years, and that I (or we) are  
 4. That I (or we) are (or are) unaware that the land is other  
 than vacant dominion land.

5. That I (or we) did, on the ..... day of ..... mark out on the  
 ground, in accordance in every particular with the provisions of  
 Sub-section (c) of Clause 18, of the said mining regulations, the  
 claim for which I (or we) make this application, and that in so  
 doing I (or we) did not encroach on any other claim or mining  
 location previously laid out by any other person.  
 6. That the area (or areas) of the claim, as nearly as I (or we) could  
 measure or estimate, an area of ..... square feet, and that the  
 description (and sketch, if any) of this date hereto attached,  
 signed by me (or us), set forth in detail, to the best of my (or our)  
 knowledge and ability, its position and dimensions.  
 7. That I (or we) make this application in good faith, to acquire  
 the claim for the sole purpose of mining, to be prosecuted by  
 myself (or us), or by myself and associates, or by my (or our)  
 assigns.

Sworn before me at ..... on this ..... day of ..... 18.....  
 [Signature.]

FORM I.—GRANT FOR PLACER MINING.  
 No. .... DEPARTMENT OF THE INTERIOR,  
 DOMINION LANDS OFFICE.

In consideration of the payment of \$20, being the fee required by  
 the provisions of the dominion mining regulations, Clauses 4 and  
 20, by ..... (A. B.) ..... of ..... accompanying his (or their)  
 application No. .... dated ..... 18..... for a mining claim in  
 ..... *(here insert description of locality)* .....  
 The minister of the interior, in pursuance of the said ..... (A. B.)  
 ..... for the term of one year from the date hereof, the  
 exclusive right of entry upon the claim ..... *(here describe in  
 detail the claim granted)* ..... for the miner-like working  
 thereof and the construction and use of a flume, shall lapse and the  
 exclusive right to all the proceeds realized therefrom.

The said ..... (A. B.) ..... shall be entitled to the use of so  
 much of the water naturally flowing through or past his (or their)  
 claim, and not already lawfully appropriated, as shall be  
 necessary for the due working thereof, and to drain the claim, free of  
 charge.  
 This grant does not convey to the said ..... (A. B.) ..... any  
 surface rights in the said claim, or any right of ownership in the  
 soil covered by the said claim; and the said grant shall lapse and  
 be forfeited unless the claim is continuously and in good faith  
 worked by the said ..... (A. B.) ..... or his (or their) asso-  
 ciates.  
 The rights hereby granted are those laid down in the afore-  
 said mining regulations, and no more, and are subject to all the  
 provisions of the said regulations, whether the same are expressed  
 herein or not. .... Agent of Dominion Lands.

FORM J. CERTIFICATE OF THE ASSIGNMENT OF A PLACER  
 MINING CLAIM.  
 No. .... DEPARTMENT OF THE INTERIOR,  
 DOMINION LANDS OFFICE.

This is to certify that ..... (B. C.) ..... of ..... Agency ..... 18.....  
 (or have) filed an assignment in due form dated ..... 18..... and  
 accompanied by a registration fee of \$2, of the grant to .....  
 (A. B.) ..... of ..... of ..... to mine ..... *(insert description  
 of claim)* ..... for one year from the ..... 18.....

This certificate entitles the said ..... (B. C.) ..... to all the  
 rights and privileges of the said ..... (A. B.) ..... in respect of  
 the claim assigned, that is to say, to the exclusive right of entry  
 upon the said claim, or the miner-like working thereof, and the  
 construction of a residence thereon, and the exclusive right to all  
 the proceeds realized therefrom, for the remaining portion of  
 the year for which the said claim was granted to the said .....  
 (A. B.) ..... that is to say, until the ..... day of ..... 18.....

The said ..... (B. C.) ..... shall be entitled to the use of so  
 much of the water naturally flowing through or past his (or their)  
 claim and not already lawfully appropriated, as shall be neces-  
 sary for the due working thereof, and to drain the claim, free of  
 charge.  
 This grant does not convey to the said ..... (B. C.) ..... any  
 surface rights in the said claim, or any right of ownership in the  
 soil covered by the said claim; and the said grant shall lapse and  
 be forfeited unless the claim is continuously and in good faith,  
 worked by the said ..... (B. C.) ..... or his (or their) asso-  
 ciates.  
 The rights hereby granted are those laid down in the dominion  
 mining regulations, and no more, and are subject to all the pro-  
 visions of the said regulations, whether the same are expressed  
 herein or not. .... Agent of Dominion Lands.

FORM K.—GRANT TO A BED-ROCK FLUME COMPANY.  
 No. .... DEPARTMENT OF THE INTERIOR,  
 DOMINION LANDS OFFICE.

In consideration of the payment of a deposit of \$20, required  
 by Clause 34 of the dominion mining regulations to be made  
 with the application of a bed-rock flume company, and of the  
 further sum of \$10, being the fee for registration of this grant  
 required by Clause 39 of the said regulations, the minister of the  
 interior hereby grants to ..... *(insert names of members of company)*  
 ..... forming together a bed-rock flume company [known as the  
 ..... *(title of company)* .....] the following rights and  
 privileges, that is to say:  
 (a) The right of way through and entry upon any new and un-  
 worked river, creek, gulch or ravine, and the exclusive right to  
 locate and work a strip of ground one hundred feet wide and  
 two hundred feet long in the bed thereof, to each individual of  
 the company.

(b) The rights of way through and entry upon any river, creek,  
 gulch or ravine, worked by miners for any period longer than  
 two years prior to such entry, and already wholly or partially  
 abandoned, and the exclusive right to stake out and work a  
 strip of ground one hundred feet wide and one hundred feet  
 in width and one-quarter of a mile in length for each individual  
 of the company;  
 (c) The rights of entry through and entry upon all claims which,  
 at the time of the notice of application, are in good faith being  
 worked for the purpose of cutting a channel and laying their  
 flume therein, with such reasonable space for constructing, main-  
 taining and repairing the flume as may be necessary.

(d) The use of so much of the water naturally flowing through  
 the stream on which they may be located, and of other adjacent  
 streams, as may be necessary for the use of their flumes, hy-  
 draulic power and machinery to carry on their operations, and  
 the right of way for ditches and flumes, to convey the water  
 due to their works, subject to the payment of any damage  
 which may be done to other parties by running such ditch or  
 flume through or over their ground;  
 Provided, that the rights herein granted shall apply only to  
 such claims and streams as are here specified, and such other claims  
 and streams as may, after due notice and application, be subse-  
 quently added to the above list by the minister of the interior,  
 under the hand of the local agent.

Provided, also, that the said company shall pay to the local  
 agent, in advance, an annual rent of \$10 for each quarter of  
 a mile of right of way legally held by them;  
 Provided, further, that this grant is subject to all provisions of  
 the dominion mining regulations, in that behalf, whether the  
 same are expressed herein or not.  
 This grant shall cease and determine at the expiration of  
 ..... year from the date hereof. .... Agent of Dominion Lands.

FORM L.—GRANT FOR DRAINAGE.  
 No. .... DEPARTMENT OF THE INTERIOR,  
 DOMINION LANDS OFFICE.

In consideration of the payment of a deposit of \$25, re-  
 quired by Clause 43 of the dominion mining regulations, to be  
 made with the application for a grant of right of way to con-  
 struct drains, and of the further sum of \$ ..... being the fee  
 for the registration of this grant required by Clause 44 of the said  
 regulations, the minister of the interior hereby grants to .....  
 ..... *(insert names of grantee or grantees)* ..... the right to run a  
 drain or flume for drainage purposes through the occupied  
 mining lands here specified: ..... *(here describe mining lands)*  
 ..... and further, for a term of ..... from the date hereof,  
 exclusive rights of way through and entry upon the following  
 mining grants: ..... *(here insert description)* ..... for the  
 purpose of constructing a drain or drains for the drainage there-  
 of; and the right to charge the following tolls for the use thereof  
 ..... *(insert tariff of tolls)* .....

Provided, that the grantee (or grantees) shall construct such  
 drain or drains of sufficient size to meet all requirements within  
 ..... from the date hereof, and keep the same in thorough work-  
 ing order and repair, and free from all obstructions; and shall,  
 within a reasonable time, construct any drains or drains from or  
 into any adjacent claims, upon being requested by the owners  
 thereof, and in default thereof shall permit such parties to make



which the owner or occupant shall be entitled. The notice mentioned in this section shall be according to a form to be obtained upon application from the agent of dominion lands for the district in which the lands in question lie, and shall, when practicable, be personally served on such owner or his agent if known, or occupant; and after reasonable efforts have been made to effect personal service without success, then such notice shall be served by leaving it at or sending by registered letter to the last place of abode of the owner, agent or occupant. Such notice shall be served if the owner or agent resides in the district in which the land is situated, ten days; if out of the district and within the province, twenty days; and if out of the province, thirty days, before the expiration of the time limited in such notice. If the proprietor refuses or declines to appoint an arbitrator, or when, for any other reason, no arbitrator is appointed by the proprietor in the time limited therefor in the notice provided for by this section, the agent of dominion lands for the district in which the lands in question lie shall, on being satisfied by affidavit that such notice has come to the knowledge of such owner, agent or occupant, or that such owner, agent or occupant willfully evades the service of such notice or cannot be found, and that reasonable efforts have been made to effect such service, and that the

notice was left at the last place of abode of such owner, agent or occupant, appoint an arbitrator on his behalf.

Sec. 51. (a) All the arbitrators appointed under the authority of these regulations shall be sworn before a justice of the peace to the impartial discharge of the duties assigned to them, and which the owners or occupants of such lands, according to their several interests therein, shall sustain by reason of such prospecting operations.

(b) In estimating such damages, the arbitrators shall determine the value of the land irrespective of any enhancement thereof from the existence of minerals therein.

(c) In case such arbitrators cannot agree, they must select a third arbitrator, and when the two arbitrators cannot agree upon a third arbitrator the agent of dominion lands for the district in which the lands in question lie shall select such third arbitrator.

(d) The award of any two such arbitrators made in writing shall be final, and shall be filed with the agent of dominion lands for the district in which the lands lie.

A. M. BURGESS, Deputy of the Minister.

Department of the Interior, Ottawa.

DIGEST OF  
**CORPORATION, LIEN AND MINING LAWS**  
OF THE  
PROVINCES OF THE DOMINION OF CANADA

WITH THE MINERAL ACT AND PLACER MINING ACT OF BRITISH COLUMBIA IN FULL

1892

COMPILED EXPRESSLY FOR THE MINING DIRECTORY

**BRITISH COLUMBIA  
CORPORATIONS.**

**HOW FORMED.** Any three or more persons, who may desire to form a company, may make, sign and acknowledge, before some person competent to acknowledge deeds, a memorandum of association in duplicate, in which shall be stated the corporate name with the addition of the words "limited liability;" the object, the amount of capital stock, the number of shares, the time or its existence (not to exceed fifty years), number of shares of which the stock shall consist, number of trustees and their names, who shall manage the company for the first three months; and the name of the city, town or electoral district where the company is located.

The registrars shall file such memorandum and inclose duplicate thereof to the provincial secretary, who shall cause the same to be published in the next issue of the *British Columbia Gazette* for at least one month thereafter. The registrar then shall issue a certificate of incorporation; thereupon, the said persons and their successors shall be a body politic and corporate, and shall by their corporate name have succession for the period limited, and shall have power:

1. To issue shares.
2. To sue and be sued.
3. To make and use a common seal.
4. To purchase, hold, sell and convey such real and personal estate as the purposes of the corporation shall require.
5. To appoint officers, agents and servants and define their duties, powers and fix the compensations thereof.
6. To require security from said officers, remove them at will, except that no trustee shall be removed except by a vote of two-thirds of the whole number of trustees.
7. To make by-laws for the company and regulate its affairs within the purposes of the company.

The trustees of the company may also be termed directors, who shall have all the powers conferred upon the trustees by this act.

No shareholder shall be individually liable for the liabilities of the company, but shall be liable to the calls and assessments to be legally levied upon the shares held by him.

A certificate of incorporation shall be conclusive evidence that the company is duly registered under this act. All companies registered under this act shall have the additional powers to borrow money for the purpose of carrying out the objects of the companies, and to mortgage their property, to sign bills, notes and contracts for money borrowed or to be borrowed for the aforesaid purposes; which powers shall not be exercised, except with the consent of the shareholders representing two-thirds of the capital stock.

**TRUSTEES.** The corporate powers of the corporation shall be exercised by a board of not less than three trustees, who shall be stockholders and residents of this province, who shall be annually elected by the shareholders, but a majority of the trustees shall be residents. A failure to elect the trustees at the designated time shall not dissolve the company; the trustees shall continue in office until the new trustees are elected under the by-laws; a majority of the whole board may transact business.

**STOCK AND SHAREHOLDERS.** The stock of a company shall be deemed personal estate, transferable on the books of the company; but no transfer shall be made where there are charges or assessments unpaid. Stockholders' votes may be given either personally or by proxy, but the instrument appointing a proxy shall be delivered to the secretary twenty-four hours before the hour named for calling the meeting. Each shareholder shall be individually liable to the creditors of the company for the amount of any unpaid shares of his shares of stock. A company incorporated under this act may increase or diminish its capital stock to any amount deemed proper for the corporation. Whenever it is desired to increase or diminish the amount of capital stock a

meeting of the stockholders may be called by a notice signed by at least a majority of the trustees and published at least once a week for four weeks in some newspaper of the electoral district where the principal place of business is located. A certificate of the proceedings shall be made out, signed and verified by the affidavit of the chairman and secretary of the meeting and certified by a majority of the trustees and filed in the same manner as the memorandum of the association. The trustees shall not declare or pay any dividends when the company is insolvent. No loan shall be made by the company to any shareholder, and if such is made the trustees and officers assenting thereto shall be jointly and severally liable to the company and to third parties to the extent of such loan. The trustees of the company shall be jointly and severally liable to laborers, servants and apprentices thereof for debts not exceeding three months' wages due.

**ASSESSMENT, DELINQUENCY AND SALE OF STOCK.** Trustees may levy and collect assessments upon the capital stock for the purpose of paying the legal expenses and obligations of the company to the extent hereinafter provided, and not otherwise. The total amount of assessments shall not exceed, in the aggregate, the value at which the shares were issued. No one assessment shall exceed ten per cent. of the amount the capital stock actually subscribed, unless where all the powers vested in the company for the purpose of collecting shall have been exhausted, or where the collection of the previous assessment has been restrained by injunction or otherwise. No assessment shall be levied except by order of the trustees, conferred in by a majority thereof. The trustees may summarily forfeit shares whereon payment of calls and assessments is not made.

**REGISTERED BOOK.** It shall be the duty of the trustees to keep a registry-book containing the names of all persons who are stockholders, showing the number of shares of stock held by them respectively, which book shall be open for the inspection of stockholders and creditors of the company at their office.

**DISSOLUTION.** Any corporation may dissolve itself by presenting to the judge of the county court of the district a certificate of its proper officers, setting forth that it was decided by a vote of two-thirds of all the stockholders to dissolve. Public notice shall then be given by the judge, which notice shall set forth the nature of the application, shall specify the time and place it is to be heard and shall be published in some newspaper once a week for four weeks; and if satisfied that the corporation has taken the necessary preliminary steps, he shall make an order declaring it dissolved.

**PREFERENCE STOCK.** The promoters of a company may state in the memorandum of association that a portion of the stock of the proposed company shall be preference stock, and may make a by-law authorizing the division of the existing capital into ordinary and preferential.

**REGISTRATION OF FOREIGN COMPANIES.** Any foreign company incorporated for the purpose of carrying on any business that has for its object the acquisition of gain, and permitted to operate in the province of British Columbia, may register itself and the members thereof, under this act, by depositing for registration a copy of its act, certificate and charter of incorporation, certified copy of articles of association, and also the written petition of the president and secretary thereof, acknowledged before a notary public of such foreign state, praying for registration.

The registrar of joint-stock companies shall issue a certificate of registration, showing the corporate name, the place of the head office, the objects, the amount of the capital stock of the company, the number of shares, the amount of each share, and such certificate shall be published for one month in the *British Columbia Gazette* and in one paper in the locality where the company proposes doing business. Such a company may then sue and be sued in the corporate name and exercise the general powers of a domestic corporation.

**FEES TO BE PAID.** For registering copy of act, certificate and charter of incorporation, articles of association and issuing

certificate, \$50; for registering company's offices and name and address of its agent, \$50; for every miner's license, \$5 annually.

**TRANSFERS OF NAME.**—When an incorporated company is desirous of changing its name, the attorney-general may, by order in council, change the name of the company. The company shall give at least three months' previous notice in the *British Columbia Gazette*, and in some newspaper published in the locality of the company, of the intention to apply for the change of name.

#### LIENS.

**LIENS OF MECHANICS.**—Unless there is an agreement in writing to the contrary, every mechanic, artisan, architect, contractor, sub-contractor, builder, superintendent, timekeeper, mill-owner, merchant, laborer or other person doing work or furnishing material to be used in the construction or repairing of any building, adjacent thereto, at the request of the owner of such land, shall by virtue of such work or furnishing have a lien for the price of such work or materials upon such building, wharf, machinery, fixtures or other works and the land occupied thereby, but limited in amount as hereinafter mentioned. Such lien shall be limited in amount to the sum actually owing the person entitled to the lien. No contractor or sub-contractor shall receive anything until his lien until all the persons employed by him or engaged to furnish materials for his contract or sub-contract have been paid in full.

**REGISTRATION AND TRANSMISSION.**—Every lien, as aforesaid, shall absolutely cease to exist after the expiration of thirty-one days after the work has been completed or materials furnished or after claimant has ceased to work thereon or furnished materials therefor, unless he shall in the meantime file in the office of the government agent in the district wherein the land is situated an affidavit sworn to before any person authorized to take affidavits in substance (a) that he is the person or joint-stock company, the owner of the property and the intervening contractor or sub-contractor through whom he claims; (b) the particular kind of work or materials furnished; (c) the time when the work was finished or the last article of material delivered; (d) if the lien is for materials, that the same were purchased for the works or improvements in question and were delivered on the ground for that purpose; (e) the sum claimed to be owing when due; (f) the description of the property alleged to be charged; with an affidavit that he has no lien against such property. In the event of the death of lien-holder, his lien shall pass to his personal representatives, and the right of lien may be assigned by any instrument in writing.

Every building or part of any lien, no portion of the property affected thereby shall be removed, and any attempt at such removal may be restrained on application to the judge of the county court nearest to which the land is situated if the claim is under \$500. No contractor or sub-contractor who is entitled to receive payment where the contract price exceeds \$500 until he shall have delivered to the owner a payroll containing the names of all workmen, laborers, lumber merchants and material-men doing work upon or supplying materials for such improvements, with the amount due therefor, and no payment by the owner to the contractor made before the expiration of thirty days after the completion of the improvements shall be valid for the purpose of defeating any lien upon such property, unless such payment has been distributed among such workmen or material-men.

**ENFORCEMENT.**—Any number of lien-holders may be joined in one suit and all proceedings brought by a lien-holder shall be taken to be brought in behalf of all lien-holders who may be made parties thereto. The money so realized shall be distributed among the lien-holders parties to such proceedings. Any lien-holder, not originally joined, may be made a party to such proceedings by order of a judge upon ex-parte application, supported by an affidavit. When the amount of the claim in which the lien is claimed in the county court nearest to which the land is situated is charged, said judge may proceed in a summary manner by summons and order and may direct the sale of the estate charged in such other proceedings as he deems proper; and when otherwise provided, the proceedings shall be done nearly as possible according to the practice in force in the county court, and when these are no guide the practice in the supreme court shall be followed. The said judge in his discretion may direct the sale of any machine or other personal property.

All money realized by proceedings under this act shall be applied as follows: First, to the costs of all the lien-holders of and incidental to the proceedings and of registering and proving the liens; second, to the amount of any claim in which the lien is being one month's wages, if due, to all persons employed by the contractor doing manual labor for wages; and the balance shall be divided pro rata among the sub-contractors, material-men and laborers. After all sub-contractors, material-men and other persons employed by the contractor have been paid their liens and costs, the balance shall be paid to the contractor. Every person who has bestowed money, or skill or materials upon any chattel, so as to become entitled to a lien thereon, shall, while such lien exists, in case the amount remains unpaid for three months, have power to sell the same on giving two weeks' notice by advertisement in a newspaper published in the district; and after such sale, such person shall apply the proceeds of such sale to payment of the amount of the lien, and the surplus, if any, shall be sold, and shall pay over the surplus to the person entitled thereto. An office copy of the order of the court declaring any lien, together with the certificate of the judge of the county having been said in court or the receipt of a sheriff, shall be sufficient discharge and acquittance pro tanto of all claims and demands.

#### MINERAL ACT

1. **SHORT TITLE.**—This act may be cited as the "Mineral Act, 1901."

2. **INTERPRETATION.**—In the construction of this act the following expressions shall have the following meanings respectively, unless inconsistent with the context:

"Mineral claim" mean any land, or such any vein of lode, or rock in place, shall be mined for gold or other minerals, precious or base, except coal.

"Rock in place" shall mean all rock in place bearing valuable deposits of gold, silver, platinum, lead, copper, iron or other minerals usually mined, except coal.

"Vein" or "lode" Whenever either of these terms is used in this act, "rock in place" shall be deemed to be included.

"Mineral claim" shall mean the personal right of property or interest in any mine.

"Mining property" shall include every mineral claim, ditch, mill-site or water-right used for mining purposes, and all other things belonging to a mine or used in the working thereof.

"Legal post" shall mean a stake standing not less than four feet above the ground, and squared or faced on four sides for at least one foot from the top, and each side so squared or faced shall measure at least four inches on its face so far as squared or faced, and any stump or tree-cut and squared or faced to the above height and size.

"Mill-site" shall mean a plot of ground located, as defined by this act, for the purpose of erecting thereon any machinery or other works for transporting, crushing, reducing or sampling ores, or for the transmission of power for working mines.

"Streams" shall include all natural water-courses, whether usually containing water or not, and all rivers, creeks and gulches.

"Ditch head" shall include a flume, pipe or race, or other artificial means for conducting water by its own weight, to be used for mining purposes.

"Ditch head" shall mean the point in a natural water-course, or lake or other source where water is first taken into a ditch.

"Foreign miner" shall mean a person or joint-stock company or foreign company named in and lawfully possessed of a valid existing free miner's certificate, and no other.

"Record," "register" and "registration" shall have the same meaning and shall mean an entry in some official book kept for that purpose.

"Full interest" shall mean any mineral claim of the full size, or one of several shares into which a mineral claim shall be equally divided.

"Suit" shall include any suit or action.

"Judgment" shall include "order" or "decree."

"Mineral" shall include all minerals, precious or base (other than coal), found in veins, lodes or rock in place, and whether such minerals are found separately or in combination with each other.

"Real estate" shall mean any mineral land held in fee simple under this or any act relating to gold mines, or to minerals other than coal.

"Joint-stock company" shall mean any company duly incorporated for mining purposes under the "Companies Act," "Companies Act, 1890," and any company duly incorporated in British Columbia for mining purposes under the "Companies Act, 1862" (Imperial), and shall include all companies falling under the definition of a foreign company in the "Companies Act."

#### FREE MINERS AND THEIR PRIVILEGES.

3. **QUALIFICATION.**—Every person over eighteen years of age, and every joint-stock company, shall be entitled to all the rights and privileges of a free miner, and shall be considered a free miner, upon taking out a free miner's certificate. A free miner's certificate issued to a joint-stock company shall be issued in its corporate name. A free miner's certificate shall not be transferable.

4. **DURATION OF CERTIFICATE.**—A free miner's certificate may be granted by one or more persons, and may be renewed, or from the expiration of the applicant's then existing certificate, upon the payment thereof of the fees set out in the schedule of fees to this act. Only one person or one joint-stock company shall be named thereon.

5. **FORM OF.**—A free miner's certificate shall be in the following form:

BRITISH COLUMBIA.

Free Miner's Certificate.

NOT TRANSFERABLE.

Date, ..... Valid for ..... year only. No. ....

This is to certify that I, ..... has paid me this day the sum of ..... and is entitled to all the rights and privileges of a free miner for ..... year from the ..... day of ..... 18.....

(Signature of Gold Commissioner or Mining Recorder, as the case may be.)

6. **APPLICATION AT RECORDER'S OFFICE IN HIS ABSENCE.**—If any person or joint-stock company shall apply for a free miner's certificate at the mining recorder's office during his absence, and shall leave the fee required by this act with the officer or other person in charge of the said office, he or it shall be entitled to have such certificate from the date of such application; and any free miner shall at any time be entitled to obtain a free miner's certificate commencing to run at the expiration of his then existing free miner's certificate, providing that when he applies for such certificate he shall produce to the mining recorder, or in case of his absence shall leave with the officer or other person in charge of the mining recorder's office, such existing certificate.

7. **SUBSTITUTED CERTIFICATE.**—If any free miner's certificate be accidentally destroyed or lost, the owner thereof may, on



payment of the fees set out in the schedule to this act, have a true copy of it, signed by the mining recorder, or other person by whom or out of whose office the original was issued. Every such copy shall be marked "Substituted Certificate," unless some other term irregularly be shown in respect thereof, every original or substituted free miner's certificate shall be evidence of all matters therein contained.

8. **PENALTY FOR MINING WITHOUT CERTIFICATE.**—Every person and joint-stock company engaged in mining for minerals (other than coal) shall take out a free miner's certificate, and whoever works a mine, tunnel, flume, drain or ditch, without having such certificate, shall, on conviction thereof in a summary way, be fined not more than five pounds, or be imprisoned, or both, always, that nothing herein contained shall prejudice the right to collect wages or payment for work done by any person who, through not being a free miner, has rendered himself liable to the above penalty.

9. **USE CERTIFICATE PERSON NOT ENTITLED TO INTEREST IN MINING PROPERTY.**—No person or joint-stock company shall be recognized as having any right or interest in or to any mineral claim, or any minerals therein, or in or to any water-right, mining ditch, drain, tunnel, or flume, or in or to any land, or any free miner's certificate, in respect of the same, if such person, or the owner of such certificate, the owner thereof shall absolutely forfeit all his rights and interests in or to any mineral claim, and all and any minerals therein, and in or to any and every water-right, mining ditch, drain, tunnel, or flume, or in or to any land, or any free miner's certificate, or any other person, or the owner of such certificate, or any person, or the owner of such certificate, shall, on or before the date following the expiration of such certificate, obtain a new free miner's certificate; provided, nevertheless, that a shareholder in a joint-stock company need not be a free miner, and though not a free miner, shall be entitled to buy, sell, hold, or dispose of any shares therein; and provided, also, that this section shall not apply to mineral claims for which a certificate of improvement or crown grant has been issued.

10. **WHEREA FREE MINER MAY PROSPECT AND MINE.**—Every free miner shall have the right to enter, locate, prospect and mine upon any waste lands of the crown for all minerals other than coal, and upon all lands the right whereon to so enter upon, prospect and mine all minerals other than coal shall have been, or hereafter shall be, reserved to the crown and its lieges, and also to enter, locate, prospect and mine for gold and silver upon any lands the right whereon to so enter upon, locate, prospect and mine shall have been, or shall be, reserved to the crown and its lieges. Excepting out of all the above description of lands any land occupied by any building, and any land falling within the curtilage of any dwelling-house, and any orchard, and any land for the time being actually reserved to the crown and its lieges, and also Indian reservations: provided that in the event of such entry being made upon lands already lawfully occupied for other than mining purposes, such free miner shall be bound to give and to execute adequate security to the satisfaction of the gold commissioner for any loss or damages which may be caused by such entry; and provided, that after such entry he shall make full compensation to the owner of or owner of such lands for any loss or damages which may be caused by reason of such entry; such compensation, in case of dispute, to be determined by the court having jurisdiction in mining disputes, with or without a jury.

11. **RIGHT TO CUT TIMBER.**—Any free miner may enter upon any crown lands, or lands covered by timber, or any lands the timber whereon has been reserved by the crown, to cut timber for mining purposes.

12. **RIGHT TO KILL GAME.**—Any free miner shall be at liberty at any period of the year, while actually prospecting or engaged in mining, to kill game for his own use.

13. **"PLACER MINING ACT."**—A free miner shall have all the rights and privileges granted to free miners by the "Placer Mining Act."

#### MINERAL CLAIMS AND MINES.

##### LOCATING, RECORDING, WORKING, AND CROWN GRANTS.

14. **FREE MINER'S CLAIM.**—Any free miner desiring to locate a mineral claim shall, subject to the provisions of this act, be entitled to land which may be used for mining, enter upon the same and locate a plot of ground, where possible, fifteen hundred feet long by six hundred feet wide, and, where possible, in rectangular form; provided, that there shall be placed a level line, the mineral claim shall be parallel. In defining the line of a mineral claim, it shall be measured horizontally, irrespective of inequalities on the surface of the ground.

15. **HOW STAKED OFF.**—A mineral claim shall be marked by three legal post-stakes as near as possible, at equal distances from each other along the center-line. The posts shall be numbered 1, 2, 3. The center-post shall always be numbered 2, and in determining the center-line and length of the claim a line shall be run from 1 through 2 and, having been set in the said straight line to the required distance, without reference, as to direction, to post 3, but, as to distance, such line shall not exceed the distance in a straight line between posts 1 and 3, and shall not exceed fifteen hundred feet. The end post there shall be placed a level notice in writing, stating the name of the claim, its length in feet, and the direction of the center-line, with the date of the notice and name of the claimant of the ground. When a claim is located in unbroken country, where no water can be seen from the next post, the locator shall blaze a line connecting all the posts. It shall be unlawful to remove or change the situation of any post unless the claim shall have been previously abandoned or forfeited.

16. **LOCATIONS MADE ON SUNDAY.**—Any location made upon Sunday or any public holiday shall not for that reason be invalid, any law or statute to the contrary notwithstanding.

17. **WHERE STAKING OUT CANNOT BE PROPERLY DONE.**—In cases where, from the nature or shape of the ground, it is impossible to mark the center-line of the claim, as provided by this act, then the claim may be marked by placing posts as nearly as possible to the center-line, and measuring the distance from such posts may be from such center-line, which distance and direction shall be set out in the record of the claim.

18. **PRIORITY OF LOCATION IN DISTRICTS.**—In case of any difficulty or objection as to a mineral claim the title to the claim shall be recognized according to the priority of such location, subject to any question as to the validity of the record itself, and subject further to the free miner having complied with all the provisions of this act.

19. **RECORD OF CLAIM.**—Every free miner locating a mineral claim shall record the same with the mining recorder of the district within which the same is situate, within fifteen days after the location thereof, if located within ten miles of the office of said mining recorder. One additional day shall be allowed for said record for every additional ten miles, or fraction thereof. Such record shall be made in a book to be kept for the purpose in the office of the said mining recorder, in which shall be inserted the name of the claim, the name of each locator, the number of each locator's free miner's certificate, the locality of the mine, the direction of the center-line, the length in feet, the date of location, and the date of the record.

20. **MINE IS A FREE MINER'S CLAIM.**—A free miner shall not be entitled to a record of a mineral claim until he shall have furnished the said mining recorder with all the above particulars.

21. **MINING RECORDER'S OFFICE.**—Upon the establishment of a mining division and the opening of a mining recorder's office therein, under the authority of this act, such office and non-office shall be the proper office for recording all mineral claims within such mining division, and making all records in respect thereof.

22. **RECORD OF CLAIM IN MINES.**—Respect of a mineral claim, or any free miner shall record a mineral claim in a different district or mining division to that in which such claim is situate, such error shall not affect his title to such claim, but he shall, within fifteen days from the discovery of his error, record such claim in the district or mining division in which it is situate, and such new record shall bear the date of the first record, and a note shall be made thereon of the error and of the date of the rectification of the same.

23. **APPLICATION AT RECORDER'S OFFICE IN HIS ABSENCE.**—If a free miner applies at the mining recorder's office during his absence to record a mineral claim, or any document or other matter required by this act to be recorded, and leaves the fee required by this act and the necessary and information required to enable the mining recorder to make such record, with the officer or other person in charge of said office, he shall be entitled to have such record dated on the date of such application.

24. **RECORD OF CLAIM BY GOLD OR SILVER HOLDER.**—Any free miner having duly located and recorded a mineral claim shall be entitled to hold the same for the period of one year from the recording of the same, and thence from year to year: provided, that during each year he pays to the mining recorder such free miner shall do, or cause to be done, work of value to itself to the value of \$50, and shall satisfy the gold commissioner or mining recorder that such work has been done, by an affidavit of the free miner or his agent, setting out a detailed statement of the work done, and shall obtain from such gold commissioner or mining recorder and shall record a certificate of such work having been done. If such work shall not be done, or if such certificate shall not be so obtained and recorded, in each and every year, the claim shall be deemed vacant and abandoned, any rule of law or equity to the contrary notwithstanding.

25. **IRREGULARITIES NOT TO AFFECT TITLE.**—Upon any dispute as to the title to any mineral claim, no irregularity made previous to the date of the record of the certificate of work next preceding the then last recorded certificate of work shall affect the title thereto, and it shall be assumed that up to that date the title to such claim was perfect.

26. **FREE MINER MAY HOLD.**—No free miner shall be entitled to hold, in his own name or in the name of any other person, more than one mineral claim on the same vein or lode, except by purchase, but such free miner may hold by location a claim upon each separate vein or lode.

27. **ABANDONMENT OF CLAIM BY FREE MINER.**—A free miner may at any time abandon any mineral claim by giving notice in writing of such intention to abandon to the mining recorder, and from the date of such notice all interest of such free miner in such claim shall cease.

28. **MACHINERY ON ABANDONED CLAIM.**—When a free miner abandons a mineral claim he shall have the right to take from the same any machinery and any personal property which he may have on the claim, and any such claim, and any such machinery contracted therefrom within such time as shall be fixed by the gold commissioner or mining recorder.

29. **RE-LOCATION OF ABANDONED CLAIMS.**—No free miner shall be entitled to re-locate any mineral claim, or any portion thereof, which he shall have abandoned or forfeited, unless he shall have obtained the written permission of the gold commissioner to make such re-location, and he shall hold no interest in any portion of such mineral claim, by location, without such permission.

30. **LOCATING MORE THAN ONE CLAIM ON THE SAME LODE.**—Should any free miner locate and record more than one mineral claim on the same vein or lode, all such locations and records, excepting the last recorded, shall be void, and the last recorded lode shall be void, unless such first claim shall have been abandoned or forfeited.

31. **AMOUNT OF LODGE CONTAINED IN A CLAIM.**—The lawful holder of a claim shall be entitled to mine such claim, and possession of all the surface included within the lines of his location,

and of all veins or lodes, throughout their entire depth, the top or apex of which lies inside of such surface-lines extended downward vertically, although such veins or lodes may so far depart from a perpendicular in their course downward as to extend outside the vertical side-lines of such surface location; but his right of possession to such outside parts of such veins or lodes shall be confined to such portions thereof as lie between vertical planes drawn downward from the top of such surface location, and such location so continued in their own direction that such planes will intersect such exterior parts of such veins or lodes; and nothing in this section shall authorize the locator or possessor of a vein or lode which extends in any direction to extend outside the vertical lines of his claim, but upon the surface of a claim owned or possessed by another; provided, always, that a prior location on the dip of a vein or lode shall have priority over a subsequent location on the same vein or lode, though such subsequent location may be upon the apex of the vein or lode, and provided, always, that in cases where the land in which such claim is situate is lawfully owned or occupied for other than mining purposes, the above section shall be read subject to the rights and interests of such owner or occupier. And it is hereby expressly declared that a location laid crosswise of a vein or lode, so that its center-line crosses the same instead of following the course thereof, will secure only so much of the vein or lode as it actually crosses at the surface, and the side-lines of the location will become the end-lines thereof, for the purpose of defining the rights of the owners. A location shall be deemed to have been laid crosswise when the smallest angle made by the center-line falling on the general course of the vein or lode is greater than forty-five degrees.

**WHERE GOLD OR SILVER HAS BEEN DISCOVERED.**—**GENERAL PREVALE.**—Where two or more veins or lodes intersect or cross each other, on their downward dip, priority of title shall govern, and the prior location shall be entitled to all ore or mineral contained within the space of the vein or lode, but not over them; and the subsequent location shall have the right of way through the said space of intersection for the purpose of the convenient working of the said subsequent location; and provided, also, that where two or more veins or lodes intersect or cross each other, the oldest or prior location shall take the vein or lode below the point of union, including all the space of intersection.

**33. RIGHT TO LODES DISCOVERED IN A TUNNEL.**—Where a tunnel is run for the development of a vein or lode the owner of such tunnel shall, in addition to any mineral claim lawfully held by him, have the right to all veins or lodes discovered in such tunnel; provided that the ground containing such veins or lodes be marked out by him as a mineral claim, and be duly recorded within fifteen days after such discovery; and provided, further, that such veins or lodes are not included in any existing mineral claim. Any money or labor expended in constructing a tunnel to develop a vein or lode shall be deemed to have been expended on such vein or lode.

**34. INTEREST IN CLAIM A CHATTEL INTEREST.**—The interest of a free miner in his mineral claim shall, save as to claims held in real estate, be deemed to be a chattel interest, equivalent to a lease, for one year, and thence from year to year, so long as the performance and observance of all the terms and conditions of this act.

**35. PURCHASE OF MINERAL CLAIM.**—Any lawful holder of a mineral claim shall be entitled to a crown grant thereof on payment to the government of British Columbia of the sum of \$25 per acre in lieu of expenditure on the claim. The intending purchaser shall cause a notice of his intention to purchase to be inserted in the *British Columbia Gazette*, and in one newspaper circulating in the district in which the claim is situate, for sixty days prior to the issuance of the crown grant.

**36. CERTIFICATE OF IMPROVEMENTS.**—Whenever the lawful holder of a mineral claim shall have complied with the following requirements, he shall be entitled to receive from the gold commissioner a certificate of improvements in respect of such claim:

(a.) Done or caused to be done work on the claim itself in developing a mine to the value of \$50, exclusive of all houses, buildings and other like improvements;

(b.) Found a vein or lode of the limits of such claim;

(c.) Had the claim surveyed by an authorized provincial land surveyor, who shall have made three plats of the claim, and placed one such plat on the No. 2 or center-post of the claim, or on such post as near the center of the claim as he may think fit, fully defined the boundaries of such claim by placing monuments or legal posts at the angles or corners of such claim, and who shall have also examined the work done on the mine itself for the development thereof, and who shall be satisfied as to the particulars of such work, exclusive of houses, buildings and other like improvements, and to the best of his belief the value of such work, and that a vein or lode has been found to exist on the claim;

(d.) shall have posted on the same post as the said plat, and also on the outside of the office of the mining recorder, a legible notice in writing of his intention to apply for a certificate of improvements, and such notice shall contain: 1. The name of the claim; 2. The name of the lawful holder thereof; 3. The number of such holder's existing free miner's certificate; 4. His intention to apply for certificate of improvements at the end of sixty days, for the purpose of obtaining a crown grant; 5. The date of the notice.

(e.) Inserted a copy of such notice in the *British Columbia Gazette*, and in one newspaper circulating in the district in which the claim is situate, for at least sixty days prior to such application, which notice shall be made at any time after the posting of the notice on the claim;

(f.) Filed with the mining recorder: 1. Affidavit of the holder of the claim, or his agent, in Form H in the schedule of this act; 2. Affidavit of the said surveyor in Form G in the schedule of this act; 3. The copies of the plat of such claim; 4. The surveyor's original field-notes.

**37. CERTIFICATE NOT GRANTED WHEN CLAIM IS IN LITIGATION.**—Provided, nevertheless, that no certificate of improvements shall be granted in respect of a mineral claim the title to which is in litigation, and a certificate of improvements granted in respect of any such claim shall be null and void.

**38. EFFECT OF CERTIFICATE OF IMPROVEMENTS.**—After the issuing and recording of such certificate of improvements, and while such certificate of improvements remains in force, it shall be deemed abandoned or forfeited on account of the holder thereof failing to take out a free miner's certificate, and it shall not be necessary to do any work thereon.

**39. RECORDING OF CERTIFICATE OF IMPROVEMENT ENTITLES OWNER TO CROWN GRANT.**—On the granting and recording of such certificate of improvements in respect of a mineral claim situate outside of the railway belt, the holder thereof shall be entitled to a crown grant of such claim without the payment of the \$25 per acre required by Section 35. And the granting and recording of such certificate of improvements in respect of a mineral claim situate inside the railway belt, the holder thereof shall be entitled to a crown grant of such claim on the payment of \$10 to the mining recorder.

**40. APPLICATION FOR CROWN GRANT.**—The holder of a mineral claim for which a certificate of improvements has been granted and recorded shall make application for a crown grant to the mining recorder, in Form J of the schedule to this act, within three months from the date of such certificate of improvements, and in default of such application having been made within such time, such certificate of improvements shall lapse and become absolutely void.

**41. TRANSFER OF CLAIM AFTER APPLICATION FOR CERTIFICATE.**—If the holder of a mineral claim, after applying for a certificate of improvements, shall sell and transfer such claim to another free miner, upon satisfactory proof of such sale and transfer being made to the gold commissioner, the holder of the claim shall be entitled to a certificate of improvements in his own name. And if a sale and transfer shall be made by any person or company after a certificate of improvements shall have been granted, the holder thereof may, at the discretion of the mining recorder to the satisfaction of the chief commissioner of lands, make the crown grant shall issue to the new holder of the claim.

**42. CROWN GRANT DOES NOT INVALIDATE A LEASE.**—The issuance of a crown grant shall not invalidate any lease which may have been granted by any mineral claim previous to the issuance of such crown grant.

**43. WHAT PASSES BY CROWN GRANT ON WASTE LANDS.**—A crown grant of a mineral claim located on any waste lands of the crown shall include the right of discovery of such claim, and all minerals, precious or base (excepting gold), found in veins, lodes or rock in place, and whether such minerals are found separately or in combination with each other, in, upon or under the land in the said crown grant mentioned, including the rights set forth in Section 31 of this act.

**44. WHAT PASSES BY CROWN GRANT WHEN ALL MINERALS (SAVE COAL) HAVE BEEN RESERVED.**—Crown grants of mineral claims located on lawfully occupied lands, where all the minerals, precious and base (excepting coal) (other than coal) has been reserved to the crown and its licensees shall pass to the grantee all minerals, precious or base, other than coal, found in veins or lodes, or rock in place, and whether such minerals are found separately or in combination with each other, which may be in, upon or under the land in the said crown grant mentioned, and including all the rights given to mineral claim holders of mineral claims so located in Section 31 of this act, but such crown grant shall expressly reserve the rights of such prior occupant.

Where the mineral claim is located on land lawfully occupied under a timber lease, the crown grant shall convey the surface and minerals, precious and base (save coal), found in veins, or lodes, or rock in place, but shall reserve the timber.

**45. WHAT PASSES BY CROWN GRANT WHERE GOLD AND SILVER HAVE BEEN RESERVED.**—Crown grants of mineral claims located on lawfully occupied lands, the right whereon to enter and mine gold and silver has been reserved to the crown, shall be deemed to include all the gold and silver found in veins, or lodes, or rock in place, which may be in, upon or under the land in the said crown grant mentioned, and including all the rights given to mineral claim holders of mineral claims so located in Section 31 of this act, but such crown grants shall expressly reserve the rights of such prior occupant.

**46. HOW ADVERSE CLAIMANT PROSECUTES HIS CLAIM.**—Should there be an adverse claimant for a mineral claim, or any part thereof, the applicant for the certificate of improvements and recording of the certificate of improvements, or any proceeding in some court of competent jurisdiction, with a view to determine the matters in dispute, and he shall prosecute the same with reasonable diligence, and at once give notice of such proceedings to the holder of the claim, and a failure to do so shall be a waiver of his adverse claim. And such claimant shall also give notice in writing to the gold commissioner or mining recorder of such adverse claim before the granting and recording of such certificate of improvements. After the granting of such certificate of improvements, no action shall be brought with respect to the title to such claim except on the ground of fraud.

**47. PARTICULARS REQUIRED TO BE FURNISHED BY ADVERSE CLAIMANTS.**—On notice being given of any adverse claim and proceedings thereon, the applicant for the certificate of improvements may apply to the judge of the court in which such proceedings are brought for an order requiring the adverse claimant to file full particulars of his adverse claim, and, if such judge shall think fit, by an affidavit, and the certificate of improvements of any disputed ground, which particulars and plat shall be filed with the registrar of the court within a time to be fixed by such order. If such particulars and plat shall not be so filed within such time, or if such proceedings shall be discontinued, such application to the court for an order requiring the applicant for the certificate of improvements: provided, always, that

it shall be competent for such judge, by order, to extend the time for the filing of such particulars and plat, upon cause being shown. And any order for particulars or for extension of time made under this section may be made ex parte.

**ADVERSE CLAIM AFFECTING ONLY PORTION OF CLAIM.**—If an adverse claim shall only affect a portion of the ground for which a certificate of improvements is applied, the boundaries of such portion shall be shown by a plat made by the applicant, and the applicant may relinquish the portion covered by the adverse claim, and still be entitled to a certificate of improvements for the undisputed remainder of his claim, upon complying with the requirements of this act.

**APPEAL FROM DECISION GIVEN.**—When judgment in such case is rendered by the court, a memorandum of such judgment shall be entered in the "Record Book"; and if by any judgment the original boundaries of any claim shall be changed, a plat made by a provincial land surveyor, and signed by the judge by whom the judgment has been given, shall be filed in the office of the mining recorder.

**70. RECORDS OF DOCUMENTS OF TITLE.**—Every conveyance, bill of sale, mortgage or other document of title relating to any mineral claim, mine held as real estate, or mining interest, shall be recorded within the time prescribed for recording mineral claims; provided, always, that the failure to so record any such document shall not invalidate the same as between the parties thereto, but shall be deemed as to third parties, said take effect from the date of record, and not from the date of such document.

**71. VALID TRANSFER OF MINERAL CLAIM.**—No transfer of any mineral claim, or any interest therein, shall be valid unless made in writing, signed by the transferor or by his agent authorized in writing, and recorded by the mining recorder; and if signed by an agent, the authority of such agent shall be recorded before the record of such transfer.

**72. TRANSFER OF MINERAL CLAIM UNDER "GOLD MINING AMENDMENT ACT, 1874."**—The transfer of any real estate acquired under the provisions of the "Gold Mining Amendment Act, 1874," or under this or any act relating to minerals, other than coal, shall be in writing, signed by the transferor or by his agent authorized in writing, and must be by deed and recorded by the mining recorder.

**73. DEATH OF FREE MINER.**—In case of the death of any free miner, his mineral claim shall be open to be taken up by any other person, either during his last illness or for the period of twelve months after his decease.

**74. FAULTS OF GOVERNMENT OFFICIALS.**—No free miner shall suffer from any acts of omission, commission, or delay on the part of any government official, if such can be proven.

#### MILL-SITES.

**55. LOCATION OF.**—A free mill-site may locate any unoccupied and unreserved crown land not known to contain mineral, and not exceeding five acres, as a mill-site. No free miner shall hold at any one time more than one mill-site obtained by him in this manner. Such mill-site shall be in the form of a square. On locating a mill-site, the free miner shall comply with the following requirements:

1. Mark out the land by placing a legal post at each corner.
2. Post a notice on each post, stating: 1. The name of such free miner; 2. The number of his free miner's certificate; 3. His intention, at the expiration of sixty days from the date of the notice, to apply for the land as a mill-site; 4. The date of the notice; 5. The name of the mining recorder.
3. Post a copy of such notice on the office of the mining recorder.

**56. RECORDER MAY GRANT LEASE FOR ONE YEAR.**—On the expiration of sixty days after the fulfillment of the above requirements, the free miner shall deposit, in duplicate, a plat of the said land with the mining recorder, and prove by affidavit that he has complied with the above requirements, and that the said land is not known to contain minerals, and shall furnish such other proof as to the non-mineral character of the land as the gold commissioner may require; the free miner shall then be entitled to a lease, for one year, of the said land, which lease shall be executed by the gold commissioner. If, during the continuance of such lease, such free miner shall prove to the satisfaction of the gold commissioner that he has put or caused to be put any machinery for mining or milling purposes on the said mill-site, of the value of at least \$500, he shall be entitled to a crown grant of such mill-site upon payment of \$5 per acre for such land. Any free miner now having a lease of a piece of land for mining or milling purposes, or for the location of the gold commissioner that he has put or constructed works, or machinery for mining or milling purposes, on the said mill-site of the value of at least \$500, shall, on payment of \$5 per acre, be entitled to a crown grant of such mill-site, and the gold commissioner shall be bound to apply for a crown grant of a mill-site the free miner shall—

1. Pay the sum of \$5 per acre to the mining recorder.
2. Deposit with the mining recorder the following documents: (a.) Lease of the mill-site; (b.) Plat of the mill-site; (c.) Surveyor's original field-notes; (d.) A certificate from the gold commissioner that works or machinery for mining or milling purposes have been put or constructed on the mill-site to the value of at least \$500; (e.) Application for the crown grant; (f.) Affidavit that the applicant holds no other mill-site obtained by him under this act.

**57. WHAT PASSES BY CROWN GRANT OF.**—Crown grants of mill-sites shall pass to the grantee all the surface of the land in the said crown grant, and the grantee shall have the right to all the presently reserved all minerals under the said land, and the right to the crown and its licensees to enter and mine the said minerals.

#### TUNNELS AND DRAINS.

**50. LICENSE TO RUN.**—Any free miner, being the holder of a mineral claim or mine held as real estate, may, at the discretion

of the gold commissioner, obtain a license to run a drain or tunnel, for drainage or any other purpose, over the land with the development of such claim or mine, through any occupied or unoccupied lands, whether mineral or otherwise, upon security being first deposited or given to such gold commissioner to his satisfaction for any damage that may be done thereby, and upon such security he shall be liable to the extent of the same.

**60. GRANT OF WATER RIGHTS.**—A free miner who is the holder of a mineral claim or mine held as real estate, or of any mill-site, may, at the discretion of the gold commissioner, obtain a grant to a water right, for any purpose, for any mining or milling or other purpose, for any term not exceeding twenty years, upon such terms and conditions as such gold commissioner shall think fit.

**61. WHAT MUST BE DONE BEFORE APPLYING FOR A GRANT.**—Before applying for any such grant, the free miner shall—

1. Post a notice in writing on a legal post upon some conspicuous part of the ground on which such water is intended to be used and a copy of such notice on the office of the mining recorder for at least six days, which notice shall contain the following particulars: (a.) The name of each applicant; (b.) The number of each applicant's free miner's certificate; (c.) The name, or, if unnamed, a sufficient description of the stream, lake or other source from which such water is intended to be taken; (d.) The point of diversion or intended ditch head; (e.) The number of inches of water applied for; (f.) The purpose for which it is required; (g.) The date of the notice.

(2) If more than three hundred inches are applied for, a deposit of such amount with the gold commissioner of \$5, to be refunded if the grant is not made.

**62. RECORD OF GRANT.**—The grant of such water-right shall be recorded in the office of the mining recorder within the time limited for the recording of mineral claims, which time can be extended at the discretion of the gold commissioner.

**63. No grant shall take effect until recorded.**

**64. PRIORITY OF NOTICE.**—On any dispute prior to such grant, priority of notice shall constitute priority of right.

**65. A grant of such water-right shall speak from the date of the grant, and not from the date of the record.**

**66. RIGHTS OF MINERS WORKING ON THE STREAM.**—Every such grant shall be subject to the rights of such free miners as shall, at the date of such grant, be working on the stream above or below the ditch head, and of any other persons lawfully using such water for any purpose whatsoever; and such grant shall be deemed as appurtenant to the mineral claim, mine held as real estate, or mill-site in respect of which it has been granted, or abandoned, or whenever the occasion for the use of the water upon the claim, mine or mill-site shall have permanently ceased, the grant shall be at an end and determined.

**67. Right of free miner shall be entitled to any such grant of water for the purpose of selling such water, or of using the same otherwise than for the purpose for which the water was recorded.**

**68. COMPENSATION OF CONSTRUCTION OF WORKS.**—Within six months after the grant is made, the grantee shall commence the construction of the ditch or other works through which he intends to convey the water, and shall prosecute the same diligently and uninterruptedly to completion, unless interrupted by the force of the weather. If, within thirty days, that the gold commissioner may, in his discretion, allow such work to cease for any time, upon cause being shown. Upon the non-fulfillment of any of the conditions of this section the grant shall be forfeited to the crown of the province. The gold commissioner shall, in his discretion, have power to allow a grantee of any water-right to change the place of diversion, on giving such notices and complying with such terms as the gold commissioner may require.

**69. WILFUL WASTE OF WATER.**—Every such grantee shall take all reasonable means for utilizing the water granted to him; and if he wilfully waste any water, or take a quantity of water in excess of his requirements, the gold commissioner may declare his grant to be forfeited to the crown.

**70. POWER TO BRIDGE STREAM, ETC.**—Any person desiring to bridge any stream, claim or other place, for any purpose, or to mine under or through any ditch or flume, or to carry water through or over any land, shall be entitled to a grant of the water-right of the party first in possession, whether of the mine or of the water-right, is to prevail, so as to entitle him to compensation if the same be just.

**71. RULES FOR MEASUREMENT OF WATER.**—In measuring water in any ditch or sluice, the following rules shall be observed: The water taken into a ditch or sluice shall be measured at the ditch or sluice head. No water shall be taken into a ditch or sluice except at a trough placed horizontally at the place at which the water enters it. One inch of water shall mean half the quantity that will pass through an orifice two inches high by one inch wide, with a constant head of seven inches above the upper side of the orifice.

**72. NOTICE TO BE GIVEN ON APPROACHING ANY DITCH.**—Whenever it shall be intended, in forming or upholding any ditch, to enter upon and occupy any part of a registered claim, or mine held as real estate, or to dig or loosen any earth or rock within four feet of any ditch or flume, or to do any work so ordered by such claim or mine, three days' notice in writing of such intention shall be given before entering or approaching within twenty feet of such other property.

**73. RIGHT TO ENTER ANY DITCH.**—Any person heretofore or hereafter engaged in the construction of any road or work may, with the sanction of the gold commissioner, cross, divert or otherwise interfere with any ditch, water-right or other mining rights whatsoever, for such period as the said commissioner shall direct.

75. **OWNER TO PROVIDE FOR WASTE WATER.**—The owner of any ditch, flume or pipe shall, at his own expense, construct, secure and maintain all enrivants necessary for the passage of waste water superfluous water flowing through or over any such ditch, flume or pipe.

76. **OWNER TO KEEP DITCH IN REPAIR.**—The owner of any ditch, flume or pipe shall construct and secure the same in a proper and substantial manner, and the same in good repair to the satisfaction of the gold commissioner, so that no damage shall occur to any road or work in its vicinity, from any part of the works of such ditch, flume or pipe.

77. **OWNER LIABLE FOR DAMAGES.**—The owner of any ditch, flume or pipe shall be liable and shall make good, in such manner as the gold commissioner shall determine, all damages which may be occasioned by or through any parts of the works of such ditch, flume or pipe breaking or being injured.

78. **WHAT CONSTITUTES A DEFICIENT NOTICE.**—If any written notice to the party intended to be affected thereby be posted for ten days on some conspicuous part of any premises referred to in such notice, and also in the office of the mining recorder, such notice shall be deemed good and sufficient.

79. **RENEWAL OF TERM FOR WATER-RIGHT.**—When the term for which any water-right has been granted shall have expired, the grantee thereof may, at the discretion of the gold commissioner, obtain a renewal of the same for a reasonable term, not to exceed ten years, provided the necessity for the use of said water for the purpose for which it was originally granted continues to exist.

80. **CHIEF COMMISSIONER MAY LAY LAW OUT LOADS, ETC.**—Nothing herein contained shall be construed to limit the right of the chief commissioner of lands and works to lay out, from time to time, the public roads of the province, across, through, along or under any ditch, water-right or mining right in any town or land, without compensation, provided that as little damage as possible shall be done in so doing.

#### MINING PARTNERSHIP.

81. **APPLICATION.**—All mining partnerships shall be governed by the provisions hereof, unless they shall have other and written terms of partnership.

82. **TO BE ANNUAL.**—A mining partnership shall, unless otherwise agreed upon, be deemed to be a yearly partnership renewable from year to year by tacit consent.

83. **SCOPE OF.**—The business of the partnership shall be mining and such other matters as pertain solely thereto.

84. **RECORD OF.**—Mining partnerships shall be created and record in the partnership name a mineral claim for each partner, but the name of every partner and the number of every partner's free miner's certificate shall be on the record of every such claim. The partnership name shall appear on every such record, and all the claims so taken up shall be the property of the partnership; provided, always, that no free miner who is the member of a mining partnership, holding by right of location a mineral claim, shall be entitled to hold by right of location in his own name, or in the name of any other partnership any interest in any other mineral claim on the same vein or lode on which the partnership claim is situated.

85. **FAILURE TO KEEP FREE MINER'S CERTIFICATE.**—Should any partner fail to keep up his free miner's certificate, such failure shall not cause a forfeiture, or act as an abandonment of the partnership claim, but the share of the partner who shall so fail to keep up his free miner's certificate shall become vested in his partners, pro rata, according to their former interests.

86. **PARTNER'S RIGHT TO VOTE.**—A partner in any mining partnership of his agent authorized in writing shall, at any meeting thereof, be entitled to vote upon any interest or fraction of an interest which he may hold therein; but the result of the votes given shall be determined by the number of the full interests voted upon, and not by the number of partners voting at such meeting.

87. **MAJORITY TO MAKE ASSESSMENTS.**—A majority of such votes may decide whether to locate and in what manner to work the partnership claim, the number of men to be employed, and the extent and manner of levying the assessments to defray the expenses incurred by the partnership. Such majority may also choose a foreman or manager, who shall represent the partnership, and sue and be sued in the name of the partnership for assessments and otherwise; and he shall have power to bind them by his contracts. Every partner, or his duly authorized agent, shall be entitled to represent his interest in the partnership property by work and labor so long as such work and labor be satisfactory to the foreman or manager. In the event of such workman being discharged by the foreman or manager the court having jurisdiction in mining disputes may, if requested, summon the foreman or manager, who shall represent the partnership, and make such order as it shall deem just.

88. **ASSESSMENTS TO BE PAID WITHIN THIRTY DAYS.**—All assessments shall be payable within thirty days after being made.

89. **DEFAULT IN PAYMENT OF ASSESSMENT.**—Any partner making default in payment, after receiving a notice specifying the amount due by him, shall, if such amount be correct, be personally liable to the partnership, and his interest in the partnership property may be sold by the partnership for the payment of the debt, and any further assessment that may have accrued thereon up to the day of the sale, together with all costs and charges occasioned by such default; and if the proceeds of the sale be insufficient to pay off the several sums mentioned, the court having jurisdiction in mining disputes, upon being applied to, shall issue an order directed to the sheriff to seize and sell any other personal property of the debtor. Notices of sale shall, in either of the cases above mentioned, be posted thirty clear days prior to the day of sale, in the vicinity of such mining or

other property, and on the court-house or mining recorder's office nearest thereto. But if such partner be absent from the district such notices shall be posted as aforesaid thirty clear days before the day of sale, and a copy thereof shall be sent to each of the some newspaper circulating in the district wherein such mining or other property is situate. Such sale shall be by public auction to the highest bidder. The purchaser shall be entitled to possession of the property sold, and to a bill of sale therefor signed by the auctioneer; such bill of sale shall confer such title upon the purchaser as the owner had.

90. **EFFECT OF NOTICE OF ABANDONMENT.**—After a notice of abandonment in writing shall have been served on the foreman or manager of a partnership by any member thereof, and so recorded, such member shall not be liable for any debts or other liabilities of the partnership incurred after service and record of such notice, and no member shall be deemed to have abandoned an interest unless he has given notice of such notice.

91. **TITLE TO ABANDONED SHARE VESTS IN CONTINUING PARTNERS.**—Upon the abandonment of any share in a mining partnership, the title to the abandoned share shall vest in the continuing partners pro rata according to their former interests.

92. **PARTNER MAY SELL HIS INTEREST.**—Any partner shall be entitled to sell or contract for the sale of his interest in the partnership property, but such interest shall continue liable for all the debts of the partnership.

93. **AFTER SALE, PARTNER NOT LIABLE FOR DEBTS OF PARTNERSHIP.**—No partner shall after a bill of sale conveying his interest has been recorded be liable for any indebtedness of the partnership incurred thereafter.

#### LIMITED LIABILITY.

94. **LIMITED LIABILITY.**—Any mining partnership composed of free miners may limit the liability of its members, upon complying with the requirements following, that is to say: Upon filing with the mining recorder a declaratory statement, containing the name of the partnership, the location and size of every vein, lode, claim, and particular interest therein, of each partner, and also placing upon a conspicuous part of every such claim, in large letters, the name of the partnership, followed by the words "Limited Liability."

95. **ADDITION TO COMPANY'S NAME.**—The words "Limited Liability" shall thereupon become part of the partnership name.

96. **EFFECT OF.**—After such conditions shall have been complied with, no member of such partnership shall be liable for any indebtedness incurred thereafter, beyond an amount proportioned to his interest in the partnership.

97. **BOOK OF.**—Every such partnership shall keep a correct account of its assets and liabilities, together with the names of the partners, and the interest held by each, and shall make out a monthly balance sheet showing the names of the creditors and their accounts due to them, and file the same among the papers of the partnership; and such balance sheet and all the books of the partnership shall be open to the inspection of creditors at all reasonable hours.

98. **PARTNER MAY SELL.**—Every partner in such partnership shall be entitled to sell or contract for his interest therein, or of any part thereof, to any other free miner.

99. **AFTER SALE, PARTNER NOT LIABLE.**—No member of such partnership, after a bill of sale conveying his interest has been duly recorded, or after he has served a notice of abandonment of his interest in the partnership, and left a copy thereof in the mining recorder, shall be liable for any indebtedness of the partnership incurred thereafter.

100. **DIVIDENDS.**—No such partnership shall declare any dividend until all its liabilities have been paid.

101. **APPOINTMENT OF FOREMAN.**—Every such partnership shall appoint a foreman or manager, who shall represent the partnership, who shall sue and be sued in the name of the partnership, and his contracts shall be deemed to be the contracts of the partnership.

102. **TO WHAT PARTNERSHIP IS LIABLE.**—No such partnership shall be liable for any other indebtedness than that contracted by its foreman or manager, or by its agent duly authorized in writing.

103. **FAILURE TO COMPLY WITH PROVISIONS.**—Should any such partnership fail to comply with any of the provisions of this act relating exclusively to "limited liability" partnership, such partnership shall, from the date of such failure, cease to be a "limited liability" partnership.

#### MINING RECORDERS.

104. **APPOINTMENT OF.** The lieutenant-governor in council may appoint any person to be a mining recorder in and for any part of the province.

105. **ELECTION OF BY MINERS.**—Where mineral land is discovered in a part of the province so situated that the provisions of this act as to free miners' certificates and records of mining property cannot be justly applied or enforced by reason of there being no gold commissioner or mining recorder in the locality, the court having jurisdiction in mining disputes, in such locality, at such times and places as may be agreed upon, and at such meetings, by a two-thirds vote, to appoint one of their number to issue free miners' certificates and to enter records of mining property; and such certificates and records shall be valid, notwithstanding any informality therein, provided that all records so made, and all fees for the same in accordance with the schedule to this act, and a list of all free miners' certificates issued, and the date and term thereof, and the fees for the same, be forwarded to the commissioner or mining recorder as soon thereafter as practicable.

106. **TO ISSUE CERTIFICATES.** Every mining recorder shall issue free miners' certificates and "substituted certificates" to all persons and companies entitled thereto.

107. **BOOK OF FORMS.**—Such free miners' certificates shall be taken from a printed book of forms, with duplicate counterparts, one of which counterparts shall be filed in the office of the mining recorder.

108. **BOOKS TO BE KEPT.**—Every mining recorder shall keep the following books: (a.) A book to be known as the "Record Book"; (b.) A book to be known as the "Record of Abandonments"; (c.) A book to be known as the "Record of Affidavits"; (d.) A book to be known as the "Record of Conveyances";

109. **RECORD OF CLAIM.**—Upon the application of or on behalf of any free miner, and upon receipt of all the particulars required by Section 19, the mining recorder shall record any mineral claim, by entering all the particulars required by Section 19 in the record book, which entry shall be, as near as convenient, in the Form B in the schedule to this act, and he shall give a copy of such entry to the free miner or his agent. The mining recorder shall not make any such entry until he has received all the particulars required by Section 19, and any entry made in violation of this section shall be absolutely void; and any company of free miners who locate and record adjoining mineral claims to be worked by them in company, as a mining partnership, provided in Part III of this act, shall be allowed to perform upon any one of such claims all the work required to entitle them to a certificate for work done for each claim held by such company, and upon being satisfied by affidavit, setting out fully the particulars of such work, the mining recorder shall issue a certificate for such company, the mining recorder shall issue a certificate for work for each of such claims.

110. **ISSUE OF CERTIFICATE.**—Upon receipt of an affidavit setting forth a detailed statement of the facts required by Section 24, the mining recorder shall issue a certificate of work in the Form E in the schedule to this act.

111. **FEILING AND RECORD.**—Upon issuing such certificate of work, the mining recorder shall file and also record such certificate in the record of affidavits, and also record such certificate of work in the record book.

112. **RECORD OF CERTIFICATE OF IMPROVEMENTS.**—Upon receiving a certificate of improvements, the mining recorder shall record the same verbatim in the record book.

113. **WHAT RECORDER MUST RECORD.** The mining recorder shall record all extensions of time, licenses, permits, grants of water-rights, and other privileges granted by the gold commissioner, or mining recorder, and suits for mineral claims held by such commissioner, and a memorandum of every judgment affecting a mineral claim or other mining property, in the record book.

114. **RECORD OF ABANDONMENT.**—Upon the receipt of a notice of abandonment, the mining recorder shall record the same in the record of abandonments, and the such notice, and write across the record of the claim affected by such notice, in the record book, the word "Abandoned," and the date of the receipt of such notice. If only any part of a claim in a mineral claim is abandoned, and not the entire claim, the memorandum in the record shall show which interest is abandoned.

115. **OF AFFIDAVITS.** The mining recorder shall record, by copying out verbatim, all affidavits and declaratory statements brought to him in connection with his office, in the record of affidavits.

116. **OF CONVEYANCES, ETC.** The mining recorder shall record, by copying out verbatim, in the record of conveyances, all conveyances, mortgages, bills of sale, and other instruments and documents of title, including powers of attorney or other authorities, to execute all or any of the above description of documents, when brought to him for that purpose.

117. **OF DOCUMENTS.** The mining recorder shall record in the record book all other documents relating to mining property which may be brought to him for record, and shall file all such documents which may be brought to him for file.

118. **DATE OF ENTRY.** Every entry made in any of the above books shall show the date on which such entry was made.

119. **BOOK TO BE OPEN FOR INSPECTION.** All books of record and documents filed shall, during office hours, be open to public inspection free of charge.

120. **OF TRUE COPIES TO BE EXTRACTED.**—Every copy or extract from any entry in any of the said books, or of any document filed in the mining recorder's office, certified to be a true copy or extract by the mining recorder, shall be received in any court as evidence of the matters therein contained.

121. **DUTY ON RECEIVING APPLICATION FOR CROWN GRANT.** Upon receipt from the holder of a certificate of improvements of an application for a crown grant in the proper form, and all moneys payable in respect thereof, the mining recorder shall apply, if applied, the mining recorder shall send such moneys, together with the under-mentioned papers, to the gold commissioner: (1.) The certificate of improvements; (2.) Affidavit of the holder of the mineral claim or his agent; (3.) The plan of the provincial land surveyor; (4.) A copy of the plat of the mineral claim; (5.) The surveyor's original field-notes; (6.) An application for the crown grant.

122. **DUTIES WITH REFERENCE TO MILL-STEPS.**—Upon receipt from the holder of a mill of all the moneys and documents mentioned in Section 57, the mining recorder shall send the same to the gold commissioner.

123. **RECORDER TO COLLECT FEES.** Before issuing any free miner's certificate or substituted certificate, or recording any certificate of work, or making any entry in any book of record, or filing any document, or making any copy or extract therefrom, the mining recorder shall collect the fees payable in respect thereof.

124. **CERTIFICATE OF WORK.**—On being satisfied that at least \$200 worth of work has been done in any year on any mine held as real estate, by an affidavit setting out fully the particulars of the work done, the mining recorder shall issue to the

owner of such mine a certificate of work, showing that such work has been done. The year in this section shall be deemed to continue to the 31st January of each year.

125. **MINING DIVISIONS.**—It shall be lawful for the lieutenant-governor in council to divide and subdivide any district into mining divisions, and to establish in each mining division a mining recorder's office.

126. **EFFECT OF ESTABLISHMENT OF RECORDER'S OFFICE.**—Upon the establishment of a mining division, and the opening of a mining recorder's office therein, under the authority of the last preceding section: (a.) Such office, and none other, shall be the proper office for recording mineral claims, records, certificates, documents, or other instruments affecting claims, mines held as real estate, or mining property situate within such mining division; and whenever, by this act, or any act amending the same, any business is required to be done or to be observed by the gold commissioner or mining recorder of the district, it shall, if the same affects or concerns any claim, mine held as real estate, or mining property situate within a mining division, be done at or in the proper office for recording of the mining division wherein such claim or mine, or other mining property, is situate. (b.) Upon the district or division of any mining recorder being divided or subdivided into mining divisions, it shall be the duty of such mining recorder to make, or cause to be made, a transcript of all the entries in all the books mentioned in Section 108, affecting claims, mines held as real estate, or mining property, situate in each newly created mining division, and to forward the same to the mining recorder of such mining division, and such transcript shall be kept in such office as far as the records of such office, and all transcripts of such records, certificates, documents or other instruments shall prima facie be deemed to be true copies of the several records, certificates, documents or other instruments in which they are contained, and such transcripts and copies thereof, when certified by the mining recorder of the mining division in whose office they are kept, shall be admissible in evidence in all courts of judicature in this province.

127. **GOLD COMMISSIONER HAS ALL POWERS OF MINING RECORDER.**—When there shall be no mining recorder for a district or division, the duties of the mining recorder shall devolve upon the gold commissioner, and it shall at all times be lawful for the gold commissioner to perform the duties of the mining recorder, and the gold commissioner shall have all the powers of a mining recorder.

128. **OFFICE HOURS.** The mining recorder's office shall be open upon such days and hours as the lieutenant-governor in council may from time to time appoint, and falling any particular day shall be kept open until after sunset on the following holidays, from 10 A. M. to 4 P. M., and such times shall be deemed the office hours of such office.

#### GOLD COMMISSIONER'S MINISTERIAL POWERS.

##### TUNNELS AND DRAINS.

129. **LICENSE FOR.** It shall be lawful for, but not incumbent upon, the gold commissioner to grant a license to any free miner, being the lawful holder of a mineral claim or mine held as real estate, to run a drain or tunnel for any purpose connected with the development or working of such claim or mine through any occupied or unoccupied lands, whether mineral or otherwise, upon security being deposited or given to him to his satisfaction for any damage that may be done thereby, and upon such other terms as he shall think fit.

##### WATER.

130. **GRANT OF WATER-RIGHT.**—It shall be lawful for, but not incumbent upon, the gold commissioner to grant a water-right to any free miner who is the lawful holder of a mineral claim, mine held as real estate, or mill-site, in any unappropriated water, for any mining or milling purpose, for any term not exceeding twenty years, and upon such terms and conditions as the gold commissioner may think fit, upon being satisfied that all the conditions of Section 61 have been complied with. And in all cases where he shall think fit to extend the time for the recording of the grant of such water-right.

131. **RENEWAL.**—On the expiration of the grant to any such water-right, it shall be lawful for, but not incumbent upon, the gold commissioner to renew such grant for a further period not exceeding ten years, on being satisfied that the necessity for the use of the water for the purpose for which it was originally granted continues to exist.

132. **FORFEITURE.**—Upon proof that any grantee has not complied with all or any of the conditions upon which grants of water-rights are held, the gold commissioner may declare the grant to be forfeited.

133. **RECORD OF.**—When such grant shall have been declared forfeited, the gold commissioner shall cause such forfeiture to be recorded by the mining recorder in the record book.

134. **CHANGE OF PLACE OF DIVERSION.** The gold commissioner may permit the grantee of any water right to change the place of diversion, on being satisfied that others are not injured by such change.

135. **GRANT TO BUILD BRIDGE.** The gold commissioner may, in all proper cases, grant an authority in writing to any person desiring to bridge any stream, claim or other place, for any purpose, by damming up or flowing off or diverting or carrying off water through or over any land already occupied, and to any person heretofore or hereafter engaged in the construction of any road or work, to cross, divert or otherwise interfere with any ditch, water-course, or any other mining rights whatsoever, for such period as the said commissioner shall think fit.

136. **OWNER LIABLE FOR DAMAGE.** The gold commissioner may order the owner of any ditch, flume or pipe to make good, in

such manner as such gold commissioner shall think fit, all damages which may be occasioned by or through any part of the works of such ditch, flume or pipe-breaking or being imperfect.

#### WORKING OF MINES OR CLAIMS, AND OTHER POWERS.

137. **CERTIFICATE OF IMPROVEMENTS.**—The gold commissioner shall issue to the lawful holder of a mineral claim a certificate of improvements in respect of such claim, being satisfied that such holder has complied with all the requirements of Section 36 of this act, and that such claim is not in litigation.

138. **CLAIM WORK.**—The gold commissioner shall have power to allow a free miner holding adjoining mineral claims to perform upon any one of such claims the work which would entitle him to a certificate of work for each such claim, and, upon being satisfied by an affidavit setting out fully the particulars of such work, he shall direct the mining recorder to issue a certificate of work for each such claim.

139. **RE-LOCATION.**—The gold commissioner may in his discretion permit a free miner to re-locate a mineral claim, or any part thereof, which may have been abandoned or forfeited by such free miner, provided that such re-location shall not prejudice or interfere with the rights or interests of others.

140. **SPACE FOR DEPOSITS.**—The gold commissioner may mark out a space of ground for deposits of leavings and deals from any tunnel, claim or mining ground, upon such terms as he may think just.

141. **PUBLIC SAFETY.**—The gold commissioner shall have the power to summarily order any mining works to be so carried on as not to interfere with or endanger the safety of the public, any public work or highway, any mining property, mineral claims, mining claims, bed-rock drains or bed-rock flumes; and any abandoned works may by his order be either filled up or guarded to his satisfaction, at the cost of the parties who may have conducted the same, or, in their absence, upon such terms as he shall think fit.

142. **CROWN GRANTS UNDER AMENDMENT ACT.**—Notwithstanding anything contained in the "Gold Mining Amendment Act, 1873," or in any crown grant under the said act or under this or any other act, it shall be lawful for the gold commissioner, in his discretion, and with or without any terms or conditions, to allow to the owners of mineral claims all such rights or privileges in and over mineral or other claims held as real estate as may be allowed in and over claims not so held; and owners of claims held as real estate shall be entitled to the same rights and privileges as owners of claims not so held.

143. **LEASE OF MILL-SITE.**—A person receiving an application for a mill-site from any free miner, or person, being furnished with his satisfaction of the non-mineral character of the land applied for, and the deposit in duplicate of a plat of said land, and upon proof by affidavit that the applicant has complied with the requirements of Section 15 of this act, the gold commissioner shall issue to the applicant a lease of such land for one year, in the form in the schedule to this act.

144. **CERTIFICATE OF WORK ON.**—Upon being satisfied that the lessee of a mill-site has put or constructed thereon works or machinery for mining or other purposes, and that he has not less than \$500, the gold commissioner shall issue his certificate to that effect.

145. **COMMISSIONER TO FORWARD DOCUMENTS, ETC.**—Upon receipt from the mining recorder of the moneys and documents mentioned or referred to in Section 121 or 122, the gold commissioner shall satisfy himself that the same are in order and then forward the same to the chief commissioner of lands and works.

146. **POWER TO CARRY OUT ACT.**—The gold commissioner shall have power to do all things necessary or expedient for the carrying out of the provisions of this act.

#### ADMINISTRATION.

147. **TO TAKE ESTATE OF INTTESTATE DECEASED MINERS.**—The gold commissioner shall take possession of the mining property of any deceased free miner, and may cause such mining property to be duly worked, or dispense therewith at his option.

148. **TO ADMINISTER ESTATE OF INTTESTATE DECEASED MINER.**—The gold commissioner, or any person authorized by him, shall take charge of all the property of any deceased free miner until the issue of letters of administration or probate of will, if any, provided that such charge shall not exceed, he shall die intestate, and the value of the personal estate of such deceased free miner is less than \$300, it shall not be necessary for the gold commissioner to obtain from any court letters of administration or probate of will, and the gold commissioner may administer and wind up the personal estate of the deceased and do all things necessary and proper therefor, and act in all respects as if letters of administration to the personal estate of such deceased free miner had been granted to such gold commissioner, and the gold commissioner shall produce and pass his accounts in each estate of which he shall undertake the administration, before a judge of the county court of the district.

#### COUNTY COURTS.

149. **JURISDICTION.**—In addition to the jurisdiction and powers given to county courts by the "County Courts Jurisdiction Act," and any other act, the county courts shall have jurisdiction, within the limits of its district, all the jurisdiction and powers of a court of law and equity:

1. In all personal actions, where the debt or damages claimed are directly or indirectly connected with the business of mining, or from the exercise of or interference with any right, power or privilege given or claimed to be given by this act or any other act relating to mining (other than coal mining).

2. In all actions between employers and employees, where the employment is directly connected with the business of mining (other than coal mining).

3. In all actions for supplies to persons engaged in mining, where such supplies were bought, contracted for or supplied, or were alleged to have been bought, contracted for or supplied for mining purposes, or for consumption by persons engaged in mining or prospecting.

4. In all actions of trespass or in respect of mineral claims or other mining property, or upon or in respect of lands entered or trespassed upon, or claimed to have been entered or trespassed upon, for exploring, mining or working minerals (other than coal), or for any other purpose directly connected with the business of mining (other than coal mining), or in the exercise of any power or privilege given or claimed to be given by this act or any other act relating to mining (other than coal mining).

5. In all actions of ejectment from mineral claims or other mining property or from lands entered, or claimed to have been entered, in searching for, mining or working minerals (other than coal), or for any purpose directly connected with the business of mining, or entered or claimed to have been entered under some power, right or authority given or obtained under the provisions of this act or any other act relating to mining (other than coal mining).

6. In all suits for foreclosure or redemption, or for enforcing any charge or lien, where the mortgage, charge or lien shall be on mineral claims, mines or other mining property.

7. In all suits for specific performance of, or for reforming, or delivering up, or canceling any agreement for sale, purchase or lease of any mineral claim, mining or other mining property.

8. In all suits for the dissolution or winding up of any mining partnership, whether registered or not, under the provisions of this act.

9. In all suits relative to water-rights claimed under this act or any other act relating to mining (other than coal mining).

10. In all proceedings for orders in the nature of injunctions, where the same are requisite for the granting of relief in any matter in which jurisdiction is given to the county court by this act.

150. **MINING JURISDICTION.**—The jurisdiction given to county courts by this act shall be known as the "mining jurisdiction" of the county court, and the words "mining jurisdiction" shall be written or printed on all summonses, writs and other process and all other documents in every action or cause brought under the mining jurisdiction of the county court.

151. **POWER OF COURTS AND OFFICERS.**—County courts and county court judges, registrars, sheriffs and other officers shall have the same duties, powers, privileges and authorities in all actions and suits and other proceedings brought under the mining jurisdiction of the county court as they have in actions and suits and other proceedings brought under the ordinary jurisdiction of the county court, and the provisions of all acts for the time being in force regulating the duties and powers of county court judges, registrars, sheriffs, registrars, sheriffs and other officers, and regulating the practice and procedure in county courts, and all rules and orders for the time being applicable to the ordinary jurisdiction of the county court, shall, so far as practicable and not inconsistent with this act, apply to mining jurisdiction of the county court.

152. **ADJOINING DISTRICTS.**—Where disputes arise concerning mining property, portions whereof are situated in adjoining mining districts, the county court of either of such districts before which the dispute is first brought shall determine.

153. **SUMMONSES RETURNABLE FORTHWITH.**—The hearing of any summons, plaint or other process in any county court shall not be deferred beyond the shortest reasonable time necessary in the interest of all parties concerned, and it shall be lawful for the registrar to make summonses or other proceedings returnable forthwith or at any other time.

154. **MAY DECIDE ON THE GROUND.**—In all mining actions or suits the court may decide the question at issue upon the ground in dispute, and its decision shall be of the same effect in all cases and have the same virtue and effect as if rendered in court.

155. **ISSUES OF FACT MAY BE FOUND BY JURY.**—In any mining cause or suit, either party may require that the issues of fact shall be tried by a jury, and the judge may, for any cause or in any case, in any action, suit or proceeding, direct all or any issues of fact to be found by a jury.

156. **COSTS.**—In all actions, suits and other proceedings within the mining jurisdiction of the county court, the judge may order that costs be taxed on the higher or lower scale allowed by the county court rules; or if he shall consider the case of sufficient importance he may order that costs be taxed as in the supreme court, and the costs so ordered shall be the costs recoverable in such action, suit or other proceeding.

157. **JURISDICTION OVER LAND IN CERTAIN CASES.**—Every mining jurisdiction shall have jurisdiction over real estate, with reference to real estate held under the "Gold Mining Amendment Act, 1873," or under this act, and, notwithstanding any law to the contrary, have the same powers and authorities to deal all matters arising between the owners thereof, or between the owners thereof and any third person, or between mining joint-stock companies or between share-holders therein or between them and the company, in the same way and as fully as if such matters were in dispute between the owners thereof, or suits and other proceedings relating to such matters or disputes shall be brought and had in the same manner as actions, suits or proceedings relating to mining claims not being real estate.

158. **ISSUE OF WRITS OF HABEAS CORPUS.**—Every county court judge having jurisdiction in mining causes may direct the issuing of writs of *habeas corpus ad respondendum*, *ad regnum* and *habeas ad satisfaciendum* in all cases in which by law he has jurisdiction over the subject-matter of the writ, but under the said writs the jurisdiction of the county court may be exercised and such writs may be issued as the court might usually require in applications of a similar nature.

PENAL AND MISCELLANEOUS.

152. PENALTY FOR CONTRAVENTION OF ACT.—Any person willfully acting in contravention of this act or refusing to obey any lawful order of the gold commissioner or of any judge presiding in a court shall, on conviction thereof in a summary way before any two justices of the peace or a stipendiary magistrate or before any judge of a court having jurisdiction in mining disputes, be liable to a fine not exceeding \$250 or to imprisonment, with or without hard labor, for any term not exceeding three months.

153. RECOVERY OF PENALTIES.—All fines and penalties imposed or payable under this act may be recovered by distress and sale of any mining or other personal property of the offender; and in default of sufficient distress by imprisonment, with or without hard labor, not exceeding three months.

154. FINES, ETC.—All fines, fees and penalties collected under this act shall be paid into the consolidated revenue fund of British Columbia.

155. SAVING RIGHTS.—Nothing herein contained shall, save where such intention is expressly stated, be so construed as to affect prejudicially any mining rights and interests acquired prior to the passing of this act; and all mining rights and privileges heretofore and hereunder acquired shall, without the same being expressly stated, be deemed to be taken and held subject to the rights of Her Majesty, her heirs and successors, and to the public rights of way and water.

156. COPIES OF ACT.—Every free miner, on application to the mining recorder of the district, shall be entitled to a printed copy of this act.

157. BEFORE WHOM AFFIDAVITS MUST BE MADE.—Affidavits and declarations made under the provisions of this act shall be made before some judge or registrar of a court of record, or before some gold commissioner, mining recorder, stipendiary magistrate, justice of the peace, notary public or commissioner for taking affidavits.

REPEALING CLAUSE.

158. The acts and parts of acts mentioned in this section shall stand repealed and be repealed, but such repeal shall not be deemed to imply that any of the said acts or parts of acts which have been repealed at any time prior to the passing of this act have been in force since such repeal; provided, further, that such repeal shall not affect any rights acquired, or any liabilities or penalties incurred, or any act or thing done, under any of the said acts or parts of acts: The "Mineral Act," save and except Sections 4, 5, 6, 13, 19, 20, 22, 27, 28, and 29; "An act to amend the "Mineral Act, 1896," the "Mineral Amendment Act, 1896," paragraph 1, of a Schedule A of the "Licenses Act," Section 79 of the "Companies Act."

SCALE OF FEES TO BE CHARGED.

For every free miner's certificate (for each year) . . . . .	\$5 00
Every substituted certificate . . . . .	1 00
Recording any claim . . . . .	2 50
Recording every certificate of work . . . . .	2 50
Recording any "lay over," or every other record required to be made in the "Record Book" . . . . .	2 50
Recording every abandonment, including the memorandum to be written on the record . . . . .	2 50
For any other record made in the "Record of Abandonments" . . . . .	2 50
For recording every affidavit, where the same does not exceed three folios of one hundred words . . . . .	2 50
For every folio over three, 30 cents per folio.	
The above rates shall be charged for all records made in the "Record of Affidavits" . . . . .	2 50
For all records made in the "Record of Conveyances," where the same are not over three folios . . . . .	2 50
For every folio over three, a further charge of 30 cents per folio.	
For all copies of extracts from any record in any of the above-named books, where such copy or extract shall not exceed three folios, per copy . . . . .	2 50
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PLACER MINING ACT

1. SHORT TITLE.—This act may be cited as the "Placer Mining Act, 1891."

2. INTERPRETATION.—In the construction of this act the following expressions shall have the following meanings respectively, unless inconsistent with the context:  
 "Mine," "placer mine" and "diggings" shall be synonymous terms, and shall mean any natural stratum or bed of earth, gravel or cement mined for gold or other precious minerals.  
 "Placer claim" shall mean the personal right of property or interest in any placer mine; and in the term "mining property" shall be included every placer claim, ditch or water-right used for placer mining purposes, and all other things belonging thereto or used in the working thereof. Placer claims shall be divided into creek diggings, bar diggings, dry diggings, bench diggings and hill diggings.  
 "Creek diggings" shall mean any mine in the bed of any river, stream or ravine, excepting bar diggings.  
 "Bar diggings" shall mean any mine over which a river extends when in its flooded stage.  
 "Dry diggings" shall mean any mine over which a river never extends.

"Bench diggings" shall mean any mine on a bench, and shall, for the purpose of defining the size of a claim in bench diggings, be excepted from "dry diggings."

"Hill diggings" shall mean any mine on the surface of a hill, and fronting on any natural stream or ravine.  
 "Streams and ravines" shall include all natural water-courses, whether usually containing water or not, and all rivers, creeks and gulches.

"Ditch" shall include a flume, pipe, race, or other artificial means for conducting water by its own weight, to be used for mining purposes.

"Ditch head" shall mean the point in a natural water-course or lake where water is first taken into a ditch.

"Free miner" shall mean a person or joint-stock company or foreign company named in and lawfully possessed of a valid existing prospect for a mine's certificate and no other.

"Legal post" shall mean a stake standing not less than four feet above the ground, and squared or faced on four sides for at least one foot from the top, and each side so squared or faced shall measure at least four inches on its face so far as squared or above height and size.

"Record," "register" and "registration" shall have the same meaning and shall mean an entry in some official book kept for that purpose.

"Record," when used without qualifying words showing that a different matter is referred to, shall be taken to refer to the record of a location of a placer claim.

"Full interest" shall mean any placer claim of the full size, or one of the shares into which a mine may be equally divided.

"Close season" shall mean the period of the year during which placer claims in any district are laid over by the gold commissioner of that district.

"Claim" shall include any suit or action.

"Judgment" shall include "order" or "decree."

"Real estate" shall mean any placer mineral land held in fee simple.

"Joint-stock company" shall mean any company duly incorporated for mining purposes under the "Companies Act," "Companies Act, 1891," and any company duly incorporated in British Columbia for mining purposes under the "Companies Act, 1892" (Imperial), and shall include all companies falling under the definition of a foreign company in the "Companies Act." (For Sections 1 to 14 inclusive see Sections 3 to 13 of "Mineral Act of 1891.")

SIZE AND NATURE OF PLACER CLAIMS.

15. FREE MINER MAY RECORD AND PURCHASE.—Every free miner shall be entitled to locate and record a placer claim on each separate creek, ravine or hill, but not more than two claims in the same locality, only one of which shall be a creek claim. He shall be allowed to hold any number of placer claims by purchase, and every free miner may sell, mortgage or dispose of his claim or any interest therein. The size of placer claims shall be as follows:

16. SIZE OF PLACER CLAIMS.—The size of placer claims shall be as follows:

A "creek claim" shall be one hundred feet, measured in the direction of the general course of the stream, and shall extend in width from base to base of the hill or bench on each side, but where the hills or benches are less than one hundred feet apart the claim shall be one hundred feet square.

In "bar diggings" a claim shall be a strip of land one hundred feet long at high-water mark, and in width extending from high-water mark into the river as its lowest water level.

In "dry diggings" a claim shall be one hundred feet square.

In "bench diggings" a claim shall be one hundred feet square; provided that the gold commissioner shall have authority, where a bench is narrow, to extend the limits of the claim beyond the limits of the bench, but not to exceed one hundred feet square.

In "hill diggings" a claim shall have a base-line or frontage of one hundred feet, drawn parallel to the main direction of the stream or ravine on which it rests. Parallel lines drawn from each end of the base-line, at right angles thereto, and running to the summit of the hill, shall constitute the side-lines thereof. Legal posts shall be placed, one hundred feet apart, on both the base-line and side-lines, and no claim shall extend beyond the posts so placed.

17. SIZE OF CLAIM ON DISCOVERY OF NEW MINE.—If any free miner, or party of free miners, discover a new mine, and such discovery be established to the satisfaction of the gold commissioner, placer claims of the following sizes, in dry bar, bench, creek or hill diggings, shall be allowed, viz.: To one discoverer, one claim, three hundred feet in length; to a party of two discoverers, two claims, amounting together to six hundred feet in length; to a party of three discoverers, three claims, amounting together to eight hundred feet in length; to a party of four discoverers, four claims, amounting together to one thousand feet in length; and to each member of a party beyond four discoverers, one claim of the ordinary size of the claim. A creek discovery claim shall extend on each side of the center of the creek as far as the summit of the hill, but not exceeding one thousand feet.

18. NEW STRATA WHERE ALL CLAIMS ARE ABANDONED.—A new stratum of auriferous earth, gravel or cement, situated in any placer claim, where such claim is abandoned, shall be deemed a new mine, although mines in the same locality shall have been previously worked; and dry diggings discovered in the vicinity of bar diggings shall be deemed a new mine and vice versa. In all cases such strata shall be treated as an ordinary claim, in respect to recording, working and representing.

19. MEASUREMENT OF CLAIMS.—In defining the size of placer claims they shall be measured horizontally, irrespective of inequalities on the surface of the ground.

## LOCATING, RECORDING, RE-RECORDING, WORKING AND LAY-OVERS.

20. **SHAPE OF CLAIM AND HOW MARKED.**—Every placer claim shall be as nearly as possible rectangular in form, and marked by four legal posts, at least one corner of which shall be on the ground. One of such posts shall be marked as the "initial post," and on that post shall be placed a legible notice in writing, stating the name of the claim, its length in feet and general direction, with the date of the notice, and the name of the locator. If any side-line of any claim shall exceed one hundred feet in length, such posts shall be placed along such side-line, at distances not exceeding one hundred feet.

21. **LOCATION MADE ON SUNDAY.**—Any location made upon Sunday or any public holiday shall not for that reason be invalid, any law or statute to the contrary notwithstanding.

22. **DISPUTES.**—In case of any dispute as to the title to a placer claim, the title to the claim shall be recognized according to the priority of such location, subject to any question as to the validity of the record itself, and subject further to the free miner having complied with all the terms and conditions of this act.

23. **RECORD OF CLAIM.**—Every free miner locating a placer claim shall record the same with the mining recorder of the district or division within which the same is situated, within three days after the location thereof, if located within ten miles of the office of the said mining recorder. One additional day shall be allowed for making such record for every additional ten miles or fraction thereof. Such record shall be made in a book to be kept for the purpose in the office of the said mining recorder, to be known as the "Record Book," in which shall be inserted the name of the claim, the name of each locator, the number of each locator's free miner certificate, the length in feet, the period for which such record is granted, the date of location, and date of the record; provided that a free miner shall not be entitled to a record of a claim until he shall first furnish the mining recorder with a written statement of the above particulars.

24. **FOREFEITURE.**—After the recording of a placer claim, the removal of any post by the holder thereof, or by any person acting in his behalf, made for the purpose of changing the limits of his claim, shall act as a forfeiture of the claim.

25. **RECORDS TO BE MADE.**—Upon the establishment of a mining division and the opening of a mining recorder's office therein, under the authority of this act, such office and none other shall be the proper office for recording all placer claims within such mining division, and making all records in respect thereof.

26. **RECORD IN WRONG DISTRICT.**—If through ignorance any free miner shall record a placer claim in a different district or mining division than that in which the same is situated, such record shall not affect his title to such claim, but he shall, within fifteen days from the discovery of his error, record such claim in the district or mining division in which it is situated, and such new record shall bear the date of the first record, and a note shall be made thereon of the error and of the date of the rectification of the same.

27. **DURATION OF RECORD.**—A free miner, having duly located a placer claim, shall be entitled to record the same for one or more years upon payment of the fees set out in the schedule to this act.

28. **RE-RECORD OF A CLAIM.**—A free miner shall, at any time during the existence of his record or re-record, be entitled to extend the term of his interest in his placer claim or one or more years, upon payment of the fees set out in the schedule to this act, by re-recording such claim. Such re-record shall be made in the record book, and shall set out: 1. The name of the claim; 2. The name of each holder of an interest in such claim; 3. The number of each such holder's free miner's certificate; 4. The locality of the claim; 5. The period for which such re-record is granted; 6. The date of the re-record.

29. **APPLICATION IN RECORDER'S ABSENCE.**—If a free miner shall apply for a record or re-record of a claim at the office of the mining recorder's office during office hours, but during his absence, and shall have the fee required by this act, and the particulars and information required by Section 23, and the officer present in charge of said office, shall be entitled to have a record dated on the date of such application.

30. **SAME AS TO RE-RECORD.**—If a free miner shall apply for a re-record, and shall make such application at the mining recorder's office during office hours, but during his absence, and shall have the fee required by this act, and the particulars and information required by Section 28, with the officer or other person in charge of said office, he shall be entitled to have a re-record dated on the date of such application, but commencing to run from the expiration of the record or re-record.

31. **TERMS.**—A free miner, having duly located and recorded a placer claim, shall be entitled to hold the same during the existence of his record or re-record of such claim upon complying with all the terms and conditions of this act.

32. **RIGHT OF MINER.**—Every free miner shall have the exclusive right of entry upon his placer claim, for the miner-like working thereof, and the construction of a residence thereon, and shall be entitled to exclusively enjoy the same, as realized therefrom; provided, that the gold commissioner may, upon application made to him, allow other free miners such rights of entry thereon as may be necessary for the working of their claims, upon such terms as may to him seem reasonable.

33. **RIGHT OF FREE MINER TO RECORD.**—Upon any dispute as to the title to a placer claim, no irregularity made prior to the date of the then current record or re-record of such claim shall affect the title thereto, and it shall be assumed that up to the date of such record or re-record the title to the same is perfect; provided, always, that it shall at all times be open to prove that the ground was improperly or insufficiently staked, or that the stakes have been illegally moved.

34. **WORKS IN CONNECTION WITH CLAIM.**—Tunnels, shafts and ditches shall be considered as belonging to the placer claim for the use of which they are constructed, and as abandoned or forfeited by the abandonment or forfeiture of the claim itself.

35. **TUNNELING IN HILLS—RIGHTS OF OTHERS.**—In tunneling under hills, the frontage of which angles toward, or which may be an oblong or elliptical form, no party shall be allowed to tunnel from any of the said angles, nor from either end of such hills, so as to interfere with parties tunneling from the main frontage.

36. **INTEREST IN PLACER CLAIM A CHATTEL INTEREST.**—The interest of a free miner in his placer claim shall, save as otherwise is held as real estate, be deemed to be a chattel interest, equivalent to a lease, for such period as the same may have been recorded, renewable at the end thereof by re-recording, and subject to the conditions as to forfeiture, working, re-presentation, re-recording, and otherwise, for the time being in force with respect to placer claims.

37. **HOLDER OF A PLACER CLAIM NO RIGHT TO VEIN OR LODE.**—The holder of a placer claim shall have no right to any vein or lode, as defined by the "Mineral Act, 1891," within the limits of such placer claim, unless he shall have located and recorded the ground as a mineral claim; and until he shall so locate and record such ground, the same shall be open to any free miner to locate and record as a mineral claim.

38. **DUTIES OF PLACER CLAIM HOLDERS.**—Every placer claim as defined by this act shall be represented and bona fide worked by the holder thereof, or by some person on his behalf, continuously, during the term of such claim, save as otherwise is provided, or during sickness, or for some other reasonable cause, which shall be shown to the satisfaction of the gold commissioner.

39. **LEAVE OF ABSENCE.**—Every free miner, or company of free miners, shall be entitled to a leave of absence for one year from his placer claim or set of claims, *et cetera*, and he may apply to the gold commissioner that he or they have or have expended on such claim, or on any portion of the set of claims, in cash, labor or machinery, an amount equal to \$1,000 on each full interest, without any return of gold or other minerals in reasonable quantities from such expenditure; and (b.) Upon the application for such leave being signed by all the holders of the claim or set of claims. Such leave of absence shall not be deemed to relieve the holder of such claim or set of claims from carrying out the provisions of this act respecting free miners' certificates, records and re-records of such claims; nor shall this section affect the discretionary power of the gold commissioner with respect to granting a leave of absence under other conditions.

40. **FORFEITURE ABSOLUTE.**—Every forfeiture of a placer claim shall be absolute, any rule of law or equity to the contrary notwithstanding.

41. **NOT ENTITLED TO LAY-OVER.**—No placer claim located at any district within fourteen days before or at any time during the close season shall be deemed to be laid over, unless so much work shall have been bona fide done thereon by the holder thereof as shall, in the opinion of the gold commissioner, fairly entitle him to have such claim laid over.

42. **LAY-OVER DURING INSUFFICIENCY OF WATER.**—Where the supply of water is insufficient to work hydraulic or other placer claims requiring water to enable them to be worked, such claims may be laid over by virtue of this section, provided such insufficiency, but not longer, except by leave of the gold commissioner, or other notice of such insufficiency of water must be posted on the office of the mining recorder within three days from the cessation of work.

43. **RECORD OF CHARGES ON CLAIMS.**—Every bill of sale, conveyance or mortgage of a placer claim, or of any fraction thereof, shall be recorded within the time prescribed for recording placer claims.

44. **TRANSFERS.**—No transfer of any placer claim, or of any interest therein, shall be enforceable unless the same or some memorandum thereof shall be in writing, signed by the transferor, or by his agent authorized in writing, and recorded in the record book as required.

45. **GOLD MINING AMENDMENT ACT, 1873.**—The transfer of any real estate acquired under the provisions of the "Gold Mining Amendment Act, 1873," shall be in writing, signed by the transferor or his agent authorized in writing, and attested by a subscribing witness.

## TUNNELS AND DRAINS.

46. **LICENSE TO MAKE.**—Any free miner requiring to run or construct a tunnel or drain in connection with his claim through any occupied or unoccupied lands, whether mineral or not, shall obtain a license from the gold commissioner for that purpose, which license shall be granted by the gold commissioner, or the action of such gold commissioner, and shall also give such security to the gold commissioner for any damage that may be caused by such tunnel or drain as such gold commissioner may require. Such license shall be subject to such terms and conditions as the gold commissioner shall think fit, and shall be recorded in the record book.

47. **TO BELONG TO CLAIM.**—A tunnel or drain shall be considered, as part of the placer claim or mine held as real estate, for all the purposes of this act.

48. **RIGHT OF WAY.**—Any free miner may apply to the gold commissioner for a grant of right of way and entry through and upon any mining ground in his district, for the purpose of constructing a tunnel or drain through the same.

49. **FORM OF APPLICATION.**—The application for every such grant shall be in writing, and shall set out the name of each applicant, the nature and extent of the proposed drain, the amount of



toll to be charged, the term of years for which such grant is to be made, and all other privileges sought to be acquired. The application shall be left at the mining recorder's office at the recorder to the gold commissioner. A notice of such application, setting out the above particulars, shall be posted on the office of the mining recorder and on the ground for thirty clear days before such grant shall be made.

50. DEPOSIT OF \$25.—The applicant for every such grant shall deposit with the mining recorder, at the time of the leaving of his application as aforesaid, \$25, which shall be refunded in case the application shall be refused.

51. GRANTS IN WAYS, ETC.—Such grants shall be in writing and signed by the gold commissioner, and shall not be valid for a longer period than twenty years, and shall give such rights of way and entry and such powers to workers, as may be desired by the gold commissioner, and he may, by order therefor, as the gold commissioner shall think fit, but not in any case to exceed the term, rights or powers set out in the application.

52. COVENANTS ON PART OF GRANTEE.—The following covenants and conditions on the part of the grantee and his assigns shall be deemed to be part of every grant, whether expressed therein or not: (a.) That he shall construct a drain or drains of sufficient size to meet all requirements within a time therein named; (b.) That he shall keep the same in thorough working order and repair, and free from all obstructions, and in default thereof that the gold commissioner may order all necessary alterations or repairs to be made by any free miners, other than the grantee or his assigns, at the cost and expense of the grantee, and he is bound to be liable in respect of such subject, however, to the conditions of the grant) of all or any part of the drainage works, materials and tolls, or any of them; (c.) That he shall, within a reasonable time, construct proper tap-drains from or into any adjacent claims, upon being requested in writing by the holders thereof; and if such grantee shall fail to commence the construction of any such tap-drains for five days after receipt of such request, or after making such commencement shall for such days fail to proceed with such construction, he shall permit such holders to construct such tap-drains, in which case such holders shall only be chargeable with one-half the specified rates of toll, or such other proportion as the gold commissioner may direct; (d.) That he will not, in the construction and maintenance of such drains and tap-drains, in any way, injure the property of others, and that he shall make good any damage done by him.

53. RECORD OF GRANT.—Every such grant shall be recorded in the record book, and the deposited sum of \$25 shall be retained as a guarantee therefor. A receipt for such sum, for a mile and such fraction thereof shall be paid annually to the mining recorder by the grantee, such rent to commence from the date of the grant.

WATER-RIGHTS.

54. Every free miner shall be entitled to the use of so much of the water naturally flowing through or past his placer claim, and not already lawfully appropriated, as may be required by the gold commissioner, to be used in the discharge of the work thereof.

55. IN UNAPPROPRIATED WATER.—A free miner may, at the discretion of the gold commissioner, obtain a grant to water-right in any unappropriated water, for any placer mining, upon such terms and conditions as such gold commissioner shall think fit.

56. HOW OBTAINED.—Before applying for any such grant, the free miner shall—

(1.) Post a notice in writing on a legal post upon some conspicuous part of the ground on which such water is intended to be used, and a copy of such notice on the office of the mining recorder for at least twenty days, which notice shall contain the following particulars: (a.) The name of each applicant; (b.) The number of claimants; (c.) The name of each certificate; (c.) The name, or, if unnamed, a sufficient description of the stream, lake or other source from which such water is intended to be taken; (d.) The point of diversion or intended ditch head; (e.) The nature and purpose of the application; (f.) The purpose for which it is required; (g.) The date of the notice.

(2.) If more than three hundred inches are applied for, a deposit shall be made with the gold commissioner of \$25, to be refunded if the grant is not made.

57. RECORD OF GRANT.—The grant of such water-right shall be recorded in the office of the mining recorder in the record of water rights, within the time limited for the recording of placer claims, and shall during each year thereafter be re-recorded as in the case of a placer claim.

58. MUST BE RECORDED.—No grant shall take effect until recorded.

59. SELLING WATER TO MINERS.—No free miner shall be entitled to a grant of the water of any stream for the purpose of selling the water to claim-holders on any part of such stream. The gold commissioner may, however, grant such water to any person upon any stream, when such water is intended to work bench or hill claims fronting on any such stream; provided, that the rights of free miners then using the water be protected.

60. DISTRIBUTION OF WATER.—The owner of any water-right may distribute the water to such free miners as on such terms as he may deem advisable, within the limits mentioned in his grant; provided, always, that such owner shall be bound to supply water to all applicants, being free miners, in a fair proportion, and shall not demand more therefor than another, except where the difficulty of supply is enhanced.

61. RIGHTS OF MINERS LOCATED BELOW DITCH HEAD.—If, after the grant has been made, any free miner or free miners locate and begin to do work any place situated below the ditch head of any stream, the water of which is intended to be diverted, he or they shall be entitled to forty inches of water if two hundred inches be diverted, and sixty inches if three hundred inches be diverted, and no more,

except upon paying to the grantee compensation equal to the amount of damage sustained by the grantee on account of the diversion of such extra quantity of water; and, in computing such damage, the expense of the construction of the ditch shall be considered.

62. PRIORITY OF NOTICE, PRIORITY OF RIGHT.—On any dispute between applicants for a grant prior to such grant being made, priority of notice shall constitute priority of right, if any.

63. DATE OF GRANT.—A grant duly recorded shall speak from the date of the grant, and not the date of the record.

64. RIGHTS OF PERSONS USING WATER.—Every such grant shall be subject to the rights of such free miners as shall, at the date of such grant, be working on the stream above or below the ditch head, and of any persons lawfully using such water for any purpose whatsoever.

65. GRANT OF WATER-RIGHT APPURTENANT TO CLAIM.—A grant of a water-right made in respect of any placer claim, or placer mine held as real estate, shall be deemed appurtenant to such claim, and shall, if and whenever the claim or mine shall have been worked out, abandoned or forfeited, or whenever the occasion for the use of the water upon the claim or mine shall have permanently ceased, the grant shall be at an end and determine.

66. WORKS WORKED BY FREE MINERS.—Within thirty days after the grant is made, the grantee shall commence the excavation or construction of the works in which he intends to divert and convey the water, and shall prosecute the work diligently and uninterrupted to the completion thereof, unless interrupted by the severity of the weather or other causes, always, that the gold commissioner may, in his discretion, allow such work to cease for any time, upon cause being shown. Upon the non-fulfillment of any of the conditions of this section, the grant shall be void.

67. LAKE OR DIVERSION.—The grantee of any water-right may obtain permission from the gold commissioner to change the place of diversion, on giving such notices and complying with such terms as the gold commissioner may direct. Every such grantee shall take all reasonable means for utilizing the water granted to him; and if he willfully waste any water, or take a quantity of water in excess of his requirements, the gold commissioner may declare his grant to be forfeited.

68. WORKING WORKS ACROSS OTHER LAND.—Any person desiring to bridge any stream, claim or other place for any purpose, or to mine under or through any ditch or flume, or to carry water through or over any land already occupied, may do so with the right of the party first in possession, whether of the mine or of the water-right, is to prevail, so as to entitle him to compensation if the same be just.

69. MEASUREMENT OF WATER.—In measuring water in any ditch or sluice, the following rule shall be observed: The water taken into a ditch or sluice shall be measured at a sluice cut out of a rock in the ditch, or at the place at which the water enters it. One inch of water shall mean half the quantity that will pass through an orifice two inches high by one inch wide, with a constant head of seven inches above the upper side of the orifice.

70. NOTICE GIVEN TO OWNER.—Whenever it shall be intended, in forming or upholding any ditch, to enter upon and occupy any part of a placer claim, or placer mine held as real estate, or other land, or to dig or lower any ditch or rock within such claim or other land, then, three days' notice in writing of such intention shall be given to the owner of such ditch, before entering or approaching within twenty feet thereof.

71. GOLD COMMISSIONER MAY ALLOW DITCH TO BE DIVERTED.—Any person heretofore or hereafter engaged in the construction of any road or work may, with the sanction of the gold commissioner, cross, divert or otherwise interfere with any ditch, water-right or other mining rights whatsoever, for such period as the said commissioner shall direct.

72. OWNER TO PROVIDE FOR WASTE WATER.—The owner of any ditch, flume or pipe shall, at his own expense, construct, secure and maintain all culverts necessary for the passage of waste and superfluous water flowing through or over any such ditch, flume or pipe.

73. OWNER TO KEEP DITCH IN REPAIR.—The owner of any ditch, flume or pipe shall construct and secure the same in a proper and substantial manner, and maintain the same in repair, and shall satisfy the gold commissioner, and so that no damage shall occur to any road or work in its vicinity, from any part of the works of such ditch, flume or pipe.

74. OWNER LIABLE FOR DAMAGE.—The owner of any ditch, flume or pipe shall be liable for all damage, all damage which may be occasioned by or through any parts of the works of such ditch, flume or pipe breaking or being imperfect.

75. NOTICE TO BE GIVEN TO OWNER.—Whenever it shall be intended, to be altered, therefor be posted for ten days on some conspicuous part of any premises referred to in such notice, and also on the office of the mining recorder, such notice shall be deemed good and sufficient.

76. BENEFIT OF WATER RIGHTS.—When the term for which any water-right has been granted shall have expired, the grantee thereof may, at the discretion of the gold commissioner, obtain a conveyance satisfactory to the gold commissioner, and to exceed ten years, for which it was originally granted continues to exist.

77. RIGHTS OF CHIEF COMMISSIONER.—Nothing herein contained shall be construed to limit the right of the chief commissioner of lands and mines to take, from time to time, the possession of lands and water, across, through, along or under any ditch, water-right or mining right, in any crown land, without compensation, provided that as little damage as possible shall be done.

## MINING PARTNERSHIPS.

79. TO WHAT CLASS THIS SHALL APPLY.—All mining partnerships shall be governed by the provisions hereof, unless they shall have another and written articles of partnership.

80. TO BE ANNUAL.—A mining partnership shall, unless otherwise agreed in writing, be deemed to be a yearly partnership, renewable from year to year by tacit consent.

81. SCOPE.—The business of such partnership shall be mining, and such other matters as pertain solely thereto.

82. RIGHTS.—Mining claims, or certificates and record in the partnership name a placer claim for each partner who is a freeminer. Such partnership claims may be located and recorded as a set of claims, and each such claim shall be staked as an ordinary placer claim. One may make on each such claim a valid initial stake, by filing thereon the words "Initial Post." It shall not be requisite to post more than one location notice on each set of claims, which notice shall be on the first initial post.

83. RECORD OF PARTNERSHIP CLAIMS.—A set of claims may be recorded in one record. The name of every partner, and the number of every partner's free miner's certificate, shall be on the record of every such set of claims. The partnership name shall appear on every such record, and all claims so taken up shall be the property of the partnership.

84. RIGHTS OF EACH PARTNER TO VOTE.—A partner in any mining partnership, or his agent authorized in writing, shall, at any meeting thereof, be entitled to vote upon any interest or fraction of an interest which he may hold therein; but the result of the votes given shall be determined by the number of the full interests voted upon, and not by the number of partners voting at such meeting.

85. MATTERS DETERMINED BY VOTE OF PARTNERS.—A majority of such votes may decide when, how long and in what manner to work the partnership claim, or set of claims, the number of men to be employed, which number shall not be less than one man to each claim, and the extent and manner of levying the assessments to defray the expenses incurred by the partnership. Such majority may also choose a foreman or manager, who shall represent the partnership and sue and be sued in the name of the partnership for assessments and otherwise, and shall have power to bind the partnership by his contracts. Every partner, or his duly authorized agent, shall be entitled to represent his interest in the partnership property by work and labor, so long as such work and labor be satisfactory to the foreman or manager. In the event of such partner or agent being discharged by the foreman or manager, the court having jurisdiction in mining disputes may, if requested, summon the foreman or manager before it, and upon hearing the facts make such order as it shall deem just.

86. ASSESSMENTS.—Assessments shall be payable within five days after being made.

87. SALE OF PARTNERSHIP PROPERTY TO PAY ASSESSMENTS.—Any partner making default in payment, after receiving a notice specifying the amount due by him, shall, if such amount be in arrears, be deemed to have authorized the foreman or manager, or his agent, to sell his interest in the partnership property by the partnership for the payment of the debt, and any further assessment which may have accrued thereon up to the day of sale, together with all costs and charges incurred by such default; and if the proceeds of the sale be insufficient to pay of the several sums mentioned, the court having jurisdiction in mining disputes, upon being applied to, shall issue an order directed to the sheriff to seize and sell any other personal property of the debtor. Notices of sale shall in the nature of the above cases, be conspicuously posted ten clear days prior to the day of sale, in the vicinity of such mining or other property, and on the court-house or mining recorder's office nearest thereto. But if such partner be absent from the district, such notices shall be posted as aforesaid thirty clear days before the day of sale, and a copy of such notice shall be published in some newspaper circulating in the district wherein such mining or other property is situated for the said period, and the usual notice by public auction to the highest bidder. The purchaser shall be entitled to possession of the property sold, and to a bill of sale therefor signed by the auctioneer; such bill of sale shall confer such title upon the purchaser as the owner hereof could confer.

88. EFFECT OF NOTICE OF ABANDONMENT.—After a notice of abandonment, in writing, shall have been served on the foreman or manager of a partnership by any member thereof, and duly recorded, such member shall not be liable for any debts or other liabilities of the partnership incurred after the date of such notice, and no member shall be deemed to have abandoned an interest until service and record of such notice.

89. INTEREST WHEN SOLD CONTINUES LIABLE.—Any partner shall be entitled to sue or contract for the sale of his interest in the partnership property, but such interest shall continue liable for all the debts of the partnership.

90. PARTNER RELIEVED BY SALE FROM FUTURE DEBTS OF PARTNERSHIP.—No partner who has sold his interest in the partnership shall be liable for any indebtedness of the partnership incurred thereafter.

## LIMITED LIABILITY.

91. Any mining partnership, composed of two or more free miners, and being free from all debts in respect of the partnership property, may limit the liability of its members, upon compliance with the requirements following, to such extent as may be provided in the mining recorder a declaratory statement, containing the name of the partnership, the location and size of every partnership claim, and the particular interest of each partner; and such a mining partnership may be formed by a set of claims, in large letters, the name of the partnership, followed by the words "Limited Liability."

92. "LIMITED LIABILITY" TO BE ADDED TO NAME.—The words "Limited Liability" shall thereupon become part of the partnership name.

93. EFFECT OF SAME.—After such conditions shall have been complied with, no member of such partnership shall be liable for any indebtedness incurred thereafter, beyond an amount proportioned to his interest in the partnership.

94. Every such partnership shall keep a correct account of its assets and liabilities, together with the names of the partners, and the interest held by each, and shall make out a monthly balance sheet showing the names of the creditors, and the amount due to each, and file the same upon the papers of the partnership; and such balance sheet and all the books of the partnership shall be open to the inspection of creditors at all reasonable hours.

95. PARTNER MAY SELL HIS INTEREST.—Every partner in such partnership shall be at liberty to sell or dispose of his interest therein, or of any part thereof, to any other free miner; but such partner shall be liable for the indebtedness on the said interest in proportion to his interest in the partnership.

96. TO AVOID FUTURE DEBTS.—No member of such partnership, after a bill of sale conveying his interest has been duly recorded, or after he has served a notice of abandonment of his interest on the foreman, and left a copy thereof with the mining recorder, shall be liable for any indebtedness of the partnership incurred thereafter.

97. DIVIDEND.—No such partnership shall declare any dividend until all its liabilities have been paid.

98. Every such partnership shall appoint a foreman or manager, who shall represent the partnership, and who shall sue and be sued in the name of the partnership; and his contracts in relation to the business of the partnership shall be deemed to be the contracts of the partnership.

99. LIABILITY.—No partner shall be liable for any other indebtedness than that contracted by his foreman or manager, or by its agent duly authorized in writing.

## BED-ROCK FLUMES.

100. APPLICATION FOR RIGHT OF WAY.—One or more free miners may apply to the gold commissioner for a grant of exclusive rights of way through and entry upon any mining ground in his district, for the purpose of constructing, laying and maintaining a bed-rock flume.

101. HOW APPLICATION IS MADE.—Every such application shall be in writing, and such petition shall be filed at the mining recorder's office, addressed to the gold commissioner, and shall state the name of the applicant and the nature and extent of the privileges sought to be acquired. Thirty days' notice of such application shall be given, by affixing the same to some conspicuous part of the site of the flume, and the walls of the court-house or of the office of the mining recorder of the district. Prior to such application, such ground shall be marked out by legal posts, placed at intervals of one hundred feet along the line of the flume, with a notice of such application affixed to one of such posts. And it shall be competent for any free miner to protest before the gold commissioner within such thirty days against such application being granted, but not afterward. Every application for a grant shall be accompanied by a deposit of \$125, to be left with the mining recorder, which shall be refunded if the application be refused, but not otherwise.

102. TERM.—Every such grant shall be in writing, signed by the gold commissioner, and shall be for a term not exceeding five years.

103. RIGHTS OF GRANTEE.—The grantee shall be entitled to the following rights and privileges, that is to say: (a.) The right of way through and entry upon any new and unworked river, creek, gulch or ravine, and the exclusive right to locate and work a strip of ground one hundred feet wide and two hundred feet long in the bed thereof to each grantee named in such grant. (b.) The right of way through and entry upon any old and unworked river or ravine, worked by miners for any period longer than two years prior to such entry, and already wholly or partially abandoned, and the exclusive right to stake out and work both the unworked and the worked portions thereof. (c.) The right of way through and entry upon one-quarter mile in length, for each grantee named in such grant. (d.) Such right of way through and entry upon any river, creek or ravine discovered within two years next preceding the date of his application before mentioned, and upon any portions of such river, creek or ravine, already located and being worked by a claim, as to the gold commissioner may see advisable. (e.) The right of way through and entry upon all placer claims which are at the time of the notice of application before mentioned bona fide being worked by any free miner for the purpose of cutting a channel and laying his flume therein, with such reasonable space for constructing, maintaining and repairing the flume as may be necessary; provided, that the owner of such last-mentioned placer claim shall be entitled to take out any gold or other minerals found in the cut so made. (f.) The use of so much of the unappropriated water of the stream on which the flumes may be located, and of other adjacent streams, as may be necessary for the use of the grantee's flumes, by means of pipes, ditches or canals, to carry on his mining operations; and the right of way for ditches and flumes to convey the necessary water to his works, subject to the payment of any damage which may be done to other parties by running such ditches or flumes through or over their ground. (g.) The gold or other minerals in his flume. (h.) No person locating new and unworked or abandoned ground within the limits of such grant, after the notice above mentioned has been given, shall have any right of title as against such grantee to such ground.

104. CLAIM-HOLDER MAY CONNECT WITH BED-ROCK FLUME.—A holder of a placer claim through which the line of the grantee's

flume is to run may put in a bed-rock flume in his claim to connect with the grantee's flume, giving the grantee ten days' notice in writing to that effect; but he shall maintain the like grant and build his flume as thoroughly and of as strong materials as are used by such grantee.

105. DUTIES OF SUCH CLAIM-HOLDER. A claim-holder occupying such flume, though his claim shall keep his flume free from obstruction, and he shall be entitled to all the gold or other minerals found therein, but he shall be subject to the same regulations, with regard to cleaning up, the flume's repairs and other matters in which both parties interested, as may be adopted by such grantee, and such claim-holder shall have the right to buy such grantee's claim and flume with the same right of preference of the grantee, by paying his claim and flume with the ground and flume of the grantee, and taking an interest proportionate to that which he shall owe to the grantee; or he may abandon his claim and flume, and such abandonment shall entitle to the use and benefit of the grantee.

106. ANNUAL WORK TO BE DONE. The grantee shall lay at least one hundred feet of flume during the first year of such grant, and three hundred feet annually thereafter, until completion of the flume; but the amount of flume to be laid may be reduced at the discretion of the gold commissioner.

107. USE CLAIM-HOLDER MAY MAKE OF A FLUME. Any free miner lawfully working any claim where a bed-rock flume exists shall be entitled to tail his sluices, hydraulics and all other sluices into such flume, but so as not to obstruct the free working of such flume by rocks, stones or otherwise.

108. RECORDS TO BE KEPT. The grantee shall record his claim with the mining recorder within three days after obtaining the same, and pay for such record the fee provided in the schedule to this act; and he shall also file with the mining recorder annually a rent of \$2.50 for each quarter of a mile of right of way legally held under such grant.

109. INTEREST OF GRANTEE. The interest of the grantee in his grant, and in all flumes and fixtures connected therewith, shall be deemed to be a chattel interest equivalent to a lease for the term of such grant.

110. EXTENSION OF TERM. Upon the expiration of the grant for a bed-rock flume, it may be extended, at the discretion of the gold commissioner.

111. FORFEITURE OF GRANT. Any grant of a bed-rock flume shall be forfeited whenever the grantee shall fail to comply with the conditions thereof, or of this act.

LEASES.

112. HOW OBTAINED. A free miner desiring to obtain a lease of any placer mining ground shall mark out such ground by placing a legal post at each corner, and shall post a notice on the post nearest to the placer mining claims then being worked in the immediate vicinity, and also on the office of the mining recorder, the locality of the ground to be acquired; 1. The name of each applicant; 2. The quantity of ground; 3. The term for which such lease is to be applied for.

113. APPLICATION FOR LEASE. The free miner, after staking the ground and posting the notices as aforesaid, shall make an application in writing addressed to the gold commissioner, and shall file the same at the office of the mining recorder, which application shall set out: 1. The name of the applicant; 2. The quantity of each applicant; 3. The name of the certificate; 4. The locality of the ground; 5. The quantity of ground; 5. The term of the lease desired; 6. The rent proposed to be paid.

114. DEPOSIT OF PLAN. On making such application the free miner shall deposit with the mining recorder for the use of the gold commissioner a plan of the ground, in duplicate.

115. TERM OF LEASE. Applications shall not be made for a longer term than ten years, excepting for bench lands adjoining unworked or abandoned rivers, for hydraulic workings, application for which bench lands may be made for any term not exceeding twenty years.

116. AREAS OF GROUNDS. Applications shall not be for greater than the following areas or distances: 1. In bench lands, ten acres; in bar diggings unworked, but a mile in length along the high-water mark; in bar diggings which have been worked and abandoned, one mile and a half in length along the high-water mark; in creek diggings on abandoned creeks, one and a half in length; in bench lands adjoining unworked or abandoned rivers, for hydraulic workings, one hundred and sixty acres, but in such lands the length shall in no case exceed half a mile.

117. EXEMPTIONS. No such application shall be made for any individual free miners, or for any portion of which is actually occupied by free miners, unless with the consent of such occupiers.

118. GRANTING LEASE. The lease may be granted or refused in the discretion of the gold commissioner, who may modify the terms and conditions of the application, as he shall think fit.

119. APPLICATION EXCEEDING FIVE YEARS. Every application for a lease for a term exceeding five years, together with a plan of the ground and the gold commissioner's report, shall be forwarded to the mining recorder, and no lease shall be granted on any such application without his sanction.

120. LEASE TO BE IN WRITING. Every lease of mining ground shall be in writing, signed by the gold commissioner and the lessee.

121. CONTENTS OF LEASE. Every lease shall provide for securing to the public reasonable rights of way and water, and shall contain a covenant by the lessee to mine and work in a miner-like manner, and shall contain such covenants for the continuous working of such mine as the gold commissioner shall think reasonable, and shall reserve the right to free miners to enter on such ground and mine for veins or lodes, as defined by the Mineral Act, 1891.

122. FORFEITURE OF LEASE. On the non-performance of non-observance of any covenant or condition in any lease, such lease shall be declared forfeited by the gold commissioner, and shall be absolutely void, and the ground included in such lease shall thereupon be open for location by any free miner.

123. LEASES FOR PLACER MINING. Leases shall be granted for placer mining only, and shall not be assigned or sub-let without the written consent of the gold commissioner.

124. HYDRAULIC WORKINGS ON ABANDONED RIVERS ARE HELD WITHOUT THE WRITTEN CONSENT OF THE GOLD COMMISSIONER. When any grantee is entitled to a grant from the gold commissioner for lake, as majority of unappropriated water, from any source, it shall be necessary in the opinion of the gold commissioner to be necessary to work the said bench lands so efficiently, and shall have the right of way through any mining ground for the purpose of constructing such ditches and flumes to convey such water that grant shall be for the same held for hydraulic working, which grant shall be for the same term for which the bench lands is leased. Whenever such bench lands shall have been efficiently worked as required by the conditions of the lease, to the satisfaction of a portion of the said lands and if at the expiration of the lease the lessee shall be entitled to an extension remain still to be worked, on the same conditions as the original lease and grant, for such reasonable time as will enable him to work out such portion of said lands as shall be so worked, and the gold commissioner may grant such extension by memorandum, on the lease provided, that whenever the bench lands so held under lease have been forfeited, the grant or worked out, or the occasion for the same has permanently ceased, the grant of such bench lands shall have permanently ceased, whether the ditch or flume water shall be permanently ceased, but in any case where the ditch or flume constructed for conveying such water shall have a height over the top of it of not less than five hundred inches, and which have cost not less than \$5,000, such ditch or flume shall remain the property of the owner thereof.

125. RECORDS OF WATER GRANTS. Every grant, and every extension of a grant, of a water-right for bench lands so leased for hydraulic working shall be recorded in the "Record of Water Grants," but it shall not be necessary to re-record such grants or extensions annually.

126. GRANT OF LEASE OF BED OF RIVER. It shall be lawful for the gold commissioner, with the sanction of the lieutenant-governor in council, to grant a lease, for any term not exceeding twenty years, of the bed of any river below the high-water mark for dredging purposes, and for a ditch or flume to run his such lease shall reserve the right to convey free miners' placer tailings into such river at any point thereon, and whether such free miner shall locate before or after the date of such lease.

MINING RECORDERS.

127. APPOINTMENT. The lieutenant-governor in council may appoint any person to be a mining recorder for any or for any part of the province.

128. APPOINTMENT BY MINERS. Where mineral land is discovered in a part of the province so situated that the provisions of this act as to free miners' certificates and records of mining property cannot be justly applied or enforced, by reason of there being no gold commissioner or mining recorder in the locality, it shall be lawful for the miners of such locality to hold meetings at such times and places as may be agreed upon, and at such meetings, by a two-thirds vote, to appoint one of their number to issue free miners' certificates and to enter records of mining property, and such certificates and records shall be valid, notwithstanding any informality therein, provided that all records made, and all fees for the same, and a list of all free miners' certificates issued, with the date and term thereof, and the fees for the same, be forwarded to the nearest gold commissioner or mining recorder as soon thereafter as practicable.

129. RECORDS TO BE KEPT. CERTIFICATES. Every mining recorder shall issue free miners' certificates and all situated certificates to all persons and companies entitled thereto.

130. COUNTERFOILS TO BE KEPT. Such free miners' certificates shall be taken from a printed book of forms, with duplicate counterfoils, one of which counterfoils shall be filed in the office of the mining recorder.

131. BOOKS TO BE KEPT. Every mining recorder shall keep the following books, to be used for placer mining entries: (a.) A book to be known as the "Record Book;" (b.) A book to be known as the "Record of Abandonments;" (c.) A book to be known as the "Record of Affidavits;" (d.) A book to be known as the "Record of Conveyances;" (e.) A book to be known as the "Record of Water Grants and Record of Claims."

132. RECORDS TO BE KEPT BY RECORDERS. Upon the receipt of a plan of or on behalf of any free miner, and upon the receipt of all the particulars required by section 25 of this act, the mining recorder shall record any placer claim, by entering all the particulars required by said section in the record book, which entry shall be as near as convenient, in the Form B in the schedule to this act. Upon the application of or on behalf of any free miner, and upon receipt of all the particulars required by section 28 of this act, the mining recorder shall re-record any placer claim, by entering all the particulars required by said section in the record book, which entry shall be, as near as convenient, in the Form C in the schedule to this act, until he has received all the particulars required by section 23, and any record made in violation of this section shall be absolutely void.

133. OF LAY-OVER. The mining recorder shall record every lay-over, leave of absence, license, permit and other privilege

granted and forfeiture declared by the gold commissioner, in the record book.

**134. OF WATER GRANT.**—The mining recorder shall record all water grants and extensions thereof in the record of water grants.

**135. OF ABANDONMENT.** Upon the receipt of a notice of abandonment, the mining recorder shall record the same in the record of abandonments, and file such notice, and write across the record of the claim affected by such notice, in the record book, the word "Abandoned," and the date of the receipt by him of the notice. If only an interest in a placer claim is abandoned, and not the entire claim, the memorandum in the record shall show which interest is abandoned.

**136. OF AFFIDAVITS.**—The mining recorder shall record, by causing to be verified, all affidavits and declaratory statements brought to him in connection with his office, in the record of affidavits.

**137. OF DOCUMENTS OF TITLE.**—The mining recorder shall record, by copying out verbatim, in the record of conveyances, all conveyances, mortgages, bills of sale, contracts for sale and other documents of title, including conveyances by attorneys or other authorities to execute all or any of the above description of documents, when brought to him for that purpose.

**138. OF OTHER DOCUMENTS.**—The mining recorder shall record all other documents relating to mining property which may be brought to him for record, and shall file all such documents which may be brought to him to file.

**139. ENTRY TO SHOW DATE.**—Every entry made in any of the mining recorder's books shall show the date on which such entry was made.

**140. BOOKS OPEN FOR INSPECTION.**—All books of record shall, during office hours, be open to public inspection free of charge, and documents filed shall be open to public inspection upon payment of the fees set out in the schedule of this act.

**141. OFFICE COPIES EVIDENCE.**—Every copy of or extract from any entry in any of the said books, or of any document filed in the mining recorder's office, certified to be a true copy or extract by the mining recorder, shall be received in any court as evidence of the matters therein contained.

**142. FEES TO BE PREPAID.**—Before issuing any free miner's certificate, or substituted certificate, or making any entry in any book or record, or filing any document, or making any copy or extract therefrom, the mining recorder shall receive the fees payable in respect thereof, as set out in the schedule to this act.

**143. RECORDER TO RECEIVE DOCUMENT.**—The mining recorder shall receive all applications and other documents addressed to or intended for the gold commissioner, and forward the same to the gold commissioner.

**144. TO RECEIVE MONEY.**—The mining recorder shall receive all moneys directed to be made by this act, and apply the same as directed by this act.

**145. TO COLLECT RENT.**—The mining recorder shall collect all rents collectible under the conditions of any lease or other documents granted under the provisions of this act.

**146. DISPOSITION OF MONEYS COLLECTED.**—The mining recorder shall forward to the provincial treasury all fees, rents, fines, penalties and other moneys collected or obtained by him in accordance with the provisions of this act.

**147. RECORDER'S OFFICE.**—It shall be lawful for the lieutenant-governor in council to divide and subdivide any district into mining divisions, and to establish in each or either mining division a mining recorder's office.

**148. EFFECT OF ESTABLISHING RECORD OFFICE.**—Upon the establishment of a mining division, and the opening of a mining recorder's office therein, under the authority of the last preceding section, (a.) such office and name thereof, shall be the proper office for recording all placer claims, records, certificates, documents or other instruments affecting claims, placer mines held as real estate, or placer mining property situate within such mining division, and whenever, in this act or any act amending the same, anything is required to be done at or by the office of the gold commissioner or mining recorder of the district, it shall, if the same affects or concerns any claim, placer mine held as real estate, or placer mining property situate within a mining division, be done at or in the office of the mining recorder of the mining division wherein such claim or mine or other mining property is situate. (b.) Upon the district or division of any mining recorder being divided or subdivided into mining divisions, it shall be the duty of such mining recorder to make, or cause to be made, a transcript of all the entries in all the books mentioned in Section 131 of this act, affecting claims, placer mines held as real estate or placer mining property, situate in each newly established mining division, and to forward the same to the mining recorder of such mining division, and such transcript shall be kept in such office as a part of the records of such office, and all transcripts of such records, certificates, documents or other instruments shall prima facie be deemed to be true copies of the several records, certificates, documents, or other instruments of which they purport to be transcripts, and such transcripts or copies thereof, when certified by the mining recorder of the mining division in whose office they are kept, shall be admissible in evidence in all courts of justice, in the same manner as if they were originals.

**149. GOLD COMMISSIONER TO HAVE ALL POWER OF MINING RECORDER.**—When there shall be no mining recorder for a district or division, the duties of the mining recorder shall devolve upon the gold commissioner, and it shall at all times be lawful for the gold commissioner to perform the duties of the mining recorder, and the gold commissioner shall have all the powers of a mining recorder.

**150. OFFICE HOURS.**—The mining recorder's office shall be open upon all days excepting public holidays, from 10 A. M. to 4 P. M., and such times shall be deemed the office hours of such office.

#### GOLD COMMISSIONER.

**151. POWERS.**—It shall be lawful for the gold commissioner to perform the following acts in accordance with the provisions of this act:

(a.) He may lay over any or all claims, and may grant to any holder of a claim leave of absence for such period and reasons as he may think proper.

(b.) He may prescribe the number of miners who shall be required to work in prospecting a set of claims until gold in paying quantities is found.

(c.) For the more convenient working of back claims on benches or slopes, the gold commissioner may permit the owners thereof to drive a tunnel through the claims fronting. An any creek, race or water-course, upon such terms as shall seem expedient: provided that in tunneling under hills, on the frontage of which angles occur, or which may be of an oblong or elliptical form, no party shall be allowed to tunnel from any of the said angles, nor from either end of such hills, so as to interfere with parties tunneling from the main frontage.

(d.) He may mark out a space of ground for deposits of leavings and deads from any tunnel, claim or mining ground, upon such terms as he may think just.

(e.) He may extend the limits of a claim in "bench diggings" beyond the limits of the bench, but not to exceed one hundred feet square.

(f.) He may, in cases of disputed boundaries or measurements, employ a surveyor to mark and define the same, and cause the reasonable expense thereof to be paid by either or both of the parties in dispute.

(g.) He may permit or order mining posts to be moved.

(h.) He may summarily order any mining works to be so carried on as not to interfere with or endanger the safety of the public, any public work or highway, or any mining property, mineral claim, placer claim, bed-rock drain or bed-rock flume; and any abandoned works may by his order be either filled up or graded to his satisfaction, at the cost of the party who may have constructed the same, or, in his absence, upon such terms as he shall think fit.

(i.) He may, upon application made to him, allow a free miner such right of way upon any adjacent claim as may be necessary for the working of his claim, and upon such terms as may be him seem reasonable.

(j.) He may grant licenses and rights of way for the purpose of constructing drains or tunnels, and may exercise such powers as are specified in Part III of this act.

(k.) He may grant water rights, and renew the same, and declare the same forfeited, and grant all such privileges, and exercise such powers as are specified in Part IV of this act.

(l.) He may grant rights of way for the purpose of constructing a bed-rock flume, and may extend the grant at its expiration, in accordance with Part VI of this act.

(m.) He may grant leases of placer mining ground, and of unappropriated water to work the same, and may grant renewals of such leases, and grant such privileges and exercise all such powers as are specified in Part VII of this act.

**152. "GOLD MINING AMENDMENT ACT, 1874."** Notwithstanding anything contained in the "Gold Mining Amendment Act, 1874," or in any other grant issued under the said act, or under this or any other act, it shall be lawful for the gold commissioner, in his discretion, and with or without any terms or conditions, to allow to the owners of placer claims all such rights or privileges in and over mineral or other claims held as real estate as may be allowed in and over claims not so held; and owners of claims held as real estate shall be entitled to the same rights and privileges as owners of claims not so held.

**153. FULL POWER.**—The gold commissioner shall have power to do all things necessary or expedient for the carrying out of the provisions of this act.

#### ADMINISTRATION.

**154. DECEASED MINER'S PROPERTY.**—The gold commissioner shall take possession of the mining property of any deceased free miner, and may cause such mining property to be duly worked, or disposed of, as he may think proper.

**155. ESTATE OF LESS THAN \$300.**—The gold commissioner, or any person authorized by him, shall take charge of all the property of any deceased free miner until the issue of letters of administration or probate of the will, if any; provided, however, that where any free miner shall die intestate, and the value of the personal estate of such deceased free miner is less than \$300, it shall not be necessary for the gold commissioner to obtain from any court letters of administration, but in such case the gold commissioner may administer and wind up the personal estate of the deceased, and do all things necessary and proper therefor, and act in all respects as if letters of administration to the personal estate of such deceased free miner had been granted by such gold commissioner, and the gold commissioner shall produce and pass his accounts, in each case, which he shall undertake the administration, before a judge of the county court of the district.

#### COUNTY COURTS.

#### JURISDICTION, PROCEDURE, FORMS AND COSTS.

See Sections 149 to 164 of mining act, preceding.

MANITOBA

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CORPORATIONS.

**LETTERS PATENT OF INCORPORATION.**—All companies, except railway and insurance companies, are created either by special act of parliament or by letters patent issued under the provisions of the "Manitoba Joint Stock Companies Act" by the lieutenant-governor in council. The special powers are required, the latter course is always adopted.

The applicants for letters patent must give one month's previous notice to be inserted once in the *Manitoba Gazette* of their intention to apply for the same, stating therein, first, the proposed name of the company; second, the object for which incorporation is sought; third, the place within the province where its operations are to be carried on; fourth, the capital stock; fifth, the number of shares and the amount of each share; sixth, the name in full and address and calling of each of the applicants, with special mention of the names of not less than three nor more than nine of their number, who are to be the first directors of the company. The application is made by petition of not less than five persons. Further state the amount of stock taken by each of the applicants, and also the amount, if any, paid in upon the stock of each applicant, and whether in cash or transfer of property or otherwise. By the date of the petition the persons therein named and their successors shall be a body corporate and politic by the name therein mentioned, and the powers therein mentioned shall be exercised subject to the provisions of the said act.

**COMMENCEING BUSINESS.**—The company may not begin operation within three years after the charter is granted, and in the event of non-user during three years at any one time the charter is forfeited. No company shall commence business until at least at least ten per cent. of the stock subscribed actually paid up.

**DIRECTORS.**—There shall be not less than three nor more than nine directors. The persons named in the letters patent shall be the directors of the company until resolved by others who shall be duly elected by the shareholders at a general meeting held at some place within the province at such time, in such wise and for such terms, not exceeding two years, as the letters patent or the by-laws of the company may prescribe. The directors shall have authority to administer the affairs of the company; second, to make contracts authorized by by-laws of the company; third, to make by-laws not contrary to law or the letters patent regulating the allotment of stock, making of calls and payment of the same, and the forfeiture of the disposal of forfeited stock, the transfer of stock, the payment of dividends, the number of directors and their terms of service, the amount of their stock qualification, the appointment, functions and removal of all agents, officers and servants of the company, the security to be given by them to the company, their remuneration, the time at which and the place where the annual and special meetings of the company are to be held, the directors shall be held, the quorum, the requirement as to proxies and the procedure in all things at such meetings, and the conduct in all other particulars of the affairs of the company, but every such by-law and every repeal, amendment or re-enactment thereof, unless confirmed at a general meeting called for the purpose, shall have effect only until the next annual meeting of the company.

Directors shall not declare a dividend when a company is insolvent or which renders the company insolvent or reduces the capital stock, and they shall be jointly and severally liable for the wages of all servants, laborers and apprentices, excluding the officers of the company, not exceeding one year, for services performed for the company while they are directors respectively.

**CAPITAL STOCK.** The capital stock of the company shall not exceed five hundred thousand dollars (\$500,000). When the whole of the stock has been subscribed and fifty per cent. thereof paid in, but not more than one year, the directors may, by increasing the capital to any amount which they may consider requisite, not exceeding one million dollars (\$1,000,000), but no by-law for increasing or decreasing the capital stock shall have any force or effect until confirmed by a vote of at least two-thirds in value of the shareholders at a general meeting duly called for considering the same and it shall afterward be confirmed by supplementary letters patent.

**LIABILITY OF SHAREHOLDERS.** Each shareholder, until the whole amount of his stock is fully paid up, shall be individually liable to the creditors of the company, but shall not be liable as such for any act, default or liability whatsoever of the company or for any claim, engagement, payment or other debt or thing relating to or connected with the company beyond the unpaid amount of his respective shares in the company. Trustees or mortgagees of stock or persons holding stock as collateral security shall not be personally subject to liability as shareholders.

**CALLS.**—The directors may call in all subscribed stock in such manner as the letters patent or by-laws of the company may require or allow. Interest at a per cent. is added to unpaid calls from the date fixed for payment. Not less than one per cent. shall be payable within one year from incorporation. The company may enforce payment of calls by action in any competent court, or the directors may summarily forfeit any shares for non-payment, and the same shall not be transferable until all unpaid calls of the company shares shall not be transferable until all unpaid calls are fully paid, or until declared forfeited, and no share-

holder in default for non-payment of calls shall be entitled to vote at any meeting of the company.

**TRANSFERS.**—Books must be kept wherein are entered all transfers of stock as presented to the company, with the date and other particulars of each transfer. The directors may refuse to allow the entry in such books of any transfer of stock whereon any estate has been claimed which has not been paid in.

**CONTRACTS.** All contracts, agreements, engagements or bargains made and every bill of exchange or promissory note drawn, accepted or indorsed on shall be binding on the company, unless otherwise provided in the charter with his powers under the by-laws of the company, or otherwise, shall be binding upon the company, and in no case shall it be necessary to affix the seal of the company.

**POWERS TO BEHOLD REAL ESTATE, ETC.** Every company may, subject to any limitations contained in the letters patent, acquire, hold, alienate and convey real estate requisite for use of the company or of the undertaking, and may take and hold such lands and tenements, real and personal property as may have been mortgaged or conveyed to it by way of security, and may retain the same for a period not exceeding ten years.

**BORROWING POWERS.** In case a by-law authorizing same is sanctioned by a vote of not less than two-thirds in value of the shareholders at a general or special general meeting to be called for the purpose, the directors may borrow money upon the credit of the company, and issue the bonds, debentures or other securities of the company, and may sell the same at such prices as may be deemed most expedient and necessary. No debenture shall be for more than one hundred dollars (\$100). The directors may in a similar manner hypothecate, mortgage or pledge the real or personal property of the company to secure any sums borrowed for the purposes thereof.

**ANNUAL STATEMENTS.** Every company shall on or before the 1st day of February in each year make a duplicate list showing:

1. Names, addresses and callings of all shareholders on the 31st of December preceding, with the number of shares held by each.
2. The names and addresses of the directors, secretary and treasurer of the company.
3. The amount of the capital stock and the number of shares into which it is divided.
4. The number of shares subscribed for and taken.
5. The amount of stock issued free of call, if any.
6. The amount of stock issued subject to call.
7. The amount of calls made on such shares.
8. The total amount of calls received.
9. The total amount of calls unpaid.
10. The total amount of shares forfeited.
11. The total amount of shares which have never been allotted or taken up.
12. The total amount for which shareholders are liable in respect of unpaid stock respectively.

The said list must be verified by the oath of the president and secretary of every company, and kept in the company's head office in Manitoba and the other deposited in the department of agriculture and immigration.

LIENS.

Every person furnishing materials to be used in the construction, alteration or repair of any building or erection, or erecting, furnishing or placing machinery of any kind, in, upon or in connection with any building, erection or mine, shall by virtue thereof have a lien or charge for the price of such machinery or materials upon such building, erection or mine, and the lands occupied thereby or connected therewith, provided that no lien shall exist for a less sum than twenty dollars (\$20).

The lien shall be limited to the estate or interest in such lands, buildings or erections of the person at whose instance or request such machinery or material were provided.

If the lien is claimed against an contractor the amount shall be limited to the amount payable to the contractor by the owner.

**REGISTRATION.** No lien shall exist, unless and until a statement of the claim is registered in the "Land Titles Office" of the district in which the lands affected are situated, and which statement may be filed during the progress of the work or within thirty days after its completion. The said statement of claim shall state:

1. Name and residence of the claimant and of the reputed owner of the property to be charged and of the person for whom the materials or machinery were provided, and the time or period within which the same were to be furnished.
  2. The materials or machinery furnished.
  3. The sum claimed as due to become due.
  4. The description of the land to be charged.
- The statement must be verified by an affidavit of the person entitled to the lien, or one of them, if there be more than one, and in addition to such lien shall upon the filing or registration thereof be deemed a purchaser pro tanto.

**PROCEEDINGS TO REALIZE.** Every such lien shall absolutely cease to exist, unless, within ninety days after the completion of machinery furnished, proceedings shall have been instituted to realize such claim under the provisions of the "Mechanics Lien Act" and a lis pendens registered in the proper land titles office.

When the claim is within the sum of two hundred and fifty dollars (\$250), proceedings may be taken in the county court to sell the same, and if the amount claimed, although, whether for more or less than the said sum of two hundred and fifty dollars (\$250), proceedings may be taken and instituted in the court of queen's bench on its equity side.

The court may then make sale of the estate in such manner in each case as it may think proper, and may also direct the sale of the materials or machinery, and authorize the removal thereof, although fixtures.

If the land charged be incumbered, existing or created before the placing of the machinery or materials, such mortgage shall not give priority to the claimant, and the amount of the actual value of such land at the time the improvements were commenced.

In cases where there are several lien-holders against the same property and the proceeds of the sale are insufficient to satisfy in full, said proceeds shall be distributed among them ratably and pari passu.

**LIENS FOR CHATELAINS.**—The Manitoba statute known as "The Lien Note Act" provides as follows:

"From and after the seventh day of July, in the year one thousand eight hundred and eighty-six, receipt notes, hire receipts and orders for chattels given by bailees of chattels, where the condition of the bailment is such that the possession of the chattel shall pass without any ownership therein being acquired by the bailee, were and shall be only valid in the case of manufactured goods or chattels, which, at the time the bailment is entered into, have the manufacturer's name or some other distinguishing name painted, printed or stamped thereon or otherwise plainly attached thereto; and no such bailment shall be valid unless it be evinced in writing, signed by the person thus taking possession of the chattel.

"Every manufacturer and his agents shall forthwith, on application, furnish to any applicant full information respecting the balance due on any such manufactured goods or chattels, and the terms of payment of such balance, and in case he or they refuses or neglects to furnish the information aforesaid for such manufacturer or agent shall be liable to a fine of not less than ten dollars (\$10) or more than fifty dollars (\$50) on conviction before any justice of the peace."

#### MINING.

**EXPLORATION.**—Any person may explore vacant dominion lands within the province of Manitoba not appropriated or reserved by government for other purposes, and may search thereon, either by surface or by shaft, for any deposit of mineral deposits (with the exception of coal) with a view to obtaining a mining location for the same, but no mining location or claim shall be granted until actual discovery has been made of the vein, lode or deposit of mineral or metal within the limits of the location or claim.

**TITLE.**—The absolute title to all the vacant and unsurveyed lands in Manitoba and the northwest territories of Canada at the date of the transfer (1870) vested in the crown represented by the government of the Dominion of Canada, and all mining rights and locations in the province of Manitoba are regulated and controlled by the department of the interior at Ottawa and by an officer known as the superintendent of mines, resident at Winnipeg, N. W. Territories. Patents may or may not cover the mineral rights. In many cases such rights are reserved, although the practice at the present time is to make all crown grants absolute and unconditional, and to cover both surface and mineral rights.

**QUARTZ MINING.**—A location of mining, except for iron, on veins, lodes or ledges of quartz shall not exceed fifteen hundred feet in length and six hundred feet in breadth. Any person having discovered a mineral vein may obtain a mining location therefor in the following manner:

1. He shall mark the location on the ground by placing four wooden posts, one at each corner, driven at least eighteen inches into the ground, or built or supported by a mound or cairn of stones, at least three feet in diameter at its base and eighteen inches high and showing that length above it. On the northeast angle post he shall mark legibly, with a cutting instrument or with colored chalk, his name in full, the date, and the letters M. L., No. 1; on the southeast angle post the letters M. L., No. 2, and his initials; on the southwest angle post the letters M. L., No. 3, and his initials; and on the northwest angle post the letters M. L., No. 4, and his initials.

He shall also file with the superintendent his file with the agent for dominion lands of the district within which the location is situated a declaration under oath, which may be taken before the agent or a justice of the peace, or a commissioner for taking affidavits, setting forth the circumstances of his discovery and the locality and dimensions of the location as well as to be made, and shall with such declaration pay the agent the entry fee of five dollars (\$5).

3. The agent shall grant a receipt to such claimant, which shall authorize him or his representatives, or assignees, to enter into possession of the location and subject to its renewal from year to year during the term of five years, to take therefrom and dispose of any mineral deposit, provided that during each of the five years after the date of such receipt, and upon the receipt by the agent of one hundred dollars (\$100) in actual mining operations on the claim.

The claimant may at any time before the expiration of the five years purchase the location for a sum of not less than five hundred acres, each after filing with the agent proof that he has expended not less than five hundred dollars (\$500) in actual mining operations on the same. On making the application to purchase he shall deposit with the agent fifty dollars (\$50) for the survey of the location by the government, and upon the receipt by the surveyor-general of the plans and field notes and his approval thereof, a patent shall issue to the claimant. Priority of discovery shall not in all cases give the right to acquire. If the original discoverer has failed to comply with the government regulations, but the first discoverer shall in all cases be entitled if he can prove possession by demarcation in the matter prescribed.

No more than one location shall be granted to any individual of the same kind in the same locality.

**ASSIGNMENTS.**—An assignment of the right to purchase a mining location shall be indorsed upon the back of the receipt or

certificate of assignment and the execution thereof attested by two disinterested witnesses. Upon the deposit of such receipt or certificate with the agent, the agent shall issue to the claimant (\$2) the agent shall give to the assignee a certificate which shall entitle the assignee to all the rights and privileges of the original discoverer in respect of the claim assigned. All assignments must be unconditional and executed strictly in accordance with the regulations.

**PLACER MINING.**—The size of the claim shall be as follows:

1. For "bar diggings" a strip of land one hundred feet wide at high water mark and thence extending into the river to its low water mark.
2. For "dry diggings" 100 feet square.
3. For "creek and river claims" 100 feet long measured in the direction of the course of the stream, and shall extend in width from base to base of the hill or bench on each side, but when the hills or benches are less than one hundred feet apart the claim shall be one hundred feet square.
4. For "bench claims" one hundred feet square.
5. Every claim on the face of any hill and fronting on any natural stream or ravine shall have a frontage of 100 feet drawn parallel to the main direction thereof and shall be laid out as nearly as possible in the manner prescribed for quartz mining locations.

If any person or persons discover a new mine and such discovery shall be established to the satisfaction of the agent, claims of the following size in dry, bar, bench, creek or hill diggings shall be allowed:

1. One hundred feet, three hundred feet in length; to a party of two, six hundred feet in length; to a party of three, eight hundred feet in length; to a party of four, one thousand feet in length, and to each member of a party beyond four in number a claim of the ordinary size.

Applications for grants of placer minings, renewals and assignments are in all respects the same as in quartz mining, and the regulations relating to quartz mining apply where applicable to placer mining. No miner shall receive a grant of more than one claim in the same locality, but he may hold any number of claims by purchase.

**ABANDONMENT, ETC.**—A claim shall be deemed abandoned when the same shall have remained unworked on working days by the grantee thereof for seventy-two hours, unless it can be shown or unless the grantee is absent on leave. The agent in each district shall declare the close season, and each holder of a mining location or a grant for placer diggings shall be entitled to suspend work thereon during such close season. The agent may grant leave of absence pending the settlement of disputes, or where there is insufficiency of water; the superintendent of mines may also grant leave of absence for one year upon satisfactory proof that the mine has been opened and worked during the diggings, and that the return of gold or other minerals in reasonable quantities for such expenditure.

**DISPUTES.** The superintendent of mines shall hear and determine all disputes in regard to mining property, subject to an appeal by either of the parties to the commissioner of lands at Winnipeg.

No forms of procedure are necessary, but the complaint must be reduced to writing and a copy served on the opposite party not more than seven days before the hearing. The complaint may be amended at any time by leave of the superintendent of mines.

A bond fee of twenty dollars (\$20) shall be deposited by the complainant at the time of filing his complaint, which shall be returned to him if he succeeds, but not otherwise.

If the decision of the superintendent of mines is appealed from a notice to that effect must be drawn up stating the grounds of such appeal and filed with the superintendent of mines, not more than three days after his decision is communicated to the parties interested, and a bond fee of twenty dollars (\$20) deposited with the agent at the same time, which will be returned to the applicant if successful, but not otherwise.

**IRON.** The agent for dominion lands of the interior may grant a location for the mining of iron not exceeding one hundred and sixty (160) acres in extent, which shall be bounded by due north and south and east and west lines, and its breadth and length shall be in the ratio of one to two.

The regulations relating to quartz mining shall in all cases, when applicable, govern iron locations.

**COAL LANDS.**—Lands containing anthracite coal may be sold at twenty dollars (\$20) per acre, and lands containing bituminous coal at ten dollars (\$10) per acre, or they may be sold at public competition, if the minister of the interior shall so decide.

Not more than three hundred and twenty (320) acres shall be sold to one applicant. The minister may grant permission to prospect for coal on a prospect for a period of not more than one year of land not exceeding three hundred and twenty (320) acres in extent. The person to whom such permission to prospect is given shall within one month thereafter commence operations and carry on the same continuously throughout the remainder of the period, and shall expend not less than two dollars (\$2) per day from the time of commencement, such permission to become void if operations cease for one week. The minister of the interior may on application extend the time limited for prospecting.

If the lands be not included in any surveyed township, the applicant shall stake out the same by placing at each angle or corner a stake or post four inches square, and between each stake and the next one on each post he shall place the number of the claim and the name of the claimant, and shall inscribe his name and the angle represented thereby, thus: "A. B. & N. E. Corner," or as the case may be, and with his application he shall forward to the minister of the interior, a map or plan of the land as staked out, showing the lines, corners and boundaries and showing thereon the best information in his power respecting the same; and all boundaries so staked out shall be due north



may be granted, provided that no more applications shall be received than there are areas of one square mile each within the area first applied for. The holder of a license to search may at any time before the expiration thereof select an area of one square mile from the land covered by the license for working the mines therein, the fee being \$50. A license to work shall be for a term of two years, from date of application, and may be extended to three years on payment of one-half the amount originally paid. Effective mining operations must be commenced within the term of the license. A license to work may be obtained in the first instance for the above-mentioned term. The holder of a license to work is entitled to the use of all the premises covered by the license on or before the termination thereof.

**LEASES.**—Leases of mines other than gold and silver are for the term of twenty years and may be assigned as hereinafter mentioned. A lessee of a coal mine is not authorized to assign or transfer his lease without the consent of the governor in council. A lease may be surrendered at any time. The governor in council may upon special circumstances authorize a lease of a larger area than one square mile. Leases of copper and lead mines convey all associated ores and metals. The act contains provisions for fixing the boundaries of mining areas under the supervision of the surveyor-general and in conjunction with lessees of adjoining areas within six months after the issuing of any lease. Quarterly returns are required to be made specifying the quantity of ore or mineral wrought or gotten, the amount of royalty accepted, and the number of days labor, and the persons employed, and the value of the work done. Such returns are required to be made under oath. The following royalties are payable to the government: Coal, 10 cents per long ton on the coal removed from the mine; copper, 4 cents upon every one per cent of copper, each ton of two thousand three hundred and fifty-two pounds of copper ore sold or smelted; lead, 2 cents upon every one per cent contained in each ton of two thousand two hundred and forty pounds of lead ore sold or smelted; iron, 5 cents on every ton of two thousand two hundred and forty pounds of ore sold or smelted; tin and precious stones, five per cent, on their value. Leases of mines other than gold and silver may be renewed for twenty years, and also for a third period of twenty years upon compliance with the provisions of the leases and of the mining act. Leases may be forfeited for non-compliance with the terms of the leases or for abandonment or failure to work effectually, but an appeal lies to the supreme court from the decision of the surveyor-general declaring a forfeiture. A lessee may be required to work during the term of any land covered by a lease or license. Leases are required to be registered in the crown land-office within one year from the time of application, otherwise the area shall be considered vacant. All mortgages and other transfers of mining title to any mines shall be recorded in the crown land-office. No lease or license shall be made covering granted lands within which the owner or his assignees shall have explored or commenced mining operations before the passing of the act, without notice to such owner or assignee. The council may from time to time, royally under special circumstances, the owner of any land may procure a license at any time, with the approval of the surveyor-general, to search for and mine therein manganese only. It must be borne in mind that under a lot of the old crown grants in this province all mines and minerals in the lands granted have been conveyed to the grantee, whose assignees now own them absolutely. In almost all the crown grants, however, mines and minerals were reserved.

## ONTARIO

Compiled by ROBINSON & LANGFORD, Barristers, Solicitors, etc., Rat Portage, Ont.

### CORPORATIONS.

**LETTERS PATENT OF INCORPORATION.**—All companies are created either by special act of parliament or by letters patent issued under the provisions of "The Ontario Joint-Stock Companies' Letters Patent Act," by the lieutenant-governor in council, except railway and insurance companies. The name of the province of Ontario or some locality therein must constitute part of the name of every company incorporated under this act.

The applicants for letters patent must for at least four consecutive weeks give notice in the *Ontario Gazette* of their intention to apply for the same, stating the following:

1. The proposed corporate name of the company, which shall not be that of any other known company, incorporated or unincorporated.
2. The object for which incorporation is sought.
3. The place or places within the province of Ontario where its chief place or places are to be carried on, with special mention of its chief place of business.
4. The amount of capital stock.
5. The number of shares and amount of each share.
6. The name in full and address and calling of each of the applicants, with special mention of the names of not less than three of their number who are to be the first directors of the company.

At any time not more than one month after the last publication of the notice, the applicants may petition the lieutenant-governor through the provincial secretary for the issuance of the letters patent. The petition must state the facts referred to in the notice in the notice, and also the amount of stock taken by each applicant and the amount, if any, paid in upon the stock of each appli-

cant, and whether the amount is paid in cash or by transfer of property, or how otherwise. In case the capital of the proposed company is \$50,000 or under, publication of the notice is not required. From the date of the letters patent the persons therein named and their successors shall be a body corporate and politic by the name mentioned therein.

**POWERS OF COMPANIES TO HOLD REAL ESTATE, ETC.**—Every company so incorporated may acquire, hold, alienate and convey real estate, subject to any restrictions or conditions in the letters patent set forth.

**DIRECTORS.**—The affairs of every such company shall be managed by a board of not less than three directors, and the persons named in the letters patent shall be the directors of the company until replaced by the directors elected in their stead. No person shall be elected or appointed a director there- after unless he is a shareholder, owning stock absolutely in his own right, and not in arrears in respect of any call thereon. Directors shall be elected by the shareholders at a general meeting of the company assembled at some place within the province of Ontario, at such time, in such wise and for such term, not exceeding two years, as the letters patent or (in default thereof) the by-laws of the company may prescribe. The directors shall have full power in all things to administer the affairs of the company, and may make or cause to be made any description of contract which the company may by law enter into.

**BY-LAWS.**—The directors may make by-laws not contrary to law or to the letters patent to regulate:

1. The allotment of stock; the making of calls thereon; the payment thereon; the issue and registration of certificates of stock; the forfeiture of stock for non-payment; the disposal of forfeited stock after the process thereof; the transfer of stock.
2. The declaration and payment of dividends.
3. The number of directors, their term of service, the amount of their stock qualification.
4. The appointment, functions, duties and removal of all agents, officers and servants of the company; the security to be given by them to the company, and their remuneration.
5. The time at which and the place where the annual meeting of the company shall be held; the calling of meetings, regular and special, of the board of directors and of the company; the quorum; the requirements as to proxies, and the procedure in all things at such meetings.
6. The imposition and recovery of all penalties and forfeitures resulting from violation of regulation by any shareholder.
7. The conduct in all other particulars of the affairs of the company. And they may from time to time repeal, amend or re-enact the same; but every such by-law and every repeal, amendment and re-enactment shall be subject to the confirmation at a general meeting of the company duly called for that purpose, shall only have force until the next annual meeting of the company.

**STOCK.**—The stock of the company shall be deemed personal estate, and shall be transferable in like manner only. The directors may make a by-law for creating and issuing any part of the capital stock as preference stock, giving the same such preference and priority as respects dividends and otherwise, over ordinary stock, as may be declared by the by-law. No share of stock shall be transferable until all previous calls thereon have been fully paid in or until declared forfeited for non-payment of calls thereon.

**CALLS.**—The directors of the company may call in and demand from the shareholders thereof, respectively, all sums of money by them subscribed, at such times and places and in such payments or installments as the letters patent or by-laws or "The Ontario Joint-Stock Companies' Letters Patent Act" requires or allows. Not less than ten per cent upon the allotted stock of the company shall be called in and made payable within one year from the incorporation of the company, the residue when and as the by-laws of the company direct. The company may enforce payment of all calls and interest thereon in any court of competent jurisdiction. If the directors of the company shall not declare or pay any dividends when the company is solvent, or any dividend the payment of which renders the company insolvent or diminishes the capital stock thereof, but if any director present when such dividend is declared forthwith, or if absent, then within two hours after he has become aware thereof and able to do so, enters his protest on the minutes of the board of directors and causes such protest to be published, such director may thereby, and not otherwise, exonerate himself from liability.

**LIABILITY OF DIRECTORS.**—The directors of the company shall be jointly and severally liable to the laborers, servants and apprentices thereof, for all debts not exceeding one year's wages due for services performed for the company while they are such directors respectively, should the company be liable to any such debt, unless the company has been sued therefor within one year after the debt became due, nor yet unless such director is sued therefor within one year from the time when he ceases to be such director, nor yet before an execution against the company has been returned unsatisfied in whole or in part; and the amount due on such execution shall be the amount recoverable with costs against such directors.

**FORFEITURE OF CHARTER.** The charter of the company shall be forfeited and annulled during the course of any years at any one time, or if the company does not go into actual operation within three years after its charter is granted.

**LIABILITY OF SHAREHOLDERS.** Each shareholder, until the whole amount of his stock has been paid up, shall be individually liable to the creditors of the company to the amount of the stock that he has not paid up thereon, but shall not be liable to an action therefor by any creditor before an execution against the company has been returned unsatisfied in whole or in part; and the amount due on such execution shall be the amount recoverable with costs against such shareholder.





## QUEBEC CORPORATIONS.

shafts or in other actual mining operations the same sum upon lands leased as is provided shall be expended in case of sales or grants, and within the same term of years as in such case, and if the lease shall be forfeited and become void. The lessee may at any time during the denised term, upon the payment of all rent due and the performance of all covenants and conditions, become the purchaser of the lands denised, and in such case the sum paid as first year's rental shall be treated as part of the purchase-money. If default is made in payment of rent, the lease shall be forfeited and become void; but the lessee may default forfeiture by paying rent within ninety days from the date herebefore appointed for the payment thereof.

**RESERVATION OF TIMBER.**—The patents of all crown lands sold as mining lands shall contain a reservation of all pine trees standing or being on said lands, which pine trees shall continue to be the property of Her Majesty; and any person holding a license to cut timber or sawlogs on such lands may at any time during continuance of such lease enter upon such lands and cut and remove such trees. The patentees and those claiming under them may cut and use such trees as are necessary for building, fencing and fuel on the land so patented, or any other purpose essential to the working of the mines thereon, and may also cut and dispose of all trees in clearing the land for cultivation. All such timber cut for purpose of timber or sawlogs shall be subject to duties.

**SURFACE-RIGHTS AND MINING-RIGHTS.**—Where the mines, minerals and mining-rights are reserved to the crown, the owner of any surface-rights (if a patent has not been granted) or applicant therefor may make application and shall have priority in respect of such application for a mining lease or grant thereof, upon payment to the department of the purchase-money or rent. Valiators appointed by the director of mines shall settle disputes arising between the owner of the surface-rights and the owner of the mine.

**BUREAU OF MINES.**—In connection with the department of crown lands a bureau of mines is to be established to aid in promoting the mining industry in the province. A director of the bureau of mines is to be appointed, who shall have all the power, rights and authority throughout the province which an inspector or local agent has. Inspectors shall have power to settle disputes between licensees, and their decisions shall be final. No officer appointed under this act shall have any interest in mining claims. The lieutenant-governor has power to appoint local agents to receive applications for the sale of mining lands in their respective agencies.

**MINER'S LICENSE.**—A director of the bureau of mines may, on payment of \$5 and one year's rent at the rate of \$5 per acre, grant to the party applying for the same a license, to be called a miner's license. Every miner's license shall be in force for one month, and shall not be renewed or payment of a fee of \$5 and the annual rental. Licensee has power personally, and not through another, to mine according to the license.

**STAKING OUT AND HOLDING OF CLAIMS.**—The licensee shall have the right to stake out the mine which the division mentioned in his license a mining claim on any crown lands (not already licensed), by planting a wooden or iron picket at each of the four corners thereof. Mining claims shall be laid out uniformly and in quadrilateral and rectangular areas, and the measurement of all such claims shall be horizontal. Inspectors shall keep books for recording mining claims, which books may be inspected by any person on payment of a fee of 20 cents; and every licensee who has staked out a mining claim shall give notice in writing hereafter given notice thereof in writing to the inspector. A mining claim shall be deemed to be forfeited and abandoned in case the annual rent thereof has not been prepaid, or if the mining claim remains unworked for the space of three months after the same has been first staked out, or remains unworked for the space of fifteen days after the expiration of the said three months. No person shall at the same time occupy more than one mining claim on crown lands, except where mining claims have been rendered temporarily unworkable in case of the insolvency of the holder. The application of the licensee and on the receipt of \$1, make an entry in the book to be kept by him of the cause or reason for the claim not being worked. The discoverer of a new vein shall be entitled to two mining claims, if the discovery is made on a known vein or lode) at least three miles from the nearest known mine or discovery on the same vein or lode.

A party will fifteen feet thick shall be left between claims and shall be kept clear. Any person removing or disturbing the same to construct new mode of access to the water, in no wise more difficult as an approach than the one destroyed by the removal of the party wall. No person shall remove or disturb any stake, picket or other mark placed as aforesaid, unless he shall first give notice thereof in writing to the inspectors, and their agents, on or before the 1st of December in every year, to the bureau of mines, showing correct returns of number of persons ordinarily employed in or about such mine, the quantity in status or weight of the mineral produced, the undersized mineral which has been sold, treated or used during the year, and the value or estimated value thereof.

The act contains provisions for the prevention of accidents; in regard to the staking out of claims; the abandonment of mines; and for the fencing of abandoned mines. It also defines the duties and powers of inspectors; penalties for obstructing inspectors; also general rules in regard to ventilation, gunpowder and blasting, manholes, fire cages, lighting, hoisting, marking, fencing of shafts, securing of shafts, safety from water, signaling, overhead cover, chains, slipping of rope on drum brakes; inclination of ladders; gauges to boilers and safety valves, etc., etc.

### QUARRING.

There are no special laws as to quarrying in Ontario.

**GRANTING OF CHARTER.**—The lieutenant-governor may, by letters patent, grant a charter to any number of persons not less than five, who shall be named therein, for such charter constitutes the shareholders in the company thereby created a body politic and corporate for any of the purposes within the jurisdiction of the legislature, except for the construction and working of railways and the business of banking, and the shareholders may previously give notice of their intention to make such application by making publication during four consecutive weeks in the *Quebec Official Gazette*, which notice shall contain:

1. The corporate name.
2. The object of the corporation.
3. The place of business.
4. The proposed amount of its capital stock.
5. The number of shares, and the amount of each share.
6. The name in full, address and calling each of the applicants, with special mention of the names of not less than three nor more than nine of their number, who are to be the first directors of the company.

Within a month thereafter the applicants may petition the lieutenant-governor for the issue of letters patent; which petition must recite the facts set forth in the notice, the amount of stock taken by each applicant, the amount paid in on the shares of stock, and the manner in which the issue has been paid. The aggregate of the stock so taken must be at least one-half of the total amount of the stock of the company. The aggregate so paid in must be at least ten per cent. thereof, or five per cent. of the total capital, unless the total exceeds \$50,000, in which case the aggregate so paid in must exceed such excess must be five per cent. thereof. The letters patent shall recite all the material averments of the petition. The lieutenant-governor may in petition change the name of the company.

**GRANTING OF BONDS.**—Every company so incorporated may acquire, hold, alienate or convey any real estate requisite for the carrying on of its undertaking, and shall forthwith become and be invested with all the rights, real and personal, heretofore held by or for it under any trust; and all the immunities requisite to carry on its undertaking; and by simple resolution it may issue bonds or debentures for the settlement of accounts, and it may, by a resolution of two-thirds of the actual shareholders, issue bonds or debentures to the amount of two-thirds of the total value of the immovable property of the company. All such bonds shall be registered in the office of the registration division, and shall then constitute a privileged effect in favor of the holders thereof against the company, and given right of preference over all other debts and claims of the company, and shall be subject to the order of the directors may increase or decrease the capital stock of the company after the whole stock has been allotted and paid in, by a by-law that effect.

**DIRECTORS.**—The directors shall be elected by the shareholders at a general meeting of the company assembled, for a term not to exceed two years, as the by-laws may prescribe. The directors have full power to conduct the affairs of the company, and may make contracts which the company may lawfully enter into; and they may also make by-laws, not contrary to law, to regulate: 1. The allotment of stock; 2. The making of calls thereon; 3. The payment of calls; 4. The issue and registration of certificates of stock; 5. The forfeiture of stock for non-payment; 6. The disposal and delivery of stock; 7. The transfer of stock; 8. The declaration or payment of dividends; 9. The number of directors and their terms of office; 10. The amount of their stock qualification; 11. The appointment, functions, duties and removal of all agents of the company; 12. The security to be given by them to the company; 13. Their remuneration; 14. The place where the annual meetings of the company shall be held and the business conducted; 15. The calling of meetings of the board; 16. The quorum; 17. The requirement of a majority of the shareholders to give notice and conduct in all other particulars of the affairs of the company. Such by-laws will be in force for one year, and, unless continued at the next annual meeting, shall cease to have force.

The directors shall be jointly and severally liable to laborors of the company for all debts not exceeding one year's wages due for services performed while they are such directors, respectively; but no director shall be liable therefor unless the company has been made a debtor within one year after the debt became due.

**SHAREHOLDERS.** Any number of shareholders who represent one-fourth of the capital stock may call a special meeting by giving written notice thereof. No stock shall be issued to represent the increased value of any property of the company, unless it be known as "watering of stock" is prohibited. The capitalization of surplus earnings, and the issue of stock to represent such capitalization of surplus, are also prohibited. Every form and manner of fictitious capitalization of stock through the issue of shares is prohibited. The stock of the company is deemed personal estate, and is transferable. The directors may call in from the shareholders all sums of money by them advanced to the company as the by-laws may allow. Not less than ten per cent. upon the allotted stock shall be called in and made payable within one year from the incorporation, and for every year thereafter at least a further five per cent. shall be made payable until the whole has been called in. If the directors call in any call within the time prescribed their stock may be forfeited to the company. No shareholders shall be held responsible to creditors beyond the amount of their respective shares in the capital stock thereof.

**DIVIDENDS.**—No company shall declare a dividend that is not earned, or which infringes or lessens the capital of the company. Should any dividend be so declared, the directors consenting to

the payment thereof shall be jointly and severally liable to the creditors of such company for the amount so paid.

**BOOKS TO BE KEPT.**—The company shall cause books to be kept in which shall be duly recorded: 1. A copy of the letters patent, and all the by-laws; 2. Names of all persons who are or were stockholders; 3. The address and calling of every such person; 4. The number of shares held by each person; 5. Amounts paid in and remaining unpaid on stock; 6. Transfers of stock; 7. The names, addresses and callings of the directors. Such books shall, during reasonable business hours, be kept open for inspection of shareholders and creditors, and their representatives. Every company neglecting to keep such books open for inspection shall forfeit its corporate rights; and every director, officer or servant who knowingly allows a false entry to be made in such books shall be liable to a penalty of \$100 for every such untrue entry, and for all damages which any party interested thereon may have sustained thereby.

**FORFEITURE.**—The charter of a company shall be forfeited by non-user during three consecutive years at any one time, or if the company do not go into actual operations within three years after it is granted.

**SPECIAL TAXES.**—In order to provide for the exigencies of the public service, every incorporated company carrying on any labor, trade or business therein shall pay an annual tax: (a) of one-tenth of one per cent, upon the amount of the paid-up capital over \$1,000,000, inclusive, and for each \$300,000, or fraction thereof, over \$1,000,000; (b) an additional tax of \$50 for each place of business, factory or workshop, in the cities of Montreal and Quebec, and of \$25 for each place of business, factory or workshop, at every other place.

**DECLARATION TO BE MADE.**—Every such incorporated company shall cause to be delivered to the superior court, or to the registrar, a declaration in writing, stating the name of the company, where its principal place of business within the province is situated, which shall be filed within sixty days after commencing operations and business. A failure to make and file such declaration renders the company liable to a fine of \$40, and the president, principal manager or chief agent, as the case may be, to a fine of \$20.

**METHOD OF WINDING UP COMPANY.**—Any such joint-stock company may be wound up voluntarily whenever the directors deem it expedient, by and sending a general meeting of the shareholders. If at such meeting a majority, representing not less than two-thirds of the stock, resolve to wind up voluntarily and dissolve, then the company shall forthwith submit its affairs to liquidators to be appointed for the purpose of winding up the affairs of the company and of distributing its assets; and thereupon the liquidators shall cease to exist. Copies of the above acts shall be sent to the province gazette, and the liquidators shall also forthwith register a notice of the dissolution in the office of the superior court and in the registry office. Within ten days with the provincial treasurer the amount of all debts and of all dividends which may then be claimed and unpaid, attested before a justice of the peace. They shall also deposit with the superior court the sworn account submitted to the shareholders.

**MINING.**

**PRIVILEGES OF ALIENS AND RESERVE OF MINING RIGHTS.**—Aliens, as well as British subjects, may enjoy the benefit of this law. Mining-rights are always considered as existing under the provisions of this law, and shall be property separate from the soil covering such mines. Mines being crown property, any person discovering the same may purchase it.

**ROYALTIES.**—A royalty shall be levied in favor of the crown upon every mine which is now or may be hereafter discovered, or otherwise alienated, and shall consist of a percentage of three per cent of the marketable value of the products of all mines and minerals, excepting gold and silver, which shall be two and one-half per cent of the gross weight. If the royalty is levied on the value of the products, the order of the sheriff of the district in which such royalty is levied, ordering him to levy same upon the goods and chattels used in the working of the mine; and if it is not paid within twenty days thereafter, the sheriff, after ten days' notice, shall sell the same whole, or a sufficient part of such goods to pay said royalty and costs.

**REGISTRARS' KEYS.**—In the mines office a register is kept for exploration permits, for sales of mining concessions, and a plan showing the mining divisions, the mining concessions and the exploration permits.

**APPOINTMENT OF OFFICERS.**—The lieutenant-governor in council may appoint the officers he deems necessary for the carrying out of this act, and fix their rank and salaries; and all such officers are bound to perform the duties assigned to them in order in council, in addition to those prescribed by this law. The inspector may, with the approval of the commissioners, appoint constables, who are appointed for the purpose of this act, to exercise the special control over the constables under the approval of the commissioner. Such constables have all the powers, authority, rights and privileges conferred upon the inspectors of the cities of Quebec and Montreal, respectively. Every inspector is bound to keep a register. He cannot, without the permission of the lieutenant-governor in council, take any share or interest in any mine in his division.

**POWERS OF INSPECTORS AS JUSTICES OF THE PEACE.**—The inspector of any mine is ex officio justice of the peace within his district, and a property qualification is not required to allow of his lawfully acting as a justice of the peace. As such

officer, the inspector possesses the jurisdiction, authority, rights and privileges conferred upon any police magistrate, district magistrate, judge of the sessions, justice of the peace, sheriff or recorder throughout the whole extent of the territory for which he has been appointed. He may, in general, settle any difficulty, in contravention thereof, as well as the regulations made under such provisions.

**EXPLORATIONS AND PROSPECTING.**—Any person, firm or company may prospect for the discovery of mines and minerals on the public lands not already occupied. He may obtain from the commissioner an exploration permit, which he may use to make all necessary works, to exist for three months, and will cost, if the mine land, which is being prospected, is for every five acres; if the mine is upon crown lands, \$10 for every fifty acres.

**SECURITY.**—The applicant shall furnish good and sufficient security, subject to the approval of the commissioner, to answer for all losses and damages that he may cause to the proprietor of the surface in making such searches or exploration.

**PRICE AND AREA.**—The minimum price of sale of mining concessions is, for iron and other, \$100 per acre; for all other minerals, \$25 per acre. A mining concession comprises a superficial area of fifty acres at least, and one hundred acres at most. No sale shall be granted unless there be some real indications of the presence of minerals in the concession, or the production of which may be shown by the exhibition of specimens of minerals found upon or in such land, accompanied by affidavits of competent and credible persons establishing that the specimens exhibited came therefrom.

**ROADS AND WATER-COURSES.**—All roads and water-courses upon mining concessions, whether expressly reserved or not in the deed of sale, belong to the crown. Such deed of sale may be annulled in default of payment of the royalty, or if the holder thereof ceases to work on his concession for two years, or violates the conditions of his deed. If the sale is annulled, notice thereof is given by service or posting, as prescribed by law, upon the minerals discovered, or the proceeds of the sale. With the application for the sale of a mining concession, showing the minerals discovered, a description of the concession applied for, a document establishing an agreement with the proprietor of the surface, and security to provide for the damages prior to the sale of private lands, or the proceeds of arbitration, if any. The deeds of sale made in duplicate, one of which must be preserved in the department of crown lands.

**ARBITRATION.**—Whenever a private person refuses to work a mine on his land, upon petition a notice is served upon him by the commissioner, calling upon him to exercise his right of pre-emption, and to give an answer to the commissioner, or to give an answer and make such arrangement, if present, and, if absent, to appear on his concession in three months in a newspaper of the province, twice these delays, and if he fails to do so, or if he refuses, the petitioner may then cause a plan of the land necessary for his mining operations to be made, and the same to be served upon the said private person, and a survey containing a description of the land, and a statement of the damages, or of the value of the land, and the name of the person whom he appoints as his arbitrator; also a demand on said private person to appoint his arbitrator, which, if he refuses to do, gives the sole arbitrator to determine the compensation to be given. The arbitrators, or the sole arbitrator, after having taken oath before a justice of the peace, shall immediately proceed to establish the compensation to be paid by the petitioner as the majority may decide, and their decision is final and without appeal. In all cases the costs are taxed by the inspector and are paid by the petitioner. If the petitioner does not bona fide proceed within two months to work the mine, or if he discontinues work for the space of eight months without authority, the award becomes *pleno jure* null and void, and the petitioner can no longer work such mine.

**BOUNDARY MARKINGS.**—Owners of mining concessions and holders of exploration permits shall comply with all the requirements of this law. They shall cause to be set up at each corner of their concession a post, distinguished in some way, which shall be placed at the corners of the concession, and the owner of their concession shall give notice to his neighbors that a survey will be made for the purpose of defining the boundaries thereof, and shall place the posts required by law, and deposit such notice. The costs of such survey are payable by the applicant, and every post which is destroyed or removed shall be replaced at the expense of the owner within one month. On the first and October of each year of the months of January, May and October of each year the holder of his concession shall send a report to the commissioner, containing the number of mining concessions, the number of men employed, the description of the district, the mines, galleries, workings, levels, plans, machinery, railways, one-way surveys, and a statement of the ores worked during the previous quarter.

**ROYALTIES.**—The amount of royalty shall be paid to the inspector of the mining division in which the mine is situated, and in the same period as that specified for filing the report and affidavits.

**QUARTZ-MILLS.**—Every person who desires to make use of any mill, other than those used for crushing or reduction of quartz, or for the crushing of gold or silver therefrom, by crushing, stamping, oblonging, or otherwise, is required to obtain a special license therefor from the inspector upon giving a register, in which he is bound to enter a clear and distinct statement of the entire business

of his mill, and to furnish monthly to the inspector of the mining division a statement, under oath, for each day of the month then last past, together with such other information as the inspector or the lieutenant-governor in council may require.

**REGULATIONS.**—The lieutenant-governor in council may from time to time make any regulation which he may deem necessary or expedient for the conduct and best interests of mining, and all such regulations, after being published in the *Quebec Official Gazette*, have force of law. He may, by proclamation, declare that the section of the revised statutes respecting riots near public works shall have force of law from and after the date of such proclamation in the divisions mentioned in the proclamation, and he may in the same manner declare the said section to be no longer in force.

**PENALTIES.**—Whoever mines without an exploration permit is liable to a fine not exceeding \$10 and costs for every day of such contravention, or, in default of payment, to imprisonment for a period not exceeding one month. Whoever obstructs or removes a party wall or passage upon lands worked as mines is liable to a fine not exceeding \$5 and costs, or, in default of payment, to imprisonment for a period not exceeding one month. Whoever causes damage or injury to the occupant of another concession by throwing earth thereon or flooding with water is liable to a fine not exceeding \$5 and costs, or, in default of payment, to imprisonment for a period not exceeding one month. Whoever does not comply with the decision of the inspector

with respect to a water-course is liable to a fine not exceeding \$50 and costs, or, in default of payment, to imprisonment for a period not exceeding one month. Any person found removing or disturbing any stake or picket is liable to a fine not exceeding \$10 and costs, or, in default of payment, to imprisonment for a period not exceeding one month. Every person who discontinues working a mine without fencing the excavation to a height of at least four feet is liable to a fine not exceeding \$50 and costs, or, in default of payment, to imprisonment for a period not exceeding one month. Every inspector of mines who, while in office, takes, without consent of the lieutenant-governor, an interest in the mines in his division, is liable to a fine not exceeding \$100 and costs, or, in default of payment, to imprisonment for a period not exceeding one year. Every holder of a license engaged in mining who interferes with an officer in entering for the performance of his duties in the mine is liable to a fine not exceeding \$5 and costs, or, in default of payment, to imprisonment for a period not exceeding one month. The fines imposed by this law are recoverable by the commissioner of crown lands in the district where the offenses have been committed, in the same manner as is an action for debt. No appeal lies from any conviction by or enjoinment of the inspector under the provisions of this law. All suits for contraventions of this law are brought by a complaint. All dues, fees and fines collected under this law, as well as the purchase price of mining concessions, unless otherwise provided, form part of the consolidated revenue funds of this province.



that of drainage, in which case, under penalty of nullity, all particulars referring to passage or transit indicated in the foregoing Clause IX shall be stipulated in the compact. XI. Mines which may be newly opened in places where they can be worked only by general drainage (mine openings) existing shall be subject to the provisions of Clauses III, VII, VIII, IX and X. XII. The legal right of use for ventilation consists in the obligation of every owner of appurtenances to permit that his inferior workings may be communicated with the superior ones, and that the properties, to whom the communication produces, as a necessary result, the ventilation which cannot be accomplished in any other manner without great expense. XIII. Unless by special compact to the contrary, made at the time of the opening of the property giving and receiving the benefit there shall always be grades located so as to impede passage or transit at the borders of the respective properties. XIV. When a communication, different from that foreseen in Clause XII, effectively ventilates one or more works, that service of ventilation shall give no right to the miner who made the communication to exact indemnity from the proprietors of the other ventilated works, nor shall said other proprietors, in their turn, acquire legal right of use which burdens the mining property that furnishes the ventilation. XV. If during the construction of the open work, according to the provisions of Clause XII, paying ore is found, the prescriptions of Clauses V, VI and VIII shall be observed, in so far as they suit the case. XVI. In the case of Clause XII, the provisions of Clause IV shall be observed. XVII. All the cost which the work of making an opening to secure ventilation occasions and the cost of the after preservation of such works shall be for the exclusive account of the party who shall have applied for the right of use for venting, or for the establishment of a mine in the future of a legal right of use to the benefit of one mining property and to the burden of another there shall be required, either the acquiescence of the owner of the burdened property, expressed in public writing or in a declaration signed and ratified before the judicial authority or before the ministry of public works, or an administrative resolution agreed to by the interested parties; or a judicial sentence. XIX. The owner of appurtenances to whose benefit the benefit of a legal right of use, who does not obtain the consent of the party whose property is to be burdened by the same, may apply to the ministry of public works, which shall decide within the period and with the formalities established by the regulation whatever or if deems proper, always giving priority to the dissenting party. If either the latter or the applicant should not agree to the administrative decision their right remains without diminution to apply to the respective local tribunals within the time fixed by the regulation. The resolution shall be communicated to the interested parties. XX. If the ministry of public works. XX. If the administrative resolution should be favorable to the applicant and adverse to the defendant, it can only be executed immediately by the applicant first giving bond sufficient to the defendant for the payment of any liability for damages and injuries in case the defendant should obtain execution in the tribunal in his own favor. XXI. The regulations of the three preceding clauses are applicable in all cases in which that laid down in the other clauses gives or could give rise to judicial contention.

#### TITLE II.—OF EXPLORATIONS, APPURTENANCES AND MINING CONCESSIONS.

Art. 13. Any inhabitant of the republic can freely make, upon government lands, explorations leading to the discovery of mineral deposits, but if, instead of borings, excavations should be made, these may not exceed ten meters in extent, either in length or in depth. No license will be necessary for said explorations, but previous notice should be given to the respective authority as the regulation provides. No mining explorations can be made upon lands which are private property without the permission of the owner or his representative; but in case that permission cannot be obtained, the corresponding administrative authority may be petitioned, who will give it in the manner which the regulation provides, requiring a bond for damages and injuries that may be caused, which the explorer will be obliged to provide to the satisfaction of the authorities after consultation with the owner of the land or his representative. Only by permission of the owner can explorations be made inside of private buildings and their dependencies. Mining explorations will not be permitted to change the boundaries of villages or towns, nor in the works, buildings or fortifications of the public nor in their vicinity. The law will fix in all these cases the minimum distances within which said works in investigation may be restricted by the respective authorities, to be ruled, counting from the date of the notice of the permission or of the administrative resolution of which this article speaks, the explorer shall have the sole right of obtaining mining appurtenances.

Art. 14. The unit of concession or the appurtenance (pertinencia) in the future shall be a solid of unlimited depth, limited above ground by that part of the earth's surface bounded by a horizontal rectangle of one hundred meters on each side, and bounded underground by the four corresponding vertical planes. The mining appurtenance (pertinencia) is indivisible in all contracts which are made concerning mining concessions or which affect the ownership.

Art. 15. Subject to the disposition in the final clause of Article 13 of this law, the concessions shall belong and shall always be given to the first applicant and shall embrace, in all cases in which there is sufficient land free from concessions, the number of appurtenances which the interested party has applied for, and which he should always declare freely, and, in accordance with the provisions of the regulations, the situation which the appurtenances constituting his concession are to occupy in the land. If between the appurtenances granted and those already existing there remain a space of less size than that of the unit of concession,

this space also shall correspond and be granted in ownership to the first applicant.

#### TITLE III.—OF MODES OF ACQUIRING MINING CONCESSIONS.

Art. 16. The ministry of state and of the dispatch of public works shall name in the states and territories and federal district the special agents acting for each, before whom shall be presented the petitions for mining concessions. These agents shall be authorized to charge fees according to the tariff which the said ministry fixes.

Art. 17. The agents of the ministry of public works shall receive the applications for mining concessions, entering immediately in a register the day and hour of the presentation. They shall then proceed at once to the examination of the application and to the measurement of the appurtenances by the expert or practical man whom they appoint; and, providing there be no opposition, they shall transmit a copy of the proceedings and of the plan to the ministry of public works for the proper approval and issuance of the title. The regulations will fix the periods within which these proceedings shall be fulfilled and will detail the mode of procedure of the agent.

Art. 18. Having obtained the approval of the proceedings, and the title of property having been issued in favor of the applicant, he shall enter into possession of the mining appurtenances without necessity of further formality.

Art. 19. The agents of the ministry of public works cannot suspend or arrest the course of the proceedings, except in case of opposition; and as soon as the term fixed by the regulations terminates they shall be obliged to transmit immediately a copy of the proceedings in the state in which it may be found to the respective local judge of the earth or any other judge after examination, may declare the tardy applicant rejected, if the fault be his, or exact responsibility of the agent if, because of him, the proceedings have been delayed. The tardy applicant cannot again petition for the same works or for other works.

Art. 20. When opposition is presented by the owner of the soil to the application for any mining concession or to the taking of the corresponding measurements, alleging that the mineral deposit does not exist, then if there should be found any indication of such deposit in the surface of the earth, or any work of exploration in the said deposit, the agent of public works shall openly reject the opposition. In case that no indications of the deposit exist in the surface of the earth, nor any cut or other work of exploration, the proceedings shall be suspended, and those of that Article 11 of this law shall be followed. The respective judge shall decide if the concession shall be given or not, and his decision is subject to appeal in either case. The writ of execution shall be issued by the ministry of public works.

The agents of the ministry of public works shall suspend proceedings in case of opposition being presented, and send the matter to the respective local judge of the first instance for the rendition of the proper judgment. The judgment will give a report of his decision to the ministry of public works.

#### TITLE IV.—GENERAL DISPOSITIONS.

Art. 22. The development of mineral substances, whether belonging to those acquired by concession according to this law or to those belonging to the owner of the soil, shall be subject to all the measures which the regulations of this law shall dictate respecting the government and security of said developments; but complying with these rules the owners shall enjoy, on the other hand, complete liberty of industrial action, in order to work in the manner which best suits them, pushing, retarding or suspending for a greater or less time their labors, employing in them the number of operatives which they wish and at the point which appears to them most opportune, and following, indeed, those systems which they prefer, of use, extraction, drainage and ventilation, according as they judge it most conducive to their own interests. Nevertheless, the owners remain responsible for accidents which occur in the mines because of being badly worked and obliged to indemnify those damages and injuries which they cause to other properties, or to the public, or to the land, by any other circumstance which may impair adjacent interests.

Art. 23. When it is necessary, in order to hasten the works of the mines of a locality, to push to completion drainage tunnels, the concession of the mining works shall be subject to contract between the interested parties.

Art. 24. Partnerships or companies which are formed for the development of mines shall be governed by the dispositions of the commercial code, except in that relative to associations which are not authorized in mining matters.

Art. 25. The contracts for furnishing sustenance to the miner (called until to-day *avío*) shall in the future have the character either of partnership, in which case the provision of the foregoing article shall be observed, or of mortgage. The mortgage in mining matters may be made freely according to the provisions of the civil code of the federal district, but holding in account the indivisibility of the appurtenance established in Article 14 of this law, and the law with respect to the retention of the provision in the commercial code, for which purpose a special book of mining operations shall be opened. The mortgagee shall always have the right to pay the tax of which Article 5 of this law treats, and shall acquire by said payment a right of preference over the owner of the mine with respect to his mortgage.

Art. 26. The mortgage can be divided into mortgage notes to a specified person or to bearer, either in the same title constituting the debt or by later document. In the former case the holder of the obligations, These provisions, as well as those relative to the amount of the debt, to the conditions of same and to the guarantee, shall be plainly printed on each one of the mortgage notes. The mortgagee may bring the action against the debtor or the mortgaged property by means of a



Art. 13. The agent of public works, during a period of three months, not to be extended, counting from the date of the notification referred to in Article 12, the registration of which is required by the provisions provided by Article 11 or of the administrative decision prescribed in Article 12, shall not admit upon the place of exploration, nor within the limits of the same, applications for concession, or other filings for exploration.

Art. 14. The explorers shall not make exploration works near to the limits of towns, except at the distance of fifty meters from the exterior lines of their buildings, private and public, and of their dependencies. The distance of fifty meters, or of whatever respect to any other public work or construction whatsoever, but may be reduced to thirty meters from the exterior lines of the common roads, railroads and canals. With respect to fortified points the minimum distance at which mining explorations can be made shall be one kilometer, counting also from the exterior lines of the works.

#### CHAPTER III.—OF THE CONCESSIONS.

Art. 15. The applications for concession of mining appurtenances or of extensions must be presented in duplicate to the respective agent of public works. They shall express with clearness the number of appurtenances which are solicited, the situation which they are to have on the land, the location of the land in the municipality to which it belongs, with the most prominent signs for its identification and the designation of the mineral substance which it is proposed to exploit. If in the judgment of the agent there should not be sufficient reasons, he shall endeavor to obtain it, interrogating the applicant and including his explanations in the application in his duplicate and in the record-book of the agency, in the presence of the interested party; except that the inability of the latter to give said explanations, or his refusal to do so shall not be considered sufficient reason for not making the registry, nor for suspending the other proceedings.

Art. 16. The agent cannot accept any other application for the same tract until the ministry of public works delivers the final decision in each proceeding for concession of mining appurtenances or extensions.

Art. 17. After an application for a mining concession is presented to the agent of public works he shall proceed immediately to register it in the presence of the applicant, registering the day and hour of its presentation, and also the proper number in the order of the proceeding, both in the margin of the said application and in his duplicate, which he shall return in due course, and also in the special book of record of applications for concession, which he should have and maintained by the agent of public works. The applications should be registered in the exact order of dates and hours in which they shall have been presented, without leaving blank spaces in the book between the divers entries.

Art. 18. In the case of simultaneous presentation of two or more applications for concession of mining appurtenances or of extensions upon the same site, it shall be decided by chance, in the presence of the interested parties, which of the petitions must be admitted and registered.

Art. 19. Within the three days which follow the presentation and registry of an application for a mining concession, the agent shall appoint a titled expert, or, should he not have one in the place, a practical surveyor, to measure the appurtenances and extensions applied for and draw a corresponding plan, indicating clearly in the same the corners of the appurtenances or extensions expressed, and also those of the contiguous appurtenances which are encountered in a surface of ground having a radius of one hundred meters. The agent may appoint the expert whom the applicant indicates to him, always providing the said expert complies with the necessary conditions.

Art. 20. Within the eight days following the appointment of which the preceding article treats, the expert should communicate to the agent whether he accepts the office or not, and in the former case what is already arranged with the applicant regarding the payment of fees. The agent will enter the due acknowledgment in the proceeding, and the expert will extend the period of eight days to another eight, and on one occasion only, at the instance of the applicant.

Art. 21. At the time of the entering of the acknowledgment of which the preceding article treats, the agent shall prepare for the expert the period of sixty days, not to be prolonged, for him to present in triplicate the plan of which Article 19 speaks, accompanied by explanatory information, and shall proceed to draw up in duplicate an abstract of the plan, containing the following data: 1. A description of the application, with a clear and precise specification of the name and residence of the applicant and of the serial number of the proceeding. 11. The name, residence and acceptance of the expert appointed. 111. The notice that a period of four months, not to be extended, counting from the date of the presentation, is given for the confirmation of the proceeding in the agency. One copy of the abstract shall be posted on the bulletin-board, which shall be placed on the exterior of each of the agencies, requiring of the applicant in the event of the necessity of the necessary stamps for the publication. The abstract shall remain fixed for one month upon the bulletin-board, of which due entry shall be made in the proceeding. The other copy of the abstract shall be delivered to the applicant by the agent, who shall be responsible for the risk and within the forty days following the date of the abstract, to cause the same to be published three consecutive times in the official periodical of the respective state, territory or federal district. The applicant is responsible to do so at the agency, in order that the same may be published in the proceeding of the respective issue of the periodicals in which the publications have been made.

Art. 22. The publication of the abstract, as provided in the preceding article, serves the same purpose, and in all those cases who may believe they have a right to protest against the application for a mining concession.

Art. 23. The agent, upon entering the acknowledgment of which Article 20 treats, shall deliver to the expert a certified copy of his appointment, which shall conclude with the statement, that whoever resists in the execution of the field-work which the expert has to do shall be held accountable under the penalties established in Article 204 of the penal code of the federal district, or in the corresponding provisions of the laws of the states.

Art. 24. If, in fact, the experts, in the execution of the work of which the preceding article speaks, should encounter resistance, they shall request the aid of the local authority.

Art. 25. The agent, after he has received the observations as the applicant may make to them, and these also which shall have been or may be made in opposition to the application for a concession, but they shall not express judgment upon the observations, except in the written information of which Article 26 treats, the presentation of which, within the period there fixed, is of the personal responsibility of said experts, to whom shall be charged all the damages and injuries which may originate in default of presentation of that document or of the plan.

Art. 26. Only during the four months fixed in Section III of Article 21 shall be admissible any opposition which may be presented, for either of the following reasons: 1. Dissent of the owner of the soil. 11. Invasion of appurtenances or extensions contiguous. 111. Ownership of or prior application for the appurtenances or extensions solicited, or for a part of them.

Art. 27. The agent, after he receives a protest against any application, will give notice of the same to the applicant by publication, during three consecutive days, on the bulletin-board, and of the serial number of the respective proceeding, in which due entry shall be made that such publication has been made.

Art. 28. Unless the applicant repair to the agency and declare the protestation which, within the period there fixed, is of the filing of the opponent's protest until the receipt of the information and plan of the expert.

Art. 29. On the same day on which these documents are received by the agent the summons the interested party to a meeting, within the fifteen days following, by means of a notice posted for three consecutive days on the bulletin-board, which shall express plainly the number of the proceeding, the names of the interested parties and the day and hour of the meeting. At that meeting the agent shall endeavor to be all, to reconcile the differences and avoid legal complications. Of all these particulars due entry shall be made in the proceeding.

Art. 30. If the opponent should be the owner of the soil, and in the same proceeding it should appear that there are indications of a mineral deposit in the surface, or any work of exploration in the said deposit, the agent shall continue the proceeding until its termination, in order that the ministry of public works may issue to the agent, in conformity with Article 7 and 11 of the law, either its termination, in conformity with Articles 7 and 11 of the law, either understood solely with respect to the subsoil, or finally leaves subject to judicial decision the extent and the price of the surface which he may wish to occupy. The agent, at the time of the respective proceedings which Article 29 treats, shall advise the interested parties that they have perfect liberty to appeal to the tribunals in conformity with Article 20 of the law.

Art. 31. In any other of the cases of opposition enumerated in Article 26, the agent, if he should not obtain the reconciliation provided for by Article 29, shall suspend all proceedings and shall deliver the proceeding to the applicant, in order that, upon his own responsibility and within the proper time which the agency fixes, he present it to the corresponding local judge of the first instance.

Art. 32. If any opposition be presented founded upon a cause diverse to those enumerated in Article 26, the agency shall be limited to include the matter in the proceeding without suspending the continuation of the same.

Art. 33. If the opposition should be presented after the receipt of the plan and the information of the expert, but before the expiration of the four months fixed in Section III of Article 21, the agent shall continue in the continuation of the proceeding provided for in Articles 29 to 32, this being the only case (besides that of remission to the tribunals) in which the agencies can delay the termination of the proceedings for thirty-five days beyond the period of four months, provided that the period is not less than twenty days before that on which the said four months would expire.

Art. 34. The four months having passed of which Article 26 speaks, within the having no objection, or having arrived what could be the case, foreseen by Articles 30 and 32, or the proceeding having developed upon the tribunals, with execution in favor of the applicant, the agencies under their strictest responsibility and within the time herein before required, shall take care of the proceeding and, in the event of its being approved, under registered cover, to the ministry of public works, unless the applicant wishes to be intrusted with the delivery of these documents, in which case the agency shall advise the ministry.

Art. 35. The applicant shall take care to furnish to the agent, in order that he may remit them to the ministry of public works, in the registered letter in which he sends the copies of the proceedings, the stamps which the law requires, which shall be returned to the interested party, through the agent, in the event that the ministry, by not approving the proceeding, does not grant the title. If the applicant should prefer it, he shall assign to any person who he may wish to present to the ministry of public works the stamps referred to.

Art. 36. Any omission in the presentation of petitions, in furnishing of stamps, in publication, in payment of fees, in attendance at meetings, and in general in whatever proceedings or diligences are required, which may be imputable to the applicants or to the opponents, shall signify, for the former that they have withdrawn their application for a concession, and



for the latter that they have withdrawn their opposition, and in conformity with these pretensions that they have acknowledged the application as valid.

Art. 37. The proceeding having been examined in the ministry of public works and approved by that department, said department shall proceed to the issuance of the title and to its remission to the agent of public works, in order that he may deliver it to the interested party, with a copy of the plan, stamped by the ministry of public works, which department shall give to the treasury department a detailed report of the concession granted. If the proceeding should not be approved, the corresponding observations shall be given to the agent, to the end that the faults observed may be rectified within the time that the ministry may signify, provided these faults cannot be imputed to the applicant or the agent, for in that case the proceeding must be in conformity to the provisions of Article 19 of the law.

#### CHAPTER IV.—GENERAL DISPOSITIONS.

Art. 38. The duties which the expert appointed in conformity with Article 12 has to perform shall be executed in such a manner that, by the necessary scientific proceedings, the horizontal length of the sides of the appurtenances and the angles which the same form with the true meridian may be obtained. For this purpose the expert shall determine the magnetic deviation of the compass, in case this instrument is used to measure the directions of the sides. The boundary lines and corners shall be marked by fixed monuments which may be encountered for reference, and the necessary data shall be obtained to make verifications of the work. The expert shall designate upon the ground where the respective landmarks should be constructed in accordance with that which is prescribed in Article 11.

Art. 39. The plans of the appurtenances shall be drawn correctly and with neatness, upon strong paper, for the preservation of said documents. Copies shall be taken thereon on tracing cloth. The scales shall always be decimal and proportioned to the object of the plans, containing also the lengths of the sides in meters, the directions of the same with relation to the true meridian, the angles of the corners, and the area of the surface which it was determined, and the area of the surface in hectares.

Art. 40. The survey and measurement of the appurtenances in the land do not imply the right of the occupation of same, and only serve to mark the limits of the concession, and the applicant should understand that he must treat with the owner of the land, in order to acquire by purchase, within convenient time, that part of the surface which he needs for the development of his mining operation, or the total area of the same surveyed, if he wishes to acquire the same, or of the superficial deposits, or otherwise procure the same by appropriation, procuring the corresponding judgment of the tribunal, according to the prescriptions of Article 11 of the law.

Art. 41. The boundaries and limits of the appurtenances: I. They shall not be changed in position, for, being destined to designate points essentially unvariable, as long as the limits of the appurtenances or concessions which they mark be not modified, they shall be constructed solidly and shewn by the presence of monuments in good condition, making upon them such repairs as shall be necessary. II. They shall be located in number and position conveniently so that in every case the proceeding and the following plan can be seen from each, and in form, color, or in some other character should be distinguishable from those of the adjacent appurtenances.

Art. 42. The owners of mining concessions cannot go outside Article 5 of the boundaries of the same (according to the provisions of Article 5 of the law), except when there is free land and previous application for extension before the respective agent of public works, who shall conduct the proceedings on the same terms and with the same requisites as those which are established in this regulation for mining concessions. The same proceedings shall be pursued in the mineral substances of applications for rectification of appurtenances.

Art. 43. The mineral substances enumerated in Article 3 of the law cannot be exploited without previous concession, and, therefore, no labor will be permitted in mines or places of said substances, which are not yet located by a legal title duly registered. Consequently no labor will be permitted, either open to the air or subterranean, which has for its object the future exploitation of any of the substances mentioned.

Art. 44. Every applicant who wishes to exploit any of the mineral substances not specified in Article 3 of the law, and which according to Article 4 of the same are for the free exploitation of the owner of the soil, shall be rejected.

Art. 45. In order to obtain the legal right of use referred to in Section IV of Article 12 of the law, the application for the license shall be presented to the respective agent of public works, accompanied by as much of the horizontal projection and profile of the tunnel, with in each a vertical scale, and also as much of the plan and details, as are necessary to be known of the nature and circumstances of the projected work. The agent shall remit to the ministry of public works, together with the application and corresponding plans, a report upon the matter, also giving his opinion. The proper authority, in view of the said documents and of the other data which he may consider proper to require, shall render his decision.

Art. 46. The owner of appurtenances which would be benefited by a legal right of use, who does not obtain the consent of the owner whose property would be benefited by the same, shall not apply to the ministry of public works, in conformity with the provisions of Section XIX of Article 12 of the law, accompanying the application with all the necessary data. The ministry, in view of the report of the respective agent of public works, and the hearing granted to the dissenting party, or to his representative, shall render his decision within the time which he shall designate, in accordance with the circumstances of each case.

Art. 47. If he who solicits it or he who ought to grant the right to which is referred in Section XIX of Article 12 of the law does not comply with the requisites of the ministry of public works, he may appeal to the respective judge, provided he does so within a time which does not exceed two months from the date of the administrative decision.

Art. 48. The articles of the republic which are not included within the jurisdiction assigned to an agent of public works in the branch of mining, the applications for mining concessions, as also the notices and instruments granting permission of exploration, shall be presented to the postmaster, who shall note upon the application the date of the notification, the date of the permission of exploration, the day and hour of the presentation, and shall give immediate notice to the ministry of public works by mail, and by telegraph, if there be one.

Art. 49. The postmaster can only receive and note the applications for concession, and the notices and instruments granting permission of exploration, to which the preceding article refers, in case that the place of his residence is out-side of the jurisdiction of any agent of the ministry of public works in the branch of mining.

Art. 50. The ministry of public works shall publish every six months in the *Diario Oficial*, the federal official paper, the notice of the titles of mining property issued during the said semester. Art. 51. The special book, of which Article 25 of the law treats, shall be kept by the persons prescribed in Article 18 of the commercial code, being governed in its conduct by what that code ordains in its Chapter 1, Title 2, Book 1.

Art. 52. It is the right of individuals to register titles of future concession, or of existent ownership, in the commercial record, as permitted by Article 26 of the mercantile code, wherever the proper registry book is not kept.

Art. 53. The abstract is obligatory upon mining corporations and upon creditors of mines, in conformity with Article 25 of the law and Article 5 of the transitory dispositions given in Title V.

Art. 54. Mining corporations are obliged to register in the capital of the provinces or judicial districts, both the location of the mining appurtenances and the office or offices which the company has in the republic.

Art. 55. If, through the extension of appurtenances, or through any other cause, there should be any doubt about the place in which the registry should be made in conformity with the preceding article, the minister of public works will determine the same, communicating his decision to the minister of the treasury.

#### CHAPTER V.—TRANSITORY DISPOSITIONS.

Applying only to the taking effect of the new law of 1892.)

Art. 1. The agents shall receive, as per strict inventory, the proceedings which exist in the offices of the mining departments, in order that they may be able to give effect to the said law, and all unfinished proceedings they shall give due course to, in conformity with Article 1, Title V, of the law.

Art. 2. Every denouncement which is found in the course of application shall be posted upon a bulletin-board, after which the agencies shall comply with the provisions of Articles 2 and 20 within the time prescribed by Article 21, repeating the publication in the office periodical to which Article 21 refers.

Art. 3. In those proceedings of denouncement in which the publications have already been made, and in which the expert has not yet been named to measure and survey the appurtenances, the agencies shall proceed, without making new registry of the denouncement, as in cases of new applications for concession. Art. 4. In those cases of denouncement in which the expert has already been named, but the plan and information have not yet been presented by him, the agencies, without making a new registry of denouncement, and passing upon the expert named, shall proceed in like manner as in new applications for concessions.

Art. 5. In those cases of denouncement in which the plan and information have already been presented, the agencies shall proceed to issue in duplicate an abstract containing the following: I. A copy of the plan and the location of the denouncement, and the name and residence of the denouncer, and the register number of the case. II. The information of the expert. III. Notice that a period of two months, not to be extended, counting from the date of the abstract, shall be given for the submission of the proceeding in the agency. The agents shall give to these two copies of the abstract the destination laid down in Article 21.

Art. 6. In those cases of denouncement in which opposition has already been put out in which the plan and information of the expert have not yet been received, the provisions of Article 27 shall be observed, and the provisions of Articles 28 to 32 in the cases in which they apply.

Art. 7. In those cases of denouncement in which the opposition and the expert's plan and information already exist, as also in those cases in which the opposition is presented within the two months provided for by Article 5 of these transitory dispositions, there shall also be observed the dispositions provided in the Articles 28 to 32 of the agencies. In this case taking advantage of the thirty-five days of extension established in Article 33.

Art. 8. The dispositions in Articles 28 to 32 shall also be observed in those cases of denouncement which are encountered in the period of twenty days described in Article 75 of the mining code of the 22d of November, 1884. The agents as administrative authorities do not have the power of receiving and passing upon proof in the same manner and spirit as the courts. Art. 9. In those cases of denouncement, the days referred to in these transitory speaks, without there having been any opposition, or any other events foreseen by Article 34 having occurred, the agencies shall proceed as that article ordains.

Art. 10. The application for the right of use referred to by Article 7 shall commence to count from the date in which the agent announces to the public that he is established and commences to fulfill the duties of his office.

TARIFF FOR THE PAYMENT OF FEES TO THE AGENTS OF THE MINISTRY OF PUBLIC WORKS IN THE BRANCH OF MINING.

I. For the annotations in the notice or in the permission of exploration, to which Articles 10 and 11 of the ordinance for the administrative proceedings in the branch of mining refers, and for the corresponding registry, \$1.

II. For the proceedings and the issuance of the permission of exploration, to which Article 12 of the said ordinance refers, \$2.

III. For the registry of each application for a mining concession, or for extension or modification of mining appurtenances, and for making the corresponding record, \$1.

IV. For the notices, memorials and abstracts of proceedings, at the rate of 20 cents for each ten lines or fraction thereof; and in addition 10 cents for each of the title pages which cover the proceedings and other documents which must be abstracted.

V. For the transcription, collation and authorization of the evidence and certificates, and for other copies, at the rate of \$1 for each hundred lines or fraction thereof.

VI. For the search of proceedings or whatsoever other documents from the record, \$1. When the interested party does not furnish sufficient data, and he has to register corresponding documents for more than one year, \$1 for each year which is registered.

VII. For each kilometer of a journey, and for each one of the returns, which is traveled in the transaction of any business, 25 cents.

VIII. For an aerial view or exterior examination, rendering the corresponding information, \$5.

IX. For the inspections, visits or examinations in works below the surface, \$7 for each one hundred meters of depth or fraction thereof at which are encountered said works, and \$5 for the corresponding information.

X. For attendance at meetings which do not exceed one hour, \$3; and for each hour additional or fraction thereof, \$1.

Liberty and constitution.  
Mexico, June 25th, 1892.

MINING TAX LAW OF JUNE 6, 1892.

Article 1. In accordance with the provisions of the articles relating to the new mining law, there shall be established a federal property tax, which shall consist of two parts; one part, which has to be paid once only, in stamps to be affixed to all titles of mining property, and the other part, which has to be paid annually, for each one of the appurtenances of which a concession is composed.

As regards the tax, the Article 14 of the new mining law shall be the one established by the present law. Consequently all old and new appurtenances existing in the republic, whatever be their extent, shall be valued according to this unit.

The fractions of appurtenances that amount to one-half or more, the tax shall be paid as if they were whole appurtenances, and nothing shall be paid for the fraction that is less than one-half.

Art. 2. Every owner or actual proprietor of mines, whatever title he may have, shall be obliged to present his documents to the office of the treasury which the regulations of this law may determine, within the time, not to be extended, counting from the taking effect of this law to the 31st of October of the present year, so that the new stamps of ownership of the mines may be affixed to the title and account taken, or the payment of the annual contribution, of the number of appurtenances which form the property, a corresponding register being opened for this purpose.

The titles which, in future, the ministry of public works will extend in accordance with the new mining law must bear the stamps corresponding to the same. These stamps shall be furnished by the party receiving the concession and shall be in proportion to the appurtenances which the concession contains.

Art. 3. The property of mines shall be valued at the value of \$10 and have to be affixed to the titles of the property, one for each appurtenance of ten thousand square meters. The rule established in Article 1 to be followed as regards the fractions. These stamps have to be cancelled by the office of the treasury authorized to receive the titles which were extended up to the 30th of June of the present year; the ministry of public works cancelling those belonging to the titles which are extended in accordance with the new mining law.

Art. 4. From the 1st of January of the present year, all owners or proprietors of mines shall be obliged to pay the sum of \$10 annually for each one of the appurtenances of which their concessions are composed.

The amount of the tax shall be the same, whatever be the nature of the substance which is being worked, in the understanding that the mine has been acquired through denouncement or by special concession before the date on which the new mining law takes effect, and that in future it shall be acquired by concession and title in accordance with the new law.

Only those mines shall be exempt from payment of the annual contribution on appurtenances and of the stamps on the titles of the property, which have been expressly freed from the same by contracts, made with the executive government in virtue of the authority given by the legislature and approved by the same. This exemption shall only last for the time stipulated in the contract, and its extension of time will be granted.

Art. 5. The annual property tax on mines shall be paid in three advance payments during each fiscal year, this payment to be made during the first month of each one-third part of a year,\* in the office of the treasury which the regulations of this law shall determine, and to which the taxpayers are obliged to go in order

to make their payments without further need of notification or any other requisite on which they might found delay or excuse.

Art. 6. Failure of presentation of the title which secures the possession of the mine within the time fixed in Article 2 shall be punished by a fine equal to the amount of the stamps which the title has to bear, if the same be presented within the two months following the expiration of the time allowed. For every two months more that the presentation is delayed, the holder shall incur a fine equal to the amount of the stamps.

If the concealment of the number of appurtenances shall be punished with a fine equal to double the amount of the stamps which the title ought to have borne for the concealed appurtenances, to which shall be added double the amount of the annual tax for the whole of the same year presented. This shall not interfere with the civil or criminal responsibility to which the concealer is liable and to which he may be subjected in due time.

Failure to pay the annual property tax within the first month of each one-third part of the year shall cause the owner to incur a fine amounting to fifty per cent of the amount of the tax, in case he pay during the second month. If the payment be made in the third month, the fine shall be equal to the amount of the tax. When once this last-named space of time has expired without the tax and accumulated fines being paid, the mining property shall be lost to the owner without recourse whatsoever. The department of the treasury shall make the corresponding declaration and shall publish the same in the *Diario Oficial*, so that any other party may petition for the property.

Art. 7. When the owner of the mine sells the same, he shall give the respective notice for annotation in the register, and the bill of sale in which is given shall bear the stamps which according to the tax law should have.

Art. 8. In case it no longer suits any person or company to continue working the mine or mines which he or it may possess, the respective office of the treasury shall be advised in writing, so that the tax may be settled up to the date of the notification and the corresponding annotation be made in the register.

REGULATIONS OF THE MINING TAX LAW OF JUNE 6, 1892.

TAX UPON MINING PROPERTIES.

Article 1. The tax established by this law is applicable to the mining properties now existing or which may hereafter be authorized by the ministry of public works in conformity with Article 3 of the law of the 4th of the current month. The mining properties now existing in the republic, in virtue of the provisions of the mining code of November 22, 1884, are, in so far as refers to taxes, not subject to the present law, being liable only to that dated June 6, 1887, and such others as may be now in force.

Art. 2. The tax upon titles shall be paid by affixing to the last deed of transfer or grant made by the interested party the corresponding amount of document and book stamps in conformity with Article 3 of the law, the same to be canceled as there is prescribed.

Art. 3. All owners and present holders of mines comprised in those referred to in Article 1 are obliged to present to the proper agent of the treasury in the states or the territories within a term which shall not be extended, expiring on the 31st of October of the present year, and under penalty of the fine to which may be applicable. The original titles of possession, pursuant to Article 4, Section VI, of the ordinances of May 22, 1783, and Article 9 of the mining code of November 22, 1884. If, the last deed transferring ownership, in the event of the present owner or possessor being the assignee of the original denouncement. II. A declaration in duplicate under oath, which shall express in detail the name and place of residence of the owner or holder, and, in such cases, that of the company and its manager or representative; the location and extent of the appurtenances and extensions in conformity with the latest measurements, expressing whether these are contiguous or separated; the amount of all appurtenances and extensions taken possession of; the conversion of this amount into money, according to the force and value of the titles, in virtue of 4 of the law of June 4th of the current year, and the reduction the petitioner may desire, if any, in conformity with Transitory Article 4 of the law cited and 8 of that of June 6, 1892.

Art. 4. The presentation of the titles fixed in the foregoing article has for its sole object the identification of the mine and the justification of the exactness of the conversion of the appurtenances into hectares.

Art. 5. The officers mentioned in Article 3 will return immediately to the interested party the duplicate of the declaration, after having noted thereon the date and hour at which the same was presented, affixing to the last title the proper stamps.

Art. 6. Within three days subsequent to that on which the agent of the treasury may have received the titles, the documents or proceedings shall be forwarded to the treasury department, together with a report in which such office shall present and substantiate its opinion as regards the exactness of the declaration made by the interested parties.

Art. 7. Upon receipt of the documents or proceedings by the treasury department in the manner cited in the last preceding article, the latter will determine, after having procured such information thereon as it may deem essential, whether the declaration shall be accepted or rejected.

\*Extract from Article 1 of the mining code of Nov. 22, 1884.  
The substances which are used for their extraction, including under the first designation all industrial establishments of mining in which by any kind of process are extracted some of the substances contained in the mineral substances referred to in the two foregoing sections of this article. (The said substances are the same as specified in Article 3 of the new law.—TRANSLATOR.)  
Sec. 2. The waters extracted from the mines, which may be used for drinking by workmen and animals, for motive power or for any other use in mines or metallurgical works.

\*In Mexico a year is divided into three parts of four months each, instead of quarterly as in the United States.

Art. 8. As provided for in Article 6, should the department find the declaration to be exact, it will return the titles to the proper agent of the treasury in order that he may deliver the same to the interested persons and certify upon the duplicate referred to in Article 5 the fact that the tax has been paid.

Art. 9. Should the treasury department not consider the declaration of the interested party exact, it shall determine the number of apartments in which the proper stamps must be paid.

Art. 10. Within three days subsequent to the notification to the interested party, in the event provided for in the foregoing article, the latter shall manifest whether or not he conforms to the number of apartments determined by the treasury department, it being understood that his acceptance thereof will be taken for granted should notice to the contrary not be received within the term indicated.

Art. 11. Should the party in interest not be satisfied with the number of apartments determined by the treasury department the latter shall designate an expert, who, with the documentary proceedings in his possession, will make an examination of the property and mineral possessions, presenting within a term of forty days a report thereon which shall be employed by the said department as a basis upon which to render a definite decision in the matter.

Art. 12. Basing the same upon the report made by the expert appointed, the treasury department will render a definite decision in the premises, returning the proceedings to the proper agent of the treasury, where the stamps corresponding to the amount lacking will be duly affixed and a memorandum made of the duplicate declaration. In the event of cause existing therefor, the petitioner shall be bound over to the proper judicial authorities in conformity with Clause II, Article 6, of the law of June 6, 1892.

Art. 13. In any concession which may hereafter be authorized by the ministry of public works, after having duly affixed to the titles the proper stamps, it will be the treasury department's duty to inform the interested party in Article 37 of the regulations of June 25, 1892.

Art. 14. The grantees of mineral zones not desiring to avail themselves of the privileges conferred by the law of June 25, 1892, of Transitory Article 3 of the law of the 4th of the current month are required to appear before the treasury department with a declaration, in duplicate, conforming to the requirements of Article 6 of the present law, and in which they will also state the date of their respective concessions and whether or not they have incorporated within the limits of such zones mineral apartments distinct from those conceded by their contracts.

Art. 15. The treasury department, in view of the declaration filed with it in conformity with the provisions of the preceding article, will request a report thereon from the department of public works, rendering its decision in accordance with the information communicated by the latter department, and issuing to the party in interest a certificate, in duplicate, of the facts noted in pursuance of the provisions of the final paragraph of Article 4 of the law dated the 6th instant.

Art. 16. For the same purpose, the grantees of zones who may hereafter incorporate within those conceded by their contracts apartments different from those conceded by their contracts are required to present, within eight days subsequent to that on which they receive notice from the ministry of public works that such incorporation has been accepted, a declaration in duplicate to the treasury department, which latter department will issue the certificate provided for in the foregoing article.

## ANNUAL TAX.

Art. 17. The annual tax referred to in Article 4 of the law will be collected by the stamp offices in accordance with the laws of March 31, 1887, and December 9, 1891, and such others bearing thereon now in force, and is payable in inferior metal stamps, the face thereof to bear an imprint, diagonally placed thereon, reading, "Mining Tax."

Art. 18. The stamp officers will receive, as sole fee, two per cent of the gross amount of the sale of stamps for the payment of the annual mining tax.

Art. 19. The stamp officers will keep a register of the mines situated in their respective districts, by aid of the data which the treasury department will furnish for that purpose.

Art. 20. The owners of mines are required to make their payments in the principal or district sub-tax office corresponding to that in which such mines may be located; the treasury department, however, may modify this rule in instances where it may be deemed equitable and convenient to do so, in such cases advising the general office that the latter may transmit information thereof to the proper tax office of the district within which the mine is situated.

Art. 21. The principal stamp officers will require the sub-offices or agencies to forward them opportunistically the stubs of the stamps sold for each mine affixed to pages on which they will state for which mines, respectively, the stamps have been sold, and whether the same correspond to the dimensions of the property detailed on the titles and indicated on the duplicate thereof returned in accordance with Articles 8 and 12.

On receipt of these pages or sheets by the principal stamp officers, they will communicate the fact to the treasury department to which they will also forward at the end of each fiscal year, all such stamped pages or sheets received, corresponding to each mining enterprise.

Art. 22. Each one of the three advance payments referred to in Article 7 of the law must be made, in full, on the 15th of December 20th and March 31st of each year. For this purpose the principal or sub-stamp office will deliver to interested parties a printed ticket or placard containing: 1. The title or head of the mine; 2. The number of the title and municipality to which the office issuing the ticket or placard may pertain; 3. The name of the mine; number of apartments for which the tax is paid; municipality in which the same is located; name of

owner or company which may be in possession thereof, and the registry number of the titles. IV. The amount payable for each third part of the year. V. Three blank columns destined to receive the stamps or reservations made for each third part of the year, which stamps are to be duly canceled.

The interested parties are required to place the ticket or placard referred to in this article in a visible part of the office of the mine, and of the owner of the mining properties, with the stamps accrediting the payment alluded thereto.

Art. 23. Upon any tax payment becoming due, as provided for in the foregoing article, and upon the stamp office being advised by the respective principal stamp office, it will communicate the fact to the agent of public works, in order that the latter may, during one month, fix a notice thereof on the bulletin-board mentioned in Article 2 of the regulations of June 25, 1892, which notice shall be given to the creditors of the mines, will operate as a citation to avail themselves of the privileges indicated in Article 23 of the law of the 4th instant. The payment of the tax by these creditors cannot be effected until the notice referred to has been placed upon the bulletin-board of the agency of public works.

Art. 24. If within the district of any principal stamp office there should happen to be no agency of public works to which the notice mentioned in the preceding article can be given, the said principal stamp office will notify the creditors of the mines through the respective principal stamp office, ascertaining previously in the proper commercial registry office the names of such creditors.

Art. 25. Upon the expiration of the terms referred to in the final part of Article 6 of the law, and the tax still remaining unpaid, such payment of the stamp will be immediately advised to the treasury department in order that the latter may, in due order, declare the loss of the property, and the ministry of public works dispose of the mine. This ruling will be published in the *Diario Oficial*.

Art. 26. The notice prescribed in Article 7 of the law will be made in writing, by the party in interest, to the principal stamp office through the proper local sub-office or agency. The principal stamp office will advise the treasury department thereof for copy.

Art. 27. The notifications referred to in Article 8 of the law will be made also as prescribed in the last preceding article. The principal stamp office will transmit the same to the treasury department, which latter may make copies thereon in the register and order their publication in the *Diario Oficial*, and effect the necessary liquidation, which it will communicate to the proper principal stamp office, that the latter may return, in such instances, the amount which may be due to the petitioner.

Art. 28. The requirements referred to in Articles 14 and 16 of this law are required within the first ten days of the fiscal year, to communicate with the treasury department, that the latter, while in possession of the documents mentioned in said articles, may proceed to the registration of the same, and the payment of the annual mining tax during the current fiscal year.

## TRANSITORY PROVISION.

For the present year only, the payment of the tax installment maturing in July next will not be required in that month, but can be made in any day during the months of August, September and October of the next installment, which, if not matured, the 1st of November next may be effected together previous to that date. Mexico, June 20, 1892.

## EXPLANATORY CIRCULAR No. 19.

With the object of obviating any difficulties that might arise in different localities of the national territory in complying with the provisions of Articles 3 and 6 of the regulations of June 30th last of the mining tax law, owing to the distance at which mining properties may be situated from their respective federal tax offices and to the different means of communication, the president of the United States of Mexico has seen fit to determine that in such instances the nearest agent of public works—subject to the tests which for the performance of this duty will be designated by the proper ministry and which will be payable by the parties interested—is authorized to receive the manifestations prescribed for in the above referred to Article 3 and to give a copy of the original and last transfer title papers, which he will duly compare and legalize, the latter, together with the manifestation, constituting the proceedings in the matter, which shall be forwarded, accompanied by the stamp which may be required, to the proper agency of the treasury, in order that the latter, after making the necessary entries, may, without further procedure, carry out the provisions of Article 6 of the regulations of June 30th last, and the parties will be careful to affix and cancel the stamps, which the law prescribes, on the original titles, retaining the latter in their possession until final decision is made, when they shall be returned to their owners with the respective original date of the entry in the register of federal mining taxes noted thereon, and which will be duly transmitted by the proper agent of the treasury. Mexico, August 15, 1892.

## MINING TAX LAW OF JUNE 6, 1887.

Article 1. After the promulgation of this law the mines of stone coal, of all varieties, those of petroleum and those of iron and quicksilver and the products of the same, national iron, wrought or cast, in rods, bars, pipes, wire, beams or rails, national quicksilver in liquid form, the product of the beneficiation of the ores, extracted from the mines, from all federal, local and municipal taxes, except stamp taxes.

Art. 2. Throughout the interior of the republic the circulation of gold and silver, whether in the ore, massive or coined, that of all other metals, and that of the products of the mines, shall be free from all exise duties, toll duties and from all other imposts, by whatever name they may be called.

Art. 3. Quicksilver of whatever origin shall be free from all charges, of whatever kind they may be.

Art. 4. Such mines as are not exploited in Article 1 and the products thereof shall only pay one single tax, in addition to the federal tax on coinage, which shall be computed upon the value of the ore or of the substances that may be exploited, without deduction of the expenses, and which shall never exceed two per cent. of said value.

Art. 5. The tax spoken of in the preceding article shall belong to the state in which the mine may be situated, or to the federation, when the mine happens to be in the federal district or in the territories. For this reason the amount thereof, within the limits that are here designated, shall be fixed annually by the respective legislatures of the states, or by the congress of the union in its case, with regard to the necessities of the treasury and to the protection that should be accorded to mining.

Art. 6. Metallurgical works or shops of any kind, when they are in operation, shall pay to the state in which they may be situated or to the federation, if they are situated in the federal district or in the territories, as the only tax, the limit whereof cannot be passed, up to \$6 per thousand, upon the value of the real estate and the machinery.

Art. 7. As is already established, the federation shall receive the federal twenty-five per cent. of the taxes, which, according to the foregoing articles, are to be levied by the states.

Art. 8. Any other tax, by whatever name may be given to it, except that of stamps, upon the extraction, production or profits of mines, upon the amount of ore treated, the production or the profits of metallurgical establishments, upon the capital invested in mines and metallurgical works, or in the shares and bonds of mines, or of any kind of metallurgical works, and upon the transfer of ownership of mining property and of metallurgical works, or of the shares that relate to them, is absolutely prohibited by this present law.

Art. 9. It is forbidden to the states to levy taxes on denouncements, possessions and other formalities necessary for the acquiring of mining property and of metallurgical works, or upon the organization of mining companies and the issuance of the stock or bonds thereof.

[Article 10 has been abolished by the law of 1892.]

Art. 11. During the term of ten years all establishments for wine-growing, silk-culture and pisciculture shall be free from all federal taxes, except the stamp tax. In order to enjoy this exemption, such establishments must subject themselves to the conditions that will be fixed in the regulations relative thereto.

Art. 12. The executive is authorized to contract with railroad companies for the reducing of freight charges upon the national products intended for exportation according to the following conditions: *a.* The executive shall annually designate in the budget the quantity of money necessary to pay the sum that the companies are to receive for the services they may render according to this article. *b.* The ministers of the treasury and of public works shall dictate, two months before each fiscal period, the proper measures, so that the exporters in subjection thereto may enjoy the advantages that are conceded to them. *c.* Such products for exportation as are destined to enjoy the said reductions shall be divided into four classes, in which, according to the importance that they may continue acquiring, the executive shall place them every two years, publishing the said classifications with due anticipation.

## LAW OF JUNE 6, 1887.

## AUTHORIZING THE PURCHASE OF A PROCESS FOR BENEFICIATING ORES.

Article 1. The executive is hereby authorized to acquire, by a contract of purchase or of use, a process for the beneficiation of ores that shall especially apply to those of gold and silver, and which shall fulfill the following conditions: I. The loss in the treatment shall not exceed two per cent. of the contents of gold or silver in the ore. II. The cost of the treatment shall not exceed \$3 for every ton of ore. III. The cost of the machinery and apparatus to treat one thousand tons of ore per month shall not exceed \$6,000.

Art. 2. The executive is equally authorized: I. To concede an especial patent for any term, up to twenty-five years, to the inventor or enterprise that shall plant the said process in this country. II. To concede to the same parties the introduction, free of duties for the time that the patent may last, and with the limitations of the following articles: *a.* Materials that are to be exclusively employed in the construction of the machinery and apparatus for the beneficiation. *b.* Machinery and apparatus for the elaboration of the reagents that may be used in the process. *c.* The reagents that are employed in the beneficiation, while they are not produced in this country in such quantity as is necessary for the needs of the process, according to the estimate previously made by the enterprise and approved by the ministry of public works. All such importations shall be subject to the rules and limitations that may be laid down by the secretaries of the treasury and of public works. III. To concede to the enterprise an exemption from all taxes except the stamp tax, during the twenty-five years, for all the capital that may be invested exclusively in machinery and in apparatus for the beneficiation and for the production of the necessary reagents.

Art. 3. To agree with the enterprise as to the highest royalties that it can charge for the use of its process, taking for a basis the economy that may be occasioned thereby.

Art. 4. At the time of granting the patent and of conceding the exemptions to which the preceding articles refer, the executive shall have power to stipulate that the treasury shall receive a certain percentage, that he may consider just, of the royalties that the enterprise may collect from such persons as may make use of their process, and a like proportion of the profits that may result from the ores that they may work on their own account and for the account of other parties.

Art. 5. The executive will be careful to stipulate: I. That the apparatus and machinery shall be made in this country. II. That the enterprise shall sell the same to any person who may solicit them for use in this republic, at a price not to exceed that mentioned in Article 1, and with the understanding that the cost of treatment and the loss of the precious metals shall not exceed that designated in the same article, under the guarantee of the enterprise. III. That the enterprise shall not charge for the use of the process, to anyone who may wish to employ it in this country, any royalties except those designated in the contract.

Art. 6. In case in which the executive acquires the process by a contract of purchase, he must submit the same to the approval of congress.

# LIST OF MINING COMPANIES AND OPERATORS

IN THE  
UNITED STATES OF AMERICA

(SEE ALSO SUPPLEMENTARY LIST, PAGE 417)

## ALABAMA

### COAL-BITUMINOUS

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, COKE OVENS, AND NAME OF MINE SUPERINTENDENT.
TOWNS AND COUNTY.	
Adger Ry. 408.	Jefferson De Bardeleben Coal & Iron Co., Bessemer, Ala. H. T. De Bardeleben, pres't., David Roberts, v.-pres't.; Andrew M. Alger, secy. and treas. Cap. st'k. \$10,000,000. Henryvellen. Slopes, 146,535 tons; steam; 280 coke ovens, capacity 107,550 tons. L. W. Johns, supt.
Aldrich Ry. 240.	Shelby Montevallo Coal & Transportation Co., W. F. Aldrich, pres't. and mgr.; J. L. McConaughy, treas. and secy. Cap. st'k. \$300,000. Montevallo. Slope, 40,000 tons; steam. W. F. Aldrich, supt.
Alexander City, Tallapoosa Ry. Gadsden 240, 408.	O. Christopher, Gadsden, Ala. Little Gem. Slope, 6,000 tons; steam. Alf. Rolands, supt.
Birmingham Ry. 240, 280, 351, 408, 422, 622.	Jefferson Eclipse Coal Co., John F. Renfro, pres't. and mgr.; Howard G. Crowder, secy. and treas. Cap. \$20,000. Eclipse. Slope, 70,000 tons; steam. Thomas A. Butler, supt.
Blocton Ry. 240, 408.	Bibb The Calhoun Coal Mining Co., T. H. Aldrich, pres't. and treas.; John Grote, secy.; Cornelius Cadle, v.-pres't. and mgr. Cap. st'k. \$1,400,000. Six mines. Slope, shaft and drift, 750,000 tons; steam; washer; 467 coke ovens, capacity 150,000 tons. P. B. Thomas, supt.
Blossburg Ry. 622.	Jefferson Sloss Iron & Steel Co., Birmingham, Ala. Thomas Seddon, pres't.; W. L. Sims, secy. and treas.; H. W. Perry, mgr. Cap. st'k. \$3,700,000. Blossburg. Open pit, drift, 250,000 tons; steam, horse; breaker. C. P. Beddon, supt.
Brookside Ry. 622.	Jefferson Sloss Iron & Steel Co., Birmingham, Ala. Thomas Seddon, pres't.; W. L. Sims, secy. and treas.; H. W. Perry, mgr. Cap. st'k. \$3,700,000. Brookside. Open pit, drift, 250,000 tons; steam, horse; breaker. C. P. Beddon, supt.
Brookwood Ry. 408.	Tuscaloosa The Standard Coal Co., H. L. Eulshen, pres't., T. M. Jackson, secy., treas. and mgr. Cap. st'k. \$500,000. Drift and slope, 300,000 tons; steam, horse, washer, 202 coke ovens, capacity 85,000 tons.
Carbon Hill Ry. 351.	Walker Carbon Hill and Lost Creek Coal Co., J. W. Shepherd, pres't.; E. Bynon, secy.; J. W. King, treas. and mgr. Cap. st'k. \$15,000. Shaft, drift, steam. E. Bynon, supt.
"	" McDonald Coal Co., F. A. Gamble, pres't.; Daniel McDonald, secy. and treas.; John McDonald, mgr. Cap. st'k. \$50,000. Shaft, 350,000 tons; steam. John McDonald, supt.
"	" Morris-Goss Mining Co., R. U. Goss, secy. and treas.; O. R. Morris, mgr. Cap. st'k. \$15,000. Maner and Ethel. Slope, shaft, 100,000 tons; steam.
Cardiff Ry. 622.	Jefferson Sloss Iron & Steel Co., Birmingham, Ala. Thomas Seddon, pres't.; W. L. Sims, secy. and treas.; H. W. Perry, mgr. Cap. st'k. \$3,700,000. Cardiff. Open-pit, drift, 250,000 tons; steam, horse; breaker. C. P. Beddon, supt.
Clements Depot Ry. 6.	Tuscaloosa Gould & Son, Wm. A. Gould, pres't., secy. and treas.; Thomas J. Gould, mgr. Cap. st'k. \$50,000. Gould's. Shaft, 114,000 tons; steam. Wm. J. Gould, supt.
Coalburg Ry. 622.	Jefferson Sloss Iron & Steel Co., Birmingham, Ala. Thomas Seddon, pres't.; W. L. Sims, secy. and treas.; H. W. Perry, mgr. Cap. st'k. \$3,700,000. Coalburg. Open pit, drift, 250,000 tons; steam, horse; breaker; 732 coke ovens. C. P. Beddon, supt.
Coal City Ry. 234.	St. Clair Coal City Mining Co., J. H. Vivion, pres't.; John Postell, secy. and treas.; W. P. Laramore, v.-pres't. and mgr. Cap. st'k. \$100,000. Nos. 1 and 2. Slope, 40,000 tons; steam; 60 coke ovens, capacity 18,000 tons. Wm. Herbert, supt.
Coaling Ry. 35.	Tuscaloosa Coaling Coal & Coke Co., A. J. Lyle, pres't.; S. Frank Perkins, secy. and treas. Cap. st'k. \$100,000. Perkins. Slope, 100 tons; steam. S. Frank Perkins, mgr.
Collinsville Ry. 612.	Cherokee Wright & Adams, Leonard, Ala. (local). Open pit, 50 tons.
Connellsville Mines Ry. 408.	Jefferson Alabama-Connellsville Coal & Coke Co., H. H. Epping, pres't.; B. S. Maulrshy, secy. and treas.; C. G. Abercrombie, mgr. and v.-pres't. Cap. st'k. \$700,000. Connellsville Mines. Slope, 30,000 tons; steam; 50 coke ovens, 20,000 tons. Edward D. Lewis, supt.

## COAL—BITUMINOUS—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT			NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, COKE OVENS, AND NAME OF MINE SUPERINTENDENT.
TOWN	AND	COUNTY.	
Corona	Walker	Corona Coal & Coke Co., Jasper, Ala. John Greenough, pres.; E. G. Storey, secy. and treas.; L. Bellis- grove, gen. mgr. Cap. stk. \$100,000. Corona Nos. 1, 2 and 3. Drifts, slope, 300,000 tons; steam, horse; breaker; washer; 30 coke ovens. Peyton Norvell, supt.	
Cullman	Cullman	Fuller, Parker & Co., Parker and Fuller. Pit; hand. Marcell Schmitt, supt.	
De Berniere	Jefferson	Little Warrior Coal Co., Birmingham, Ala., National Bank Bldg. Richard Thomas, pres.; J. de B. Hooper, secy. and treas. Cap. stk. \$10,000. De Berniere. Slope, 30,000 tons; horse, steam.	
Gadsden	Etowah	Obel Christopher & C. A. Clayton. Gadsden Mines. Slope, 72,000 tons; hand, steam; breaker.	
"	"	The Sam Clayton Coal Co., 415 Broad st. J. S. Clayton, pres. and mgr.; J. M. Flood, secy.; M. C. McCauly, treas. Cap. stk. \$10,000. Natchez. Tunnel, 5,000 tons; steam. Sam Clayton, supt.	
Gamble Mines	Walker	Townley Coal & Coke Co., Jasper, Ala. J. C. Neely, pres.; J. B. Carrington, secy., treas. and mgr. Cap. stk. \$400,000. Gamble. Slope, drift, 120,000 tons; steam, compressed air; 300 coke ovens. A. P. Van Fleet, supt.	
Gurnee	Shelby	Excelsior Coal Co., T. H. Aldrich, pres. and treas.; A. H. Carpenter, secy.; Cornelius Cadle, mgr. Cap. stk. \$1,420,000. Anita and Buck Mountain. Slopes, 100,000 tons; steam. J. E. Strong, supt.	
Horse Creek	Walker	Dora Coal Mining Co., J. T. Morgan, pres.; R. E. Morgan, secy. and treas. Cap. stk. \$100,000. Dora. Drift, 75,000 tons; horse. W. A. Gray, supt.	
"	"	Thomas Price & Co., Thomas Price sr., pres. and mgr.; W. A. Price, secy. and treas. Cap. stk. \$25,000. National. Slope, 120,000 tons; steam. D. Hatten, supt.	
Inman	St. Clair	Inman Mines, St. Clair Coal Co., Ragland, Ala., R. L. Robinson, pres.; J. C. Mellichamp, secy.; Rees C. Harris, mgr. Slope, tunnel, 25,000 tons; steam. Rees C. Harris, supt.	
Jasper	Walker	Coal City Coal & Coke Co., Birmingham, Ala., Room 4 Morris Bldg. R. D. Johnston, pres.; Joe R. Cook, secy. Coal City and Cahmet. Drifts, 40,000 tons; horse.	
Johns	Jefferson	De Bardeleben Coal & Iron Co., Bessemer, Ala. H. T. De Bardeleben, pres.; David Roberts, v.-pres.; Andrew M. Adger, secy. and treas. Cap. stk. \$10,000,000. Blue Creek. Slopes, 146,535 tons; steam; 280 coke ovens, 102,550 tons. L. W. Johns, supt.	
"	"	Tuggle-Ellis Mining Co., J. D. Tuggle, pres. and mgr.; P. C. Ellis, secy. and treas. Cap. stk. \$100,000. Herring. Open pit, 180,000 tons; horse. C. W. Hawkins, supt.	
Leonard	Cherokee	David T. Adams (local). Open pit, 10 tons; hand.	
Lewisburg	Jefferson	The Mary Lee Coal & Railway Co. J. A. Montgomery, pres. and gen. mgr.; T. M. Frazier, secy.; Geo. W. West, treas. Cap. stk. \$500,000. Mary Lee. Slope, 150,000 tons; steam; washer; 110 coke ovens, capacity 40,000 tons. Wm. I. Gilmore, supt.	
Lockhart	Walker	Lockhart Coal Co., Corona, Ala. E. W. Coleman, pres.; T. C. Smithson, secy.; B. L. Smithson, treas. M. Sanders, mgr. Cap. stk. \$24,000. Lockhart. Slope, 24,000 tons; steam. A. D. R. Luter, supt.	
Morris	Jefferson	J. F. Rogers (local). Rogers. Tunnel, 40 tons.	
Mounds	Jefferson	Alethia Coal & Mining Co., Birmingham, Ala., Morris Bldg. W. M. Mayer, pres.; R. G. Mallott, secy. and treas.; C. B. Walker, mgr. Cap. stk. \$25,000. Alethia. Slopes, 10,000 tons; steam. H. H. Graves, supt.	
Palos	Jefferson	Turner Coal Co., Birmingham, Ala., Morris Bldg. Chas. Turner, pres.; R. H. Turner, vice-pres. and gen. mgr.; A. Ladaly, secy. and treas. Cap. stk. \$20,000. Turner. Tunnel, 90,000 tons; horse; washer. R. H. Turner, supt.	
Patton	Walker	Deer Creek Coal Co., Marietta, Ala. J. E. Cooke, pres. and gen. mgr. Cap. \$10,000. Deer Creek. Slope, 36,000 tons; horse. Wm. Faid, supt.	
Pratt Mines	Jefferson	Tennessee Coal, Iron & R. R. Co., Thomas C. Platt, pres.; Jas. Bowron, secy. and treas.; G. B. McCor- mack, mgr. Cap. stk. \$10,000,000. Pratt. Slope, shaft, drift, 1,250,000 tons; steam; washer; 1,035 coke ovens, capacity 425,000 tons. Erskine Ramsay, supt.	
Quinton	Jefferson	Reid & Glover, J. L. Glover, pres.; J. S. Reid, secy. and treas.; M. McLarity, mgr. Cap. \$200,000. Quinton. Slope, steam. M. McLarity, supt.	
Ragland	St. Clair	Hudson & Co., Greenville, S. C., 207 Washington st. Frank Hamands, pres.; J. H. Morgan, secy.; W. A. Hudson, treas.; E. E. Clayton, mgr. Cap. stk. \$100,000. Tunnel, slope, 40,000 tons; washer; 10 coke ovens. E. E. Clayton, supt.	
"	"	St. Clair Coal Co. R. L. Robinson, pres.; J. C. Mellichamp, secy. and treas.; Rees C. Harris, mgr. Shaft and slope, 35,000 tons; steam; washer; 10 coke ovens, capacity 10,000 tons. Rees C. Harris, supt.	
Russellville	Franklin	Lady Ensley Coal, Iron & R. R. Co. W. M. Sunde, pres.; Thos. D. Radcliffe, secy. and treas.; Walter Moore, mgr. Cap. stk. \$30,000,000. Lady Ensley. 200,000 tons; steam. R. L. Williamson, supt.	
Shannon	Bibb	De Bardeleben Coal & Iron Co., Bessemer, Ala. H. T. De Bardeleben, pres.; David Roberts, v.-pres.; Andrew M. Adger, secy. and treas. Cap. stk. \$10,000,000. Helena. Slope, 146,535 tons; steam; 280 coke ovens, capacity 102,550 tons. L. W. Johns, supt.	
Sumter	Jefferson	De Bardeleben Coal & Iron Co., Bessemer, Ala. H. T. De Bardeleben, pres.; David Roberts, v.-pres.; Andrew M. Adger, secy. and treas. Cap. stk. \$10,000,000. Blue Creek. Slopes, 146,535 tons; steam; 280 coke ovens, capacity 102,550 tons. L. W. Johns, supt.	
Tuscaloosa	Tuscaloosa	Alabama Insane Hospital (local). Shaft, 2,730 tons; steam. Dr. P. Bryce, mgr.	
"	"	A. Durie (local). Cap. \$3,000. Shaft, 4,000 tons; steam.	
Warrior	Jefferson	Mabel Mining Co., T. M. Davidson, pres. and treas.; L. K. Moss, secy. and mgr. Cap. \$30,000. Mabel. Tunnel, 50,000 tons; horse. L. K. Moss, supt.	
"	"	Watts Coal & Iron Co., A. W. Graham, pres.; W. C. Ruffin, secy., treas. and mgr. Cap. stk. \$210,000. Watts. Open pit, 50,000 tons; horse; 33 coke ovens, capacity 120,000 tons. W. C. Ruffin, supt.	
Wymond	Jefferson	Trussville Furnace & Mining Co., Trussville, Ala. R. D. Smith, mgr. Cap. stk. \$800,000. Bradford. Slope, 60,000 tons; steam; 103 coke ovens, capacity 25,000 tons. Harry Watkins, supt.	

## GOLD AND SILVER

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
Edwardsville Ry. 622.	Cleburne	J. B. Merrill Co., J. B. Merrill, pres.; Wm. Hamilton, secy.; F. C. Merrill, treas.; John Driesbach, mgr. Pineucky, gold, 100 tons; refractory; steam; 10 stamps. John Driesbach, supt.

## IRON

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, BLAST FURNACES, ETC., AND NAME OF MINE SUPERINTENDENT.
Allice Ry. Fossie 408.	Jefferson	J. R. & C. J. Smith, Fossie, Ala. A. J. Ferrell, mgr. Fossie, Wares, Muscudo, red ore. Slopes, 360,000 tons; steam; furnace. A. J. Ferrell, supt.
Anniston Ry. 408.	Calhoun	Woodstock Iron Co., T. G. Bush, pres.; J. W. Stillwell, secy. and treas.; S. N. Noble, mgr. Cap. stk. \$3,000,000. Woodstock, brown hematite. Open, 150,000 tons; steam, horse; 2 furnaces, 60,000 tons. John Ballard, supt.
Attalla Ry. 35, 126, 240, 408.	Etowah	Attalla Mining & Manufacturing Co., Chattanooga, Tenn., 408 Richardson Bldg. W. M. Nixon, pres. and treas.; John C. Knox, secy.; Geo. W. Nixon, mgr. Cap. stk. \$30,000. Attalla, Winchester, red fossiliferous. Tunnel, 50,000 tons; horse. John C. Knox, supt.
"	"	William Nielson, Chattanooga, Tenn. Attalla. Tunnel, 350,000 tons; hand, steam. Wm. Nixon, mgr. and supt.
Bessemer Ry. 408.	Jefferson	Sloss Iron & Steel Co., Birmingham, Ala. Thomas Seddon, pres.; W. L. Sims, secy. and treas. Sloss, red hematite. Slope, 200,000 tons; steam and compressed air. C. P. Liding, supt.
Brierfield Ry. 240.	Bibb	Alabama Iron & Steel Co., T. J. Peter, pres.; E. T. Peter, secy. Cap. stk. \$1,000,000. Bibb, brown hematite. Open pit, 20,000 tons; furnace.
Cedar Bluff Ry. Lawrence 240.	Cherokee	Burnett & Smyer, R. Lawrence, pres. and gen. mgr.; James F. Burnett, secy. and treas. Cap. stk. \$200,000. Stallings, red fossiliferous. Slope, 1 N. Tunnel, supt.
Champion Ry. 408.	Blount	J. W. Worthington & Co., Birmingham, Ala. Cap. \$1,000,000. Champion, brown hematite. Open pit; steam; washer. W. A. Wall, supt.
Gadsden Ry. Thomson's Switch 622.	Etowah	Bean Mining Co., Robert Bean, mgr. Red hematite. Slope, 12,000 tons, horse.
"	"	Fitzgerald & Smith, 319 1/2 Broad st., P. S. Fitzgerald, pres., secy. and treas.; Louis Smith, mgr. Cap. \$5,000. Red hematite. Tunnel, 35,000 tons; hand, horse. Louis Smith, supt.
"	"	Gadsden Iron Co., A. J. Crawford, pres.; T. W. Stewart, secy., treas. and mgr. Gadsden, red hematite. Open, 12,000 tons; hand.
"	"	J. W. Hammond, Cap. \$10,000. O'Conner, red hematite. Open pit, 126,000 tons; horse; steam; furnace, 100 tons. J. W. Hammond, supt.
"	"	James G. Thomson. Red fossiliferous hematite. Slope, open, pit, 4,800 tons; horse.
Irondale Ry. Ruffner 612, 622.	Jefferson	Sloss Iron & Steel Co., Birmingham, Ala. Thomas Seddon, pres.; W. L. Sims, secy. and treas. Sloss Irondale, red hematite. Drift, 125,000 tons; gravity. Thomas C. Culverhouse, supt.
Kaolin Ry. James Switch 35.	De Kalb	J. M. Cox, Cap. \$1,000. Kaolin, red fossiliferous. Tunnel, open pit, 6,000 tons; horse.
Laney Ry. 408.	Calhoun	J. C. Laney & J. E. Line, J. C. Laney, gen. mgr. Cap. \$10,000. Laney's, red and brown hematite. Tunnel, open pit; hand. W. T. Burk, supt.
"	"	J. E. Line & Co., Cap. \$10,000. Bonanza, brown hematite. Open pit, 20,000 tons; hand. Chas. Travis, supt.
Rendalia Ry. 408.	Talladega	Reynolds Iron Co., Col. Gordon McKay, pres.; W. A. Glover, mgr. and treas. Cap. \$100,000. Reynolds, brown hematite. Open pit, 60,000 tons; steam. W. A. Glover, supt.
Russellville Ry. 61.	Franklin	Lady Ensley Coal, Iron & R. R. Co., W. M. Sumde, pres.; Thos. D. Radcliffe, secy. and treas.; Walter Moore, mgr. Cap. stk. \$30,000,000. Lady Ensley, hematite, 150,000 tons; steam; washer. R. L. Williamson, supt.
Shelby Ry. 408.	Shelby	Shelby Iron Co., T. G. Bush, pres.; H. C. Cooper, secy.; N. S. Gurnee, treas. Shelby, brown hematite, Furnaces.
Tecumseh Ry. 234, 240.	Cherokee	Tecumseh Iron Co., P. U. Moore, pres.; P. B. Warner, secy.; S. J. Fearing, treas. and mgr. Cap. stk. \$200,000. Baker Hill, brown hematite. Open pit, 50,000 tons; furnace; 15,000 tons.
Warrior Ry. 408.	Jefferson	Hoene Warrior & Jefferson Coal Co., B. H. Frank Hoene, pres. and mgr.; W. A. Hoene, secy. Cap. stk. \$100,000. Hoene Warrior, black band. Drift, slope; steam. W. A. Hoene, supt.

## MINERAL PAINT

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF PRODUCT, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, PAINT MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
Consola Station Ry. 408.	Elmore	Gayle & Sempie, Montgomery, Ala. Yellow ocher. Tunnel, 500 tons; steam.
Jackson Ry. 462, 708.	Clarke	Jackson Golden Ochre Co., A. M. Wing, pres.; Geo. W. Powe, secy. and treas., M. L. Pritchett, mgr. Cap. stk. \$10,000. Yellow ochre. Tunnel; steam.
Perdue Hill Ry. Claiborne 7.	Monroe	Claiborne Ochre Co., Selma, Ala. R. H. Azee, pres. and mgr.; H. P. Azee, secy.; W. C. Azee, treas. Cap. stk. \$5,000. Yellow ochre. Open pit.

## STONE, MARBLE, GRANITE AND ONYX

LOCATION OF MINE OR QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT.			NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE OR QUARRY, KIND OF STONE, KIND OF MINE OR QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STONE OR MARBLE MILLS, LIMESTONES AND CAPACITY, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN	AND	COUNTY.	
Bridgeport	.....	Jackson Ry. 430, 482, 746.	Bridgeport Stone Co., Frank H. Edwards, prest. and mgr.; J. Bradley Patterson, secy. and treas. Cap. stk. \$10,000. Deptford and Riverside, gray sandstone and blue limestone. Open pit; horse, hand. A. Melroe and Jas. Kelly, supts.
Isbell	.....	Franklin Ry. Darlington 61.	Isbell Quarry Co. Charles F. Conrad, prest. and mgr. Limestone for fluxing.
Luyerne	.....	Crenshaw Ry. 6.	C. R. Brickell & Co. Cap. \$5,000. Limestone. Steam; limekilns.
Rock Springs	.....	Etowah Ry. 408.	C. Midgley & Co. Cap. \$6,000. Rock Spring, limestone. Open pit, 30,000 tons; steam; limekiln, 900 tons.
South Florence	.....	Colbert (P. O. Florence) Ry. 408.	Florence Cotton & Iron Co., Philadelphia, Pa., 330 Walnut st. Abraham S. Patterson, prest.; James Pollock, secy. and treas.; Daniel King, mgr. Limestone. Open pit, 45,000 tons; steam. Thomas Keefe, supt.

SEE ALSO SUPPLEMENTARY LIST



# ALASKA

## COAL—BITUMINOUS

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, CORE OVENS, AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Killsnoo, All shipments to and from Alaska points via Pacific Ocean 52.	James McClasky. Open pit, hand.
Seward, Cook's Inlet	Alaska Coal Co., San Francisco, Cal., 216 Sacramento st. W. H. Eastland, pres.; S. M. Eastland, California Safe Deposit & Trust Co., treas.; W. T. Robinson, mgr. Cap. stk. \$2,000,000. Kacheemak, tunnel, 1,500 tons; hand, W. T. Robinson, supt.
Fing Island, (P. O. Victoria, B. C.)	Coal Harbor Coal Mining Co., San Francisco, Cal., 40 California st. Irwin C. Stump, pres.; C. W. McAfee, v.-pres.; J. R. Howell, secy.; A. S. Baldwin, treas.; John C. Green, mgr. Cap. stk. \$2,000,000. Tunnels, 150,000 tons; steam.

## GOLD AND SILVER

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC. AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Douglas, Douglas Isl. All shipments to and from Alaska points via Pacific Ocean 52.	Alaska-Treadwell Gold Mining Co., San Francisco, Cal., 420 Montgomery st. Willard Alvord, pres.; A. T. Corbus, secy.; J. P. Corbus, treas.; R. Duncan Jr., mgr. Cap. stk. \$5,000,000. Alaska, Treadwell, gold. Open pit, shafts, tunnels, 200,000 tons; free and refractory; steam; 730 stamps. R. Duncan Jr., supt.
" " "	The Pansy Mining Co., Pansy, gold and silver. Tunnel; free.
Fish River, Alaska (P. O. Sitka) Golovin Bay 52.	The Omilak Gold & silver Mining Co., San Francisco, Cal., 40 California st. John C. Green, mgr. Cap. stk. \$10,000,000. Omilak and Pioneer. Tunnel, 312,000 tons; free; steam.
Juneau, Ry. 52.	Bismark Mining & Milling Co., Portland, Ore. S. Young, pres.; Fred. Goetz, secy.; J. S. Spencer, treas. Cap. stk. \$500,000. Bismark No. 2, gold. Tunnels, free; steam. Fred. Schultz, supt.
" " "	Archibald Campbell, Fuller First, gold and silver. Tunnels and placer, 800 tons; free and refractory, water; 5 stamps and pulverizer.
" " "	Denver Summit Gold Co., Boston, Mass., 27 Washington st. Harrison L. Fisk, pres. and treas.; Fred. L. Gleason, secy.; Winthrop W. Fisk, mgr. Cap. stk. \$500,000. Denver Summit, gold. Tunnel; free and refractory; steam; 20 stamps. M. Le Page, supt.
" " "	Juneau Mining & Manufacturing Co., Eau Claire, Wis. M. Wadleigh, pres.; R. H. Downing, secy.; J. F. Miller, treas.; Wm. M. Eborer, mgr. Cap. stk. \$1,250,000. Gold. Tunnel, 5,000 tons; free; water; 10 stamps. Wm. M. Eborer, supt.
" " "	Last Chance Placer Mining Co., Cap. \$500,000. Last Chance, gold. Placer, hydraulic. William Nelson, supt.
" " "	Nowell Gold Mining Co., Portland, Maine. Thos. S. Nowell, pres.; Arthur L. Nowell, secy.; Hon. Albert C. Howard, treas.; Fred. K. D. Nowell, mgr. Cap. stk. \$2,000,000. Gold and silver. Hydraulic, quartz, free, water; 20 stamps. John Olds, supt.
" " "	Shuck Bay Placer Mining Co., Jersey City, N. J., 4 Montgomery st. Shuck Bay, gold. Placer; water.
" " "	Starr & Reed, Phillip Starr, secy.; W. F. Reed, treas. Gold. Open; free; steam and water.
" " "	Willoughby & Weir, Cap. \$15,000. Tellurian Group, gold. Slope, open pit; refractory and free; water, 5 stamps.
" " "	H. S. Wyman, Dora, gold. Tunnel; free; water; arrastre.

### SEE ALSO SUPPLEMENTARY LIST

# ARIZONA

## COPPER

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, FURNACES, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Clifton.....Graham Ry. 692.	Arizona Copper Co., Ltd. James Colquhoun, prest. and mgr.; J. G. Hopkins, secy. and treas. Cap. stk. \$3,000,000. Longfellow, Metcalf, Simpson and Coronado Groups, copper. Shafts, tunnels and open cuts, 50,000 tons; self-fluxing and siliceous; water and steam; water jacket, 70,000 tons. James Colquhoun, supt.
"....."	Silver & Copper Cliff Mining Co., Nevada, Mo. Will F. Norman, prest.; J. D. Wevay, secy.; W. H. Robinson, treas. Copper Cliff, copper. Tunnels and shafts; carbonates and black sulphides.
Globe.....Gila Ry. Wilcox 692.	Old Dominion Copper Co., Baltimore, Md., Keyser Bldg. Wm. Keyser, prest.; Jos. Clendenin Jr., secy.; R. Brent Keyser, treas. Old Dominion, copper. Shaft, 38,000 tons; steam; 3 water jackets, 50,000 tons. A. L. Walker, supt.
Morenci.....Graham Ry. Clifton or Lords- burg 692.	Detroit Copper Mining Co. of Arizona, New York City, 99 John st. Wm. Church, prest. and mgr.; Jos. Van Vleet, secy. and treas. Copper Mountain and others, copper. Shafts, tunnels and pits, 25,000 tons; steam; 4 water jacket furnaces. Gordon McLean, supt.
Pantano.....Pima Ry. 26, 692.	W. B. McCleary. Niagara Group, copper. Shaft and tunnel, 9,000 tons; oxide and carbonate; horse.
Tucson.....Pima Ry. Desert 692.	J. K. Gooding, P. O. Box 236, Cap. \$100,000. Young America, copper. Shafts, tunnels and levels, 9,000 tons; oxide; steam; water jacket furnace, 25 tons.

## GOLD AND SILVER

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Agua Fria Valley, Yavapai Ry. Prescott 604.	Frank McCabe. Gladstone, gold. Shafts and tunnels, 300 tons; refractory; horse and hand.
"....."	Willard Rice. Cornucopia, gold and silver. Open pit and shaft; free; water.
Arivaca.....Pima Ry. Tucson 692.	Ates & Wieck. Red Rock, silver. Shaft and tunnel; free; hand.
"....."	Wm. J. Clark, Tucson, Ariz. Horn Silver, gold, silver and lead. Shafts and tunnels, 50 tons; free and refractory.
"....."	John P. Hedigan. Cap. \$50,000. Hedigan, gold. Tunnel; free; steam; 10 stamps.
"....."	John Sexton. Cap. \$5,000. Cockatoo, Ballarat and Broken Hill, gold and silver. Tunnels and shafts, 100 tons; refractory; hand.
Castle Dome Ldg. Yuma (P. O. Yuma) Ry. 692.	Hodges Bros., Yuma, Ariz. Cap. \$5,000. Washington, silver and lead. Shaft, 350 tons; free and refractory; horse and hand.
Cedar Valley, Mohave P. O. and Ry. King- man 26.	Diamond Joe Mining Co. Diamond Joe, silver, copper and lead. Shaft and tunnel, 150 tons; refractory; hand.
Cherry.....Yavapai Ry. Prescott 604 (32 m.)	James E. & John Allen. Wheatley, Mammoth. Shaft, open cut, 250 tons; free; water; mill.
"....."	Mocking Bird Mining & Milling Co. Richard De Kuhn, prest. and mgr.; Clarence Williams, secy. and treas. Cap. stk. \$48,000. Mocking Bird and 4 others, gold. Shaft and tunnels, 3,000 tons; free; steam; 10 stamps. Richard De Kuhn, supt.
"....."	J. H. B. Smith. Cap. \$2,500. Rocky Pass, gold. Tunnel and slope, 300 tons; free; water.
Chloride.....Mohave (P. O. Mineral Park) Ry. Kingman 26.	Hampton, McDufee & Co., Mineral Park, Ariz. Rain Bow, gold and silver. Tunnel, shafts and slopes, 200 tons; free and refractory; hand. H. B. Hampton, supt.
Clifton.....Graham Ry. 19.	Golden Eagle Gold & Silver Mining & Smelting Co., Bangor Me., 67 Hartow st. Arthur C. Higgins, prest.; S. Willis Whitcomb, secy. and treas. Cap. stk. \$800,000. Golden Eagle and 2 others, gold and silver. Tunnel, drift; free, refractory; hand (developing). J. F. Smart, supt.
Cottonwood.....Yavapai Ry. Prescott 604.	Munds, Campbell & Olden. Supply, Nozarth and Cross Cut, gold. Shaft; free; steam; arrastre.
Crown King.....Yavapai Ry. Prescott 604.	Crowned King Mining Co., Edinburg, Ill. O. F. Place, prest.; N. C. Shekels, secy.; Geo. P. Harrington, treas. Cap. stk. \$6,000,000. Crowned King, gold and silver. Tunnel, 6,000 tons; refractory; steam. 110 stamps. John Martin, supt.
Dos Cabezos.....Cochise Ry. Wilcox 692.	Oak Grove Mining & Milling Co. Chas. S. Atlix, mgr. Glenwood, Oak Grove and others, gold and copper. Shafts, 200 tons; free; steam and horse; Dyer mill and concentrator. Chas. S. Atlix, supt.
Dragoon Summit, Cochise Ry. 692.	N. Bell, Pinos Altos, N. M. Santa Loed, gold and lead. Shafts, 500 tons; free and refractory; hand. N. Bell, supt.
Globe.....Gila Ry. Bowle 692.	Fame Mining Camp. Chas. Denhard, mgr. and supt. Fame, silver. Tunnel; free; hand.
"....."	R. E. Humphrey. Gold and silver. Shaft; free; hand.
"....."	C. Ruckelshausen, Box 102. London, Hartford and 2 others, silver. Open pit, shaft, tunnel and slope; free.
Gold Basin.....Mohave Ry. Hackberry 26.	Carey & Merrill. Christmas Gift, gold. Tunnel, 1,300 tons; free; water; arrastre.

## GOLD AND SILVER—(CONTINUED).

LOCATION OF MINE, RAILWAYS, WATER RIGHTS AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Gold Basin.....Mohave (Continued.)	O. K. Mining & Milling Co., Kansas City, Mo., New England Bldg. Milton Welsh, pres.; C. Kinney, secy.; Newton Welsh, treas.; Frank Welsh, mgr. Cap. stk. pd. \$300,000. O. K. and Excelsior, gold, shafts and tunnels, 6,000 tons; free; steam; 10 stamps. R. G. Patterson, supt.
"....."	Henry Schaefer. Cap. \$15,000. Mountain View, Miners' Delight, gold and silver. Shaft; free.
Greenterville.....Pima Ry. Sonita 26.	Cornelia Mining Co., St. Louis, Mo. H. V. Kent, pres.; J. H. Sulbornton, secy. Monitor, silver and lead. Shaft; refractory (developing).
"....."	Thomas Deering. Belmont, gold, silver and lead. Tunnel and shaft; refractory; hand (developing).
Gunsight.....Pima Ry. Gila Bend 692.	Silver Gilt Mining Co., Kansas City, Mo., 16 and 17 Gibraltar Bldg. E. B. Wingate, pres.; Morton Thayer, secy., treas. and mgr. Cap. stk. \$10,000,000. Gunsight and Silver Gilt, silver, shafts and tunnels, 15,000 tons; refractory; steam; 20 stamps. James F. Ryan, supt.
Harqua Hala.....Yuma Ry. Aztec 692.	Bonanza & Golden Eagle Mining Co. A. G. Hubbard, pres., mgr. and supt.; H. E. Harris, secy.; G. W. Bowers, treas. Cap. stk. \$500,000. Gold Mountain, gold. Shaft, 26,000 tons; free; steam; 20 stamps.
"....."	Hubbard & Bowers. A. G. Hubbard, pres. and mgr.; H. E. Harris, secy.; Wells, Fargo & Co. Bank, treas. Cap. stk. \$700,000. Harqua Hala, Bonanza and Golden Eagle, gold. Shaft, 28,800 tons; free; steam; 20 stamps. A. G. Hubbard, supt.
Kingman.....Mohave Ry. 26.	Arkansas & San Antonio Mining & Milling Co., East St. Louis, Ill. Wm. Stroh, pres.; J. H. Donnewald, secy.; F. H. Miller, treas.; O. F. Kuenser, mgr. and supt. Cap. stk. \$200,000. Arkansas and San Antonio, gold and silver. Shaft; steam (developing).
"....."	Bowers & Co. F. F. Baldwin, mgr. Night Hawk, gold and silver. Tunnel and shaft; refractory; tunnel, G. M. Bowers, supt.
"....."	Foster S. Dennis & J. J. Jerome. Cap. \$20,000. Tibulco, silver and lead. Shaft; refractors; horse (develop- ing). J. J. Jerome, supt.
"....."	Gold Bug Mining Co., Colorado Springs, Colo., 13 Hagerman Block. Walter F. Crosby, pres.; W. H. Leonard, secy. and treas.; Robert J. Grant, mgr. Cap. stk. \$1,000,000. Gold Bug, gold. Shaft; free; horse (developing).
"....."	John Lynch & F. S. Dennis. Cap. \$50,000. C. O. D., gold, silver and lead. Shaft, 8,000 tons; refractory; steam; pulverizers. Chas. Lynch, supt.
"....."	Primrose Mining Co. Geo. M. Bowers, mgr. and supt. Primrose, silver. Shaft; refractory (developing).
Lost Basin.....Mohave (P. O. Gold Basin) Ry. Haekberry 26.	M. Scanlan. Cap. \$15,000. Julia and Mono, gold. Tunnel, 100 tons; refractory; water; arrastre.
Mammoth.....Pinal Ry. Tucson 692.	Mammoth Gold Mines, Ltd., London, England, 257 Winchester House, Old Broad St. James Hastings, pres., Charles Goodyear, secy.; Joseph W. Johnston, mgr. Cap. stk. \$2,500,000. Mammoth, gold, shaft, 25,000 tons; free; steam; 50 stamps. Andrew J. Collins, supt.
Mineral Park.....Mohave Ry. Kingman 26.	C. E. Sherman. Distal, gold and silver. Shaft, 500 tons; refractory; steam. F. W. Thies, supt.
"....."	Stephen Smith. Samoa, gold. Tunnels and shafts; refractory; horse (developing).
Nogales.....Pima Ry. Calabasus 26.	H. A. Read. St. Patrick and San Francisco, silver. Shaft, tunnel, 1,000 tons; free; steam; 5 stamps. M. W. Read, supt.
Oro Blanco.....Pima Ry. Tucson 692 (68 m.)	Austerlitz Gold Mining Co., Norwich, Conn. Walter I. McCoy, pres.; Frank A. Mitchell, secy. and treas.; C. W. Kempton, mgr. and supt. Cap. stk. \$200,000. Austerlitz, gold and silver. Tunnel and open pit; free; steam.
"....."	G. Jenkins & A. Haeker. Silver Prince, gold, silver and lead. Shaft, open cut; hand (developing).
Phoenix.....Maricopa Ry. 419.	Stockton Consolidated Mining Co., Stockton, Cal. C. C. Castle, pres.; C. M. Keniston, secy. and treas.; C. E. Philco, mgr. Cap. stk. \$500,000. Meta and Lillie, gold, silver, copper. Shaft and tunnel; free.
Pinal (not a P. O.).....Pinal Ry. Casa Grande 26.	Pinal Consolidated Mining Co., San Francisco, Cal., 300 Montgomery St. B. Hart, pres.; Alexis S. Chem- lant, secy. and treas.; J. Champion, mgr. Cap. stk. \$500,000. Pinal, lead and silver. Tunnel, 10,000 tons; refractory. J. Champion, supt.
Prescott.....Yavapai Ry. 694.	Alloy Mining & Development Co., Egbert Chamberlin, pres.; Eugene M. Farr, secy. and treas.; Chas. M. Clark, mgr. Cap. stk. \$1,000,000. Silver Belt, silver. Shaft; steam; quartz mill; steam jigs. Chas. M. Clark, supt.
"....."	J. W. Arehbold & A. Kozik. Cap. \$1,000. Frankford, gold and silver. Shaft and tunnel, 100 tons; refrac- tory; hand.
"....."	Catoetin Silver Mining Co. W. E. Polkey, pres. and mgr.; H. Arthur Swan, secy. Cap. stk. \$125,000. Catoetin, gold, silver and lead. Tunnel and shafts, 800 tons; refractory; steam and water; 10 stamps. J. W. Woodruff, supt.
"....."	Chas. M. Clark. Cap. \$20,000. Silver Belt, silver. Shaft, 50 tons; refractory; steam jigs.
"....."	Commercial Mining Co., New York City, 29 John St. Jas. Douglas, pres.; Geo. Notman, secy. and treas.; Senator, gold and silver. Shaft and tunnel, 4,000 tons; refractory; steam and water. J. S. Douglas, supt.
"....."	Congress Gold Mining Co. E. M. Diekey, pres. and treas.; F. M. Murphy, secy. and mgr. Cap. stk. \$800,000. Congress, gold. Shaft, 36,000 tons; refractory; steam; 40 stamps. F. M. Murphy, supt.
"....."	Shirley & Webber. Cap. \$12,000. Farnell, gold. Tunnels, 1,400 tons; free; steam; 5 stamps. James Shirley, supt.
"....."	Webb & Myers. Silver, copper and lead. Shaft and tunnel; refractory; hand (developing). C. E. Myers, supt.
Quitova.....Pima Ry. 692.	Peer, Doerless & Crocker Mining Co., San Francisco, Cal., 23 Nevada Block. W. S. Lyle, pres.; Aug. Waterman, secy.; Nevada Bank, treas. Cap. stk. \$10,000,000. Peer, Peerless, Crocker, Weldon, silver, tunnel and shaft; free; steam; 20 stamps. D. C. Pickett, supt.
Red Rock.....Pinal Ry. 692.	Arizona Consolidated Gold and Silver Mining Co., Green Bay, Wis. James H. Elmore, pres.; M. J. McCar- nick, secy. and treas.; D. E. Elmore, mgr. Cap. stk. \$250,000. Jessie Benton, Tom Benton and others, gold and silver. Shaft and tunnel, 1,200 tons; free; refractory; steam; 5 stamps. D. E. Elmore, supt.

## GOLD AND SILVER—(CONTINUED).

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWNS AND COUNTY.	
Silver King ..... Pinal Ry. Casa Grande 692.	D. M. Hyde. Old Bonanza Terror, silver. Open cut and tunnel; free; hand (developing).
" " " "	John M. McCaffrey. Edison Group, gold, silver, copper and lead. Shaft and tunnel; refractory; hand (developing).
" " " "	Silver King Mining Co., San Francisco, Cal., 310 Pine st., Rooms 15 and 17. Thomas M. Theby, pres.; J. W. Pew, secy.; California Bank, treas.; Josiah Champion, mgr. Cap. stk. \$1,000,000. Silver King, silver and lead. Shaft, 250,000 tons; refractory; steam; 40 stamps, smelter. Josiah Champion, supt.
" " " "	South Comstock. Wm. H. Lempker, pres.; W. F. Tateen, secy. and treas. Cap. stk. \$100,000. S. Comstock, Berlin, Sierra and California, gold, silver and copper. Tunnel and shaft; refractory; hand. W. H. Lempker, supt.
Skull Valley. Yavapai Ry. Babert's Mill 26.	Paul Loske, Copper Basin, Ariz. Washington, gold. Shaft, 300 tons; refractory; hand. Geo. Cooper, supt.
Stanton. Yavapai Ry. Prescott 20, 292.	J. A. Conlee. Johnston Group, gold and lead. Shaft and tunnel, 10 tons; free and refractory; 10 stamps.
Tombstone. Cochise Ry. Fairbanks 26.	J. Murray Bailey, San Francisco, Cal., 18 Post st. C. O. D., silver. Shafts and drifts; free; horse and hand (developing).
" " " "	Telephone Mining & Reduction Co., San Francisco, Cal., 18 Post st. J. B. Mcchesney, pres.; J. Murray Bailey, secy.; treas. and mgr. Cap. stk. \$1,000,000. Telephone, silver. Shafts and drifts, 200 tons; refractory; wind. John Haley, supt.
Thobson. Pima Ry. 692.	Eagle Gold Mining Co., Burlington, Iowa. N. S. Young, pres.; A. H. Kuhlmeier, secy. and treas. Cap. stk. \$200,000. Suzzanaw and others, gold, silver and lead. Shafts, 1,000 tons; refractory; steam. Chas. T. Connell, supt.
" " " "	Iowa Mining Co., Cedar Rapids, Iowa. Dr. James Carson, pres.; M. T. Butterfield, secy. and mgr.; J. B. Leigh, treas. Cap. stk. \$100,000. Blue Jay, silver. Shafts and tunnels, 300 tons; refractory.
Victor. Cochise P. O. and Ry. San Simon 692.	Victor Mining Co., Chicago, Ill., 81 La Salle st., Room 409. Cap. stk. \$10,000. Victor Group, silver and lead. Tunnel; refractory (developing). Thomas Burtis, supt.

## MICA.

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF PRODUCT, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS OF POWER USED, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWNS AND COUNTY.	
Thobson. Pima Ry. 692.	Carl Bock. Lella, Little Ida, Mattie D., Prince Carl. Pit; hand.

## STONE, MARBLE, GRANITE AND ONYX

LOCATION OF MINE OR QUARRY, RAILWAYS, WATER ROUTE, AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE OR QUARRY, KIND OF STONE, KIND OF MINE OR QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STONE OR MARBLE MILLS, LIMEKILNS AND CAPACITY, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWNS AND COUNTY.	
Cave Creek. Maricopa P. O. and Ry. Phoenix 419.	McCassey & Luhrs, Phoenix, Ariz., Commercial Hotel. G. H. S. Luhrs, pres. and treas.; John McCassey, mgr. Cap. \$25,000. Onyx. Pit; hand. John McCassey, supt.
Seligman. Yavapai Ry. Prescott June, 26.	Red Mesa Stone & Flagging Co., Albuquerque, N. M. Albert E. Ealy, pres.; C. A. Hawks, secy. and treas. Cap. stk. \$100,000. Red Mesa. Pit; hand; stone mill. C. D. Anderson, supt.

SEE ALSO SUPPLEMENTARY LIST

## ARKANSAS

## COAL—BITUMINOUS

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.			NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, COKE OVENS, AND NAME OF MINE SUPERINTENDENT.
TOWN	AND	COUNTY	
Baldwin	Washington	Ry. Fayetteville 720.	J. N. Clark, Fayetteville, Ark. L. T. Rice, mgr. Cap. \$1,000. Black Diamond. Tunnel, 800 tons; hand.
Coal Hill	Franklin	Ry. 397.	Black Diamond Coal Co., Dr. Webe, prest.; D. L. Boorline, seey., treas. and mgr. Cap. stk. \$4,000. Black Diamond. Slope, 10,000 tons; steam. S. P. Cline, supt.
"	"	"	Onita Coal Co., M. H. Clift, prest.; J. A. Mitchell, seey.; A. Lloyd, mgr. Cap. stk. \$100,000. Onita. Slope, 4,000 tons; steam. E. A. Klein, supt.
Fayetteville	Washington	Ry. 720.	S. A. Lamons. Cap. \$20,000. Fayetteville. Tunnel and open pit, 5,000 tons, horse and hand.
"	"	"	Isaac Taylor (local). Taylor. Slope; hand.
Greenwood	Sebastian	Ry. 711.	South-Western Coal Mining Co., J. P. Burton, prest. and mgr.; C. W. Phillips, seey. and treas. Cap. \$3,000. South-Western. Slope, 20,000 tons; steam. J. P. Burton, supt.
Hackett,	Sebastian	Ry. Cotars 720.	Bazan Mining & Coal Co., John W. Bazan, prest. and mgr.; James Murry, seey., Mrs. M. J. Bazan, treas. Cap. stk. \$80,000. The Bazan. Slope, 30,000 tons; steam.
Huntington	Sebastian	Ry. 720.	Kansas & Texas Coal Co., St. Louis, Mo., corner Fifth and Ollian sts. B. H. Hobart, prest.; W. P. Heath, seey. and treas.; John R. Braddwood, mgr. Anderson's, strip. Pit, 500 tons; horse, James Russell, supt.
Jenny Lind	Sebastian	Ry. 397.	Peter McMillan. Cap. \$1,000. Shaft, 1,500 tons.
"	"	"	E. B. Petty. Cap. \$10,000. Petty's. Slope, 10,000 tons; steam. A. F. Gardner, supt.
"	"	"	Western Coal & Mining Co., St. Louis, Mo., corner Sixth and Locust sts. Edwin Gould, prest.; D. S. H. Smith, seey. and treas.; R. M. McDowell, mgr. Cap. stk. \$1,000,000. Jenny Lind, 15 and 16. Shaft and slope, 180,000 tons; steam. E. P. Seeley, supt.
Lester	Onachita	Ry. 714.	Arkansas Coal, Fire Clay & Manufacturing Co., St. Louis, Mo., Laclede Bldg. J. C. Clarke, Mobile, Ala. prest.; J. B. Clements, v.-prest. and mgr.; Ed. Hogaboom, seey. and treas. Cap. stk. \$200,000. Camden and Garnett. Tunnel; steam, C. ovens, 400,000 tons. R. Hubbard, supt.
Mazazine	Logan	Ry. Altus 397.	Pett Jean Oil & Mineral Co., Little Rock, Ark., 221 W. Fifth st. Dr. P. H. Treadway, prest.; Leonard Adams, seey.; Clement E. Yost, treas. B. F. Kennedy, mgr. Cap. stk. \$200,000. Open pit; steam. Emmanol Boone, supt.
Onita,	Pope	(P. O. Russellville) Ry. 460.	Onita Coal Mining Co., Fort Scott, Kan. Onita. Slope, 24,000 tons; steam; breaker and washer. W. R. Eastlee, supt.
Russellville	Pope	Ry. 460.	Carey Coal Co., Hutchinson, Kan. Slope; steam.
"	"	"	A. Popkiss (lessee). The Hiawatha. Slope, 6,000 tons; steam; breaker.
"	"	"	Ed. N. Sweet & Co. Cap. \$1,000. Slope, 1,500 tons; steam. J. K. Sweet, supt.
Strickler	Washington		A. B. Hodge (local). Open pit; hand.

## COPPER

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.			NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, FURNACES, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN	AND	COUNTY	
Silver City	Montgomery	Ry. Hot Springs, 310	Frank Pease. Drumond Joe, silver, lead and copper. Shaft, refractory; hand.

## FIRE CLAY.

LOCATION OF MINE OR BANK, RAILWAYS, WATER ROUTES, AND SHIPPING POINT.			NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE OR BANK, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, ETC. AND NAME OF SUPERINTENDENT.
TOWN	AND	COUNTY	
Lester	Onachita	Ry. 714.	The Arkansas Coal, Gas, Fire Clay & Manufacturing Co., Hot Springs, Ark. J. C. Clarke, Mobile, Ala., prest.; J. B. Clements, v.-prest. and mgr.; Ed. Hogaboom, seey. and treas. Cap. stk. \$200,000. Tunnel; steam.

## GOLD AND SILVER

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Anthony ..... Howard Ry. Nashville 22.	United States Antimony Co., Philadelphia, Pa., 836 Drexel Bldg. Samuel Richards, pres.; R. M. Smith, secy. and treas.; Wm. F. Roberts, Jr., mgr. Cap. stk. \$5,000,000. Ohio, May; O'Bannon, New Discovery; etc., silver, lead and antimony. Shafts and tunnels; refractory; water and electricity; furnace.
Bear ..... Montgomery Ry. Hot Springs 310.	New England Mining Co., Portland, Maine, 30 Exchange st., E. O. Clark, pres.; J. M. Russell, secy.; S. W. Roberts, treas. and mgr. Cap. stk. \$500,000. Gold. Tunnel and shaft; refractory; steam.
Benton ..... Saline Ry. 714.	S. H. Whitehome. Rabbit, silver and nickel. Shaft; free milling; steam.
Calico Rock ..... Izard Jackson Ldg. 8069, 714.	Gertrude Gold Placer Mining Co., Chicago, Ill., Room 4, 194 Clark st., J. W. Edwards, pres.; W. A. Webber, secy.; A. A. Webber, treas.; J. J. Collins, mgr. Cap. stk. \$1,000,000. The Gertrude, gold and lead. Tunnel; hand.
Delaney ..... Madison Ry. 720.	Billion City Mining Co., Fayetteville, Ark., L. S. Martin, pres.; D. C. Ambrose, secy.; J. L. Dickson, treas.; Martin & Wade, mgrs. Cap. stk. \$250,000. Gold and silver. Tunnel, 450 tons; free; hand. L. S. Martin, supt.
Elнора ..... Montgomery (P. O. Silver City) Ry. Hot Springs 310.	Elнора Mining, Milling & Real Estate Co., Annona, Ill. S. B. Sherr, pres. and mgr.; I. B. Tripp, secy. Cap. stk. \$1,000,000. Elнора, silver and lead. Shaft; refractory; steam.
Little Rock ..... Pulaski Ry. 714.	Little Rock Mining & Smelting Co., corner Second and Spring sts. Dixon C. Williams, pres.; B. H. Gedge, secy. and treas.; R. K. Pitkin, mgr. and supt. Cap. stk. \$500,000. Silver, lead, copper and zinc. Shaft (developing); free; steam.
Silver City ..... Montgomery Hot Springs 310.	Bull of the Woods Mining Co., J. A. Hughlett, pres.; J. J. Hays, secy.; J. F. Robinson, treas.; W. C. King, mgr. Bull of the Woods, silver, lead and copper. Open pit and shaft, 10 tons; refractory; hand. W. C. King, supt.
" .....	Cosmos Mining & Smelting Co., Memphis, Tenn. Wm. Strewli, pres.; Joseph Buerger, secy.; Gus Limberg, treas.; Max Koller, mgr. Cap. stk. \$3,000,000. Cosmos, gold and silver. Free and refractory.
" .....	Eureka Mining Co., St. Louis, Mo., 221 N. Main st. W. H. Swift, pres.; Walter Slawson, secy. and treas.; Charles Cuffer, mgr. Cap. stk. \$3,000,000. Bully, Sheridan and Kentucky, silver and lead. Shaft; free and refractory; hand. Peter Heenan, supt.
" .....	Mrs. Lala Gill. Cap. \$2,000. Silver, lead and copper. Shafts; refractory; hand. Dr. J. C. Bates, supt.
" .....	King & Fisher, W. C. King, mgr. Eureka, silver and lead. Slope; smelting; horse.
" .....	Minnesota Mining Co., Minnesota, silver and lead. Shaft and tunnel; refractory; steam.
" .....	Pease & Hughlett. Cap. \$1,500. Silver Hue, silver, lead and copper. Shaft and open pits; refractory; hand.
" .....	Waterloo Mining Co., P. W. Williamson, treas. and mgr. Waterloo and Lady Franklin, silver. Shaft; refractory; steam. P. W. Williamson, supt.
" .....	Wheeler & Ish. Cap. \$15,000. Minnesota and Elнора, silver. Tunnel; free milling; steam. F. M. Ish, supt.

## LEAD AND ZINC

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, SMELTERS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
El Dorado Dist ..... Marion (Not a P. O.)	Chicago Zinc Co., Chicago, Ill., 1020 Chamber of Commerce Bldg. Perry A. Hull, pres.; Edward J. Judd, secy. and treas. Cap. stk. \$3,000. Esmeralda, lead and zinc. Tunnel and shaft (developing).
Flippin ..... Marion Ry. Batesville 714.	Ozark Lead & Zinc Co., St. Louis, Mo., 316 S. Eighth st. G. A. Wiley, pres.; W. A. Robinson, secy.; Fred C. Exter, treas. Cap. stk. \$100,000. Queen Lily, Constock, Center Point and others, lead and zinc. Tunnel and open pit.
Powell ..... Marion Ry. McBoe's Ldg. 23.	Linton, Black & Co., T. N. Linton, pres.; J. W. Black, secy.; J. R. Potts, treas.; James P. Brady, mgr. Cap. stk. \$25,000. Governor, Eagle and American, lead and zinc. Shaft, tunnel, 300 tons; refractory; hand. James P. Brady, supt.
Toney ..... Marion Ry. Buffalo Ldg. 8069, Batesville 714.	The Phoenix Zinc Mining & Smelting Co., East St. Louis, Ill. James Menown, pres.; F. B. Runder, secy. and treas. Cap. stk. \$1,000,000. The Phoenix, zinc. Shaft.
" .....	The Southern Zinc Mining & Smelting Co., East St. Louis, Ill. Estell McHenry, pres.; F. B. Runder, secy. and treas. Cap. stk. \$1,000,000. The Southern, zinc. Shaft and tunnel.
Vellville ..... Marion Ry. 8069.	Morning Star Mining Co., W. Q. Seawel, pres. and treas.; G. W. Chase, secy. and mgr. Cap. stk. \$500,000. Morning Star, zinc. Drifts and tunnels, 500 tons; hand.
" .....	New York Zinc & Lead Co., New York City, 529 Broadway. Samuel Weil, pres.; Moses S. Lorett, secy.; M. Stern, treas.; S. H. Emanuel, mgr. Cap. stk. \$1,000,000. Bear Hill, Jay Gould and Lone Pigrin, lead and zinc. Shafts and tunnels, 250 tons; horse. W. Q. Seawel, supt.

## MANGANESE

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, BLAST FURNACES, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Abbot ..... Independence (P. O. Batesville) Ry. 714.	W. S. Abbot, Batesville, Ark. Cap. \$300,000. Abbot's Manganese Mines. Shafts, drifts and tunnels, 6,000 tons; steam; crusher, washer. W. S. Abbot, supt.

STONE, MARBLE, GRANITE AND ONYX

LOCATION OF MINE OR QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE OR QUARRY, KIND OF STONE, KIND OF MINE OR QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STONE OR MARBLE MILLS, LIMESTONES AND CAPACITY, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Batesville, Independence Ry. 714.	Jesse M. Bartlett. Open cut, 4,500 tons; hand and horse; kiln, 300 tons.
" " "	Frank Joblin. Cap. \$8,000. Batesville Quarry. Open pit; hand.
Benton, Saline Ry., Little Rock 397, 398, 714.	Arkansas Steatite Manufacturing Co., Little Rock, Ark. Cap. stk. \$500,000. The Wallis, soapstone, steatite, serpentine and slate. Open, tunnels; steam; kilns, 50 tons.
Cabin Creek, Johnson (P. O. Lamar) Ry. 460.	Arkansas Stone Co., Little Rock, Ark., 223 W. Markham st. H. Rudd, prest.; P. C. Irving, secy., treas. and mgr. Cap. stk. \$3,000. Cabin Creek. Open pit, 2,538 tons; hand. Wm. Birse, supt.
Hackett, Sebastian Ry. 729.	A. J. Scott (local). Sand Ridge, stone. Open pit; hand.
Hot Springs, Garland Ry. 310.	The Pike Mfg. Co., Pike Station, N. H. E. B. Pike, prest. and mgr.; F. M. Tucker, secy. and treas. Cap. stk. \$70,000. Pike, novaculite stone.
" " "	James A. Smith, 805 Central av. Cap. \$1,000. Open pit, 10 tons; hand.
" " "	J. J. Sutton, 16 N. Bouden st. Sutton's, 10. Slope and tunnels, 300 tons.
" " "	A. Whittington, 19 Park av. Cap. \$10,000. Oil stones. Open pit, 100 tons.
Little Rock, Pulaski Ry. 714.	Fred Hanger. Cap. \$20,000. Open pit, 15,000 tons; steam.
" " "	Little Rock Granite Co., 208 W. Markham st. Zeb Ward, prest.; Zeb Ward jr., secy., treas. and mgr. Cap. stk. \$10,000. Granite. Open pit, 30,000 tons; steam; mill. B. C. Miller, supt.
Lone Rock, Baxter Ry. Batesville 8290, 348.	Lone Rock Marble & Mineral Co., Chicago, Ill., Room 4, 194 Clark st. Cummings Cherry, prest.; W. A. Webber, secy.; Cummings Cherry jr., treas. Cap. stk. \$100,000. Lone Rock, red marble. Open pit; hand.
Russellville, Pope Ry. 469.	Ernest B. Kramer (local). Open; hand.

SEE ALSO SUPPLEMENTARY LIST

## CALIFORNIA

## ASBESTOS

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
San Diego San Diego Ry. 552, 692.	John D. Hoff Asbestos Co., 923 4th St. John D. Hoff, pres't, and mgr.; N. J. King, secy. Cap. stk. \$100,000. Open pit; steam; mill, 1,500 tons.

## ASPHALTUM

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Edna San Luis Obispo Ry. Steele 551.	Bitumen Consolidated Mining Co., San Francisco, Cal., 240 Montgomery st. A. Walrath, pres't.; M. P. Doud, secy.; G. M. Perine, treas.; J. A. Fairchild, v.-pres't, and mgr. Cap. stk. \$300,000. San Luis Obispo Bituminous Rock Co.'s asphaltum. Open pit, 25,000 tons; hand. James Cornack, supt.
" " "	San Luis Obispo Bituminous Rock Co., San Francisco, Cal., 240 Montgomery st. A. C. Bossett, pres't.; J. A. Fairchild, mgr. Cap. stk. \$1,000,000. Bituminous rock, asphaltum. Open pit, 30,000 tons; hand. James Cornack, supt.
La Patena Santa Barbara (P. O. Santa Barbara) Ry. 692.	California Petroleum & Asphalt Co., San Francisco, Cal., 308 Market st. W. N. Cowles, pres't.; A. C. Ferry, secy.; Crocker Woolworth National Bank, treas.; W. T. Burton, mgr. Cap. stk. \$500,000. La Patena. Shaft, 20,000 tons; steam and hydraulic; mill. W. N. Bruce, supt.
Las Conchas... Santa Barbara (P. O. Santa Barbara) Ry. Carpinteria 692.	California Petroleum & Asphalt Co., San Francisco, Cal., 308 Market st. W. N. Cowles, pres't.; A. C. Ferry, secy.; Crocker Woolworth National Bank, treas.; W. T. Burton, mgr. Cap. stk. \$500,000. Las Conchas. Open, 20,000 tons; steam and hydraulic; mill. J. L. Stoner, supt.
Los Angeles, Los Angeles Ry. 26, 692.	American Oil Co., Phillips Block, Room 4. W. E. De Groot, pres't.; G. B. Griffin, secy.; University Bank, treas.; B. A. C. Stephens, mgr. Cap. stk. \$120,000. Roberts. Steam, horse and hand (developing). A. M. Jones, supt.
" " "	Mrs. Ida Hancock. La Brea. Open pit, 1,000 tons; hand.
Santa Cruz Santa Cruz Ry. 692.	Bitumen Consolidated Mining Co., San Francisco, Cal., 240 Montgomery st. A. Walrath, pres't.; M. P. Doud, secy.; G. M. Perine, treas.; J. A. Fairchild, v.-pres't, and mgr. Cap. stk. \$300,000. Asphaltum. Open pit, 25,000 tons; hand. Majors Bros., supts.
" " "	Santa Cruz Rock Pavement Co., San Francisco, Cal., 302 Montgomery st., Room 8. A. Walroth, pres't.; M. P. Doud, secy.; Pacific Bank, treas.; Geo. M. Perine, mgr. Cap. stk. \$150,000. Walroth. Open pit, 12,000 tons; horse and hand.
Santa Maria... Sa. Barbara Ry. 551, 592.	Santa Maria Asphalt Co. S. Kaiser, pres't.; J. Kaiser, secy.; L. M. Kaiser, treas.; M. Maryanski, mgr. Cap. stk. \$250,000. Open pit and shafts; horse.
Ventura Ventura Ry. 692.	Ventura Asphalt Co., San Francisco, Cal., 320 Sansome st., Room 59. Gen. T. B. Bunting, pres't, and mgr.; Frank A. Brooks, secy, and treas. Cap. stk. \$1,000,000. Ventura. Shaft and tunnels, 2,000 tons.

## BORAX

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Druggett San Bernardino Ry. 26, 692.	Pacific Coast Borax Co., San Francisco, Cal., 230 Montgomery st. F. M. Smith, pres't.; A. H. Clough, secy. Cap. stk. \$1,500,000. Calico Borate. Shafts and tunnels; steam and horse. J. W. S. Perry, supt.

## COAL—BITUMINOUS

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, CORE OVENS, AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Carbondale Amador (P. O. Ione) Ry. Bank- ers 692.	Ione Coal & Iron Co., San Francisco, Cal., Fourth and Townsend sts. S. F. Gage, pres't.; A. J. Treat, secy.; Pacific Improvement Co., treas. Cap. stk. \$4,000,000. Mine 3. Slope, 25,000 tons; steam. Frank Fraites, supt.
Carmelite Monterey (P. O. Pacific Grove) Ry. Carmel Bay 592.	Carmels Land & Coal Co., San Francisco, Cal. J. S. Emery, pres't.; Wm. T. Baggett, secy.; Abner Doble, treas.; Abner Bassett, mgr. Cap. stk. \$300,000. Carmels. Shaft, 1,000 tons; steam. Abner Bassett, supt.
Contingua Fresno Ry. 692.	California Coal Co. F. Miers, pres't, and treas.; Thos. R. Muir, secy, and mgr. Tunnel, 4,000 tons; hand. Robt. Ballantine, supt.
" " "	San Joaquin Valley Coal Mining Co., Fresno, Cal., 944 1st. J. E. Rawlins, pres't.; Edward Kountze, secy. and mgr.; Bank Central Cal., treas. Cap. stk. \$300,000. San Joaquin. Slope and tunnels; steam. W. L. Tronsett, supt.
Priest Valley Monterey Ry. Alameda Stat'n 692.	John Clayton.
San Diego San Diego Ry. Del Mar Stat'n 26.	City Lands Coal & Oil Co., 519 E. St. M. A. Fetter, pres't.; F. H. Dixon, secy.; Nevada Bank of San Francisco, treas.; Wm. H. Carlson, mgr. Cap. stk. \$300,000. City Lands. Shaft. Wm. H. Carlson, supt.



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TOWN	AND	COUNTY.	
June Ry. 622.	Amador		Newton Copper Co., San Francisco, Cal., 420 Montgomery st., Room 4. Horace D. Ranlett, prest. and mgr.; W. R. Morton, secy.; Bank of California, treas. Cap. stk. \$200,000. Newton, sulphuret. Shaft; steam; furnace.
Spenceville Ry. Wheatland 622.	Nevada		Wochler & Pletsch, Cap. \$25,000. Spenceville and others. Open pit; steam and water.

## GOLD AND SILVER

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.			NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN	AND	COUNTY.	
Acton Ry. 622.	Los Angeles		E. Beckman, W. W. Hollister, C. W. Cook and James Kelley, Santa Barbara, Cal. Padre, gold. Shaft; free; steam; 2 stamps. Thomas Kelley, supt.
"	"	"	E. B. Millar, Los Angeles, Cal., 139 S. Broadway. Red Rover, gold. Shafts and tunnels, 4,000 tons; free; steam; 10 stamps. Ed. Brough, supt.
"	"	"	Mount Gleason Mining & Milling Co., Los Angeles, Cal., Station 26. A. F. Mackay, prest.; J. A. Jones, secy. and mgr.; Farmers' & Merchants' Bank, treas. Cap. stk. \$50,000. Mount Gleason, gold. Tunnels; free and refractory; steam; 5 stamps. J. A. Jones, supt.
Altaville (H. O. Angel's Camp) Ry. Milton 622.	Calaveras		Altaville Quartz Mining & Milling Co. B. R. Prince, mgr. Altaville, gold. Shaft; free; steam and water; 8 stamps.
"	"	"	Ellipse Mining Co., San Francisco, Cal., 402 Montgomery st. David Salfeld, prest.; Louis Bendel, treas.; Wm. Schmaedecke, mgr. Cap. stk. \$1,000,000. Evening Star, gold. Shaft and tunnel; free; steam and water. James J. Schmaedecke, supt.
Amador City Ry. June 622 (12 miles).	Amador		Bunker Hill Gold Mining Co., Philadelphia, Pa. Bunker Hill, gold. Shaft, 30,000 tons; free; water and steam; 40 stamps. John Myers, supt.
"	"	"	Gold Mountain Mining Co., San Francisco, Cal., 213 Grant av. Frank M. Pixley, prest.; J. F. D. Curtis, secy.; Bank of California, treas. Cap. stk. \$300,000. Gold Mountain, gold. Tunnels, refractory; water; 20 stamps. W. B. Farwell, supt.
"	"	"	Grover Mining Co., San Francisco, Cal., 13 and 15 Fremont st. J. S. Emery, prest.; R. McF. Doble, secy.; Angel-California Bank (limited), treas.; Jonas Call, mgr. Cap. stk. \$1,000,000. Grover, gold. Shaft, 22,400 tons; free; water, steam and electricity; 20 stamps. A. B. Call, supt.
"	"	"	N. Hamberger, Gold, shaft, 10 tons; horse.
"	"	"	Keystone Consolidated Mining Co., San Francisco, Cal., 310 Pine st. M. J. McDonald, prest. and mgr.; J. H. Kilham, secy.; Pacific Bank, treas. Keystone, gold. Shafts, free, steam and water; 10 stamps. E. T. Hale, supt.
"	"	"	South Spring Hill Gold Mining Co., Pittsburg, Mass. George F. Morse, prest.; Nahum Harwood, secy.; T. H. Goodnow, secy. Cap. stk. \$1,200,000. South Spring Hill and Talisman, gold. Shaft, 24,000 tons; free; water and steam; 10 stamps. J. R. Tregloan, supt.
Angel's Camp Ry. Milton 622, 22 miles	Calaveras		Angels Quartz Mining Co., San Francisco, Cal., 42 Nevada Block. J. A. Coleman, prest.; E. F. Preston, secy.; T. J. Schuyler, treas.; G. H. Fox, supt. and mgr. Cap. stk. \$200,000. Angels, gold. Shafts and tunnels; free, water (developing).
"	(20 miles)	"	Gold Hill Mining Co., Chicago, Ill., 67 Calumet Bldg. S. V. Ryland, prest. and mgr.; W. G. Stephens, secy.; Sam'l Brown Jr., treas. Cap. stk. \$5,000. Gold Hill, gold. Slope, tunnel, 1,200 tons; free; water; 10 stamps. S. V. Ryland, supt.
"	"	"	Remington, Porter & Gates Mining Co., Watertown, N. Y. E. M. Gates, prest.; M. L. Cleveland, secy.; W. H. Porter, treas. Carson Creek, gold and silver. Shaft, 18,000 tons; free and refractory; water; 40 stamps. E. W. Roberts, supt.
"	(22 miles)	"	E. K. Steverson, Sonoma, Cal. Vanderbilt, Rothschild, Bright Star and Chaparral Hill, gold quartz. Tunnels (developing); free and refractory, water, 8 stamps.
"	(20 miles)	"	Utica Mining Co., San Francisco, Cal., 224 California st. C. D. Lane, mgr. and supt. Utica, gold. Shaft, 35,000 tons; free; water; 80 stamps.
Auburn Ry. 622.	Placer		Corwin, Ough & Lozano, J. M. Ough, mgr. Mountain View, gold. Tunnel; refractory; water. G. B. Corwin, supt.
"	"	"	Mammoth Bar Gold Mining Co. D. W. Lubock, prest.; R. L. Dunn, secy.; Walter S. Davis, treas. and mgr. Cap. stk. \$1,000,000. Mammoth Bar, gold. Placer, water. Walter S. Davis, supt.
"	"	"	Mina Riea Gold Mining Co., New York City, corner Fulton and Nassau sts. J. O. Preble, prest. and mgr.; N. P. Hale, secy.; V. A. Lewis, treas. Cap. stk. \$200,000. Mina Riea, gold. Shaft, free; water; 10 stamps. J. W. McLaughlin, supt.
"	"	"	Charles F. Reed & E. L. Hubbard, Gold Blossom, gold. Shaft, refractory; water; 10 stamps. C. F. Reed, supt.
Bangor Ry. Honeycut 622.	Butte		Bishop Mining Co. W. W. Will, prest.; John G. Will, secy.; Bird Will, treas. and mgr. Cap. stk. \$30,000. Bishop, gold, gravel. Shaft, 15,000 tons; steam. Bird Will, supt.
"	"	"	Blue Lead Gravel Mining Co., Gridley, Cal. R. E. Taylor, prest.; F. H. Mack, secy.; W. M. Brown, treas.; Samuel Grove, mgr. Blue Lead, gold. Shaft; steam. Samuel Grove, supt.
"	"	"	Blue & Gold Mining Co. Cap. \$10,000. Blue and Gold, gold. Shafts; free; steam; 20 stamps. Hay & Clark, supts.
"	"	"	Catskill Gravel Mining Co., Marysville, Cal. A. W. White, prest.; E. E. Meek, secy.; Wm. Klein, treas. Cap. stk. \$100,000. Catskill, gold. Shaft; steam; arrastre. J. D. Campbell, supt.
Banner Ry. Fosters 649	San Diego		Banner Mining Co., Pomona, Cal. George Rhoren, prest.; Archie Thompson, secy.; National Bank, treas. Cap. stk. \$300,000. Cincinnati Belle and others, gold. Shaft and tunnel; free; steam; 10 stamps. D. C. Lane, supt.

## GOLD AND SILVER—(CONTINUED).

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWNS AND COUNTY.	
Banner ..... San Diego (Continued.)	Irving L. Carl & A. E. Cowels, Cap. \$25,000. North Hubbard, gold. Tunnel, 800 tons; free; steam; 5 stamps. Irving L. Carl, supt.
" .....	Ruby Mining & Milling Co., San Francisco, Cal., 406 Market st. L. E. Lee, secy., treas. and mgr. Cap. stk. \$50,000. Wilcox and Ruby, gold. Tunnel, 2,200 tons; free; steam; 5 stamps. L. E. Lee, supt.
" .....	Schapparell Mining Co. W. W. Boswell, mgr. and supt. Schapparell, gold. Shaft, tunnels, etc.; free; hand.
Bath ..... Placer Ry. Colfax 692.	Breece & Wheeler, San Francisco, Cal., 1400 Post st. Judson Wheeler, secy. and treas. Cap. \$200,000. Gold. Tunnel, 12,000 tons; placer; steam and hydraulic; 10 stamps. W. H. Grenell, supt.
Bear Valley ..... Mariposa Ry. Merced City 692 (40 miles).	Bart & Bach. Cap. \$15,000. Green Stone, gold. Shaft; free; steam; 5 stamps.
" .....	Cathey Bros. Jubilee and Daisy, gold. Shaft and tunnel; free; water; arrastre.
" .....	Mariposa Consolidated Mining & Milling Co., San Francisco, Cal., 224 California st. Col. Howard, pres.; C. T. Budge, secy.; Burt M. Fadden, mgr. Mariposa, Grant, gold. Shaft; free and refractory; water; 5 stamps. A. C. Hamilton, supt.
Benton ..... Mono Ry. Los.	Phoenix Mining & Milling Co., San Francisco, Cal., Nevada Block, Room 69. John F. Millner, pres.; A. K. Durbrow, secy.; Bank of California, treas.; Arch. Farrington, mgr. Cap. stk. \$1,000,000. Phoenix, gold. Shaft, tunnel and slope; free; steam; 10 stamps. A. Farrington, supt.
Bishop ..... Inyo Ry. Poleta 108.	O. H. Hill & Co. Geo. F. Willis, mgr. and supt. Georgia, gold. Tunnel, 20 tons; free; steam; 5 stamps.
Black Bear ..... Siskiyou Ry. 692.	Black Bear Quartz Mining Co., San Francisco, Cal., 230 California st. John Daggett, pres. and mgr.; J. F. Nesmith, secy.; Bank of California, treas. Cap. stk. \$3,000,000. Black Bear, gold. Tunnel; free; water; 32 stamps. John Daggett, supt.
Bodie ..... Mono Ry. Hawthorne, Nev., 108.	Standard Consolidated Mining Co., San Francisco, Cal., 319 Pine st. Thomas H. Leggett, pres. and mgr.; I. W. Pew, secy. and treas. Cap. stk. \$10,000,000. Standard Consolidated, gold and silver. Shaft and tunnel, 16,000 tons; free; steam; 20 stamps. Thomas H. Leggett, supt.
Brown's Valley ..... Yuba Ry. Marysville 692.	Jefferson Gold Quartz Mining Co., Marysville, Cal., P. O. Box 397. F. W. Johnson, pres.; G. W. Harny, secy.; Rideout Bank, treas.; A. J. Schultz, mgr. Cap. stk. \$100,000. Jefferson, gold. Shaft, 25,000 tons; free; steam; 10 stamps. A. J. Schultz, supt.
" .....	Johnson, Swezy & Brown, Marysville, Cal. Dexter, gold. Shaft; free; hand.
Brownsville ..... Yuba Ry. Honey 692	Reuben Clark. Cap. \$2,000. R. C. gold. Shaft and tunnel, 5,000 tons; free and refractory; water; 10 stamps. J. C. Campbell, supt.
" .....	Johnson Mining Co. R. M. Johnson, pres. and secy.; H. A. Conwell, treas.; R. W. Emerson, mgr. Cap. \$2,000. Johnson, gold and silver. Shaft and tunnel, 2,000 tons; free and refractory; water; 5 stamps. R. M. Johnson, supt.
" .....	T. H. Steel. Cap. \$50,000. Gold. Placer; hydraulic.
Butcher Ranch ..... Placer Ry. Auburn 692.	Gray Eagle Mining Co., San Francisco, Cal., 303 California st. H. W. Gray, pres.; A. W. Barrows, secy.; Wells Fargo Bank, treas.; T. G. Durning, mgr. Cap. stk. \$1,000,000. Gray Eagle, gold. Placer, tunnel, shaft and slope; steam; 10 stamps. T. G. Durning, supt.
" .....	Spring Garden Mining Co., San Francisco, Cal., 737 Ellis st. J. A. Wilder, pres.; A. C. Wilder, secy.; Wells Fargo & Co.'s Bank, treas. Cap. stk. \$1,000,000. Spring Garden, gold. Slope and tunnel; placer; steam and water. Geo. F. Stone, supt.
Butte Valley ..... Plumas Ry. Chico 692.	R. Benrick, A. G. Rout, pres.; Hugh Kelley, secy.; C. H. Lee, treas.; R. Benrick, mgr. Cap. stk. \$5,000. Nip and Tuck, gold. Tunnel, 3,000 tons; free; water; 10 stamps. R. A. Coston, supt.
" .....	Butte Valley Mining Co. Cap. stk. \$3,000. Butte Valley, gold. Tunnel and placer; water. C. H. Lee, supt.
" .....	A. N. Cameron. Cap. \$7,000. River View, gold. Tunnel; placer.
" .....	James Firmstone. Daisy, gold. Placer, 3,000 tons; hand.
" .....	N. Meadows. Cap. \$3,000. Allen Cove, gold. Tunnel.
" .....	A. G. Rupe. Cincinnati Hill, gold. Placer.
" .....	Teodor Willner, Jawbone Flat, Cal. Cap. \$3,000. Luhn, gold. Placer; tunnel; hand.
Calico ..... San Bernardino Ry. Daggett 26.	De Sota Mining Co. De Sota, silver. Shafts and tunnels; free; hand.
" .....	Thomas Gray. Lue Mine, silver. Tunnel, shafts and slopes; free; hand; 10 stamps. J. L. Porter, supt.
" .....	Fred Heber. Hyena, silver. Tunnel; free; hand.
" .....	Silver King Mining Co., Ltd., London, Eng., 3 Great Winchester st. W. Hosking Ashlin, secy. Oriental Group and 3 others, silver. Shafts, tunnels, slopes and drifts, 35,000 tons; free; steam; 30 stamps. Wm. S. Edwards, supt.
" .....	Tracy N. Stebbins. Silver. Shaft and tunnels, 2,500 tons; free; steam; 5 stamps.
" .....	Waterloo Mining Co., Milwaukee, Wis. C. M. Sanger, pres.; W. H. McTeaff, secy.; C. T. Bradley, treas.; E. A. Sanger, mgr. Waterloo, Silver King and others, silver. Shafts and tunnels, 75,000 tons; free; steam; 75 stamps. Jos. Kerbaugh, supt.
Calistoga ..... Napa Ry. 692.	Knapp Consolidated Mining Co., J. D. C. Knapp, pres.; W. D. Smith, secy.; P. M. Schelz, treas. Cap. stk. \$5,000,000. Mt. View, Cleveland, Nellie, Silver Vein and Smith, gold and silver. Tunnel and slopes, 10,000 tons; free.
" .....	Pailsade Mining Co. R. F. Grigsby, pres. and mgr.; R. A. Grigsby, secy. Cap. stk. \$500,000. Pailsade, gold and silver. Shafts, tunnels, 3,000 tons; refractory; steam; 15 stamps. R. F. Grigsby, supt.
Calumet ..... Shasta (P. O. Middle Creek) Ry. Calumet Spur 692.	Calumet Gold Mining Co., San Francisco, Cal., 58 Chronicle Bldg. Wilmot H. Garlick, pres. and treas.; A. B. Paul jr., secy.; Almarin B. Paul, mgr. Cap. stk. \$500,000. Calumet and Poorman, gold. Tunnels and drifts; refractory; water; 24 stamps. Almarin B. Paul, supt.

## GOLD AND SILVER (CONTINUED).

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COCNT.	
Campo Seco, Calaveras Ry. Valley Springs 26.	Venus Quartz Mining Co., James Cory, secy.; A. R. Summer, mgr. Venus, gold. Tunnel, 400 tons; refractory; hand; 10 stamps. C. Puger, supt.
Cariboo, Plumas (P. O. Butte Valley) Ry. 692.	William Wilson. Gold. Tunnel; hand.
Carrville, Trinity Ry. Redding 692.	J. E. Carr. Cap. \$40,000. Nash, gold. Placer; hydraulic.
" " " " " " " "	Strode & Bander. Cap. \$10,000. Oro Grande, gold. Tunnel, 5,000 tons; free; water; 5 stamps.
Carsons, Calaveras (P. O. Angels' Camp) Ry. Milton 692.	Joseph Canepa. Canepa, gold. Shaft; free and refractory; hand.
Cerro Gordo, Inyo Ry. Keeler 108.	H. B. Boland. Union Jack and Protection, silver and lead. Tunnel; hand.
" " " " " " " "	Thomas Boland. Cap. \$5,000. Union and Enterprise, silver and lead. Shaft, 800 tons; refractory; Steam J. Donerley & C. Benton. Cedar, silver. Slope; free; hand.
" " " " " " " "	John Dunphy. Morning Star and Phoenix, gold, silver and lead. Shaft, 4,000 tons; refractory; horse and hand.
" " " " " " " "	W. L. Hopkins & M. Carey. Faith and Hope, silver and lead. Shaft; refractory.
" " " " " " " "	Union Co., Carson City, Nev. H. M. Verlington, prest.; G. F. Ford, secy.; Wells, Fargo & Co.'s Bank, treas. Cap. \$10,000,000. Union, silver and lead. Shaft and tunnel, 200 tons; refractory.
Cherokee, Butte Ry. Chat 491.	T. F. Emmons, Greenville, Cal. Albana, gold. Tunnel, 1,500 tons; free; water; 10 stamps.
" " " " " " " "	F. Sutton & Wm. Symons, Sonora, Cal. Cap. \$10,000. Carlotta, gold and silver. Shaft, 500 tons; free; horse. Wm. Symons, supt.
Chinese Camp, Tuolumne Ry. 692.	Hard Tack Mine. John Long, mgr. Gold. Shaft, free.
Cleveland, Trinity (P. O. Ono) Ry. An- derson 692.	Cleveland Consolidated Mining Co., Red Bluff, Cal. R. G. Hart Jr., prest.; Gen. N. P. Chipman, secy.; Tehama Co. Bank, treas. Cap. \$10,000,000. Bull's Chooop and Cleveland, gold and silver. Tunnels, 4,200 tons; free and refractory; steam, 10 stamps. R. G. Hart sr., supt. and mgr.
Clinton, Mono Ry. Carson City, Nev., 781.	Interstate Consolidated Mining Co., Bridgeport, Cal. A. F. Bryant, prest.; J. D. Murphy, secy.; J. A. Brown, treas.; A. P. Sayre, mgr. Cap. \$100,000. Interstate, gold and silver. Shaft and tunnels, 50 tons; refractory; hand. A. P. Sayre, supt.
" " " " " " " "	Mineral Chief Consolidated Mining & Milling Co., Bridgeport, Cal. A. F. Bryant, prest.; W. O. Parker, secy.; Henry Williams, treas.; T. C. Sharpe, mgr. Cap. \$150,000. Mineral Chief, gold. Shaft and tunnel; free; horse. T. C. Sharpe, supt.
" " " " " " " "	Rattler Mining Co., Rattler, gold. Tunnels.
" " " " " " " "	John H. Sheehan. Summers and Klituck, gold and silver. Tunnels, free; steam; 5 stamps.
Course Gold Gulch, Fresno Ry. Raymond 692.	McKenzie & Rule. Last Chance, gold. Free; steam; 10 stamps.
" " " " " " " "	Waterloo Gold Mining Co., San Francisco, Cal. 48 P. 8 St. M. Lambeth, prest.; J. Murray Bailey, secy., treas. and mgr. Cap. \$1,000,000. Paymaster an F. Alpha, gold. Tunnels and shafts, 4,000 tons; free; steam; 10 stamps. J. D. Beam, supt.
Colts, Siskiyou Ry. 692 (10 miles).	E. T. Bartlett. Ranger, gold. Shaft, tunnel and open pit, 70 tons; free.
" " " " " " " "	Patterson Bros. & Payne. Wm. Patterson, mgr. Patterson, gold. Water.
" " " " " " " "	G. D. Willey, Hornbrook, Cal. G. D. Willey, prest. and mgr.; A. P. Hill, secy.; C. P. Baumgardner, treas. Cap. \$125,000. Louisiana, gold. Placer; water and hydraulic. Wm. Cassey, supt.
Colfax, Placer Ry. 692.	Henry McManus, New York City, 41 Wall st. Rising Sun, gold. Shaft; free; steam; 20 stamps. W. F. Pierce, supt.
Columbia, Tuolumne Ry. Oakdale 26.	Conlin & Graham. Enterprise, gold. Shafts and tunnels; free; water; 4 stamps. Angus S. Graham, supt.
" " " " " " " "	Engelke & Co., J. D. Engelke, mgr. Experimental, gold. Shaft and tunnel, 1,200 tons; free; water; 10 stamps.
" " " " " " " "	Last Chance Mining Co. Last Chance, gold. Open pit; free and refractory; steam; 5 stamps. L. C. Tibbits, supt.
" " " " " " " "	Noonday Mining Co., Oakdale, Cal. J. W. Woodside, prest. and mgr.; A. S. Dingley, secy.; F. H. War- ner, mgr. Cap. \$15,000. Noonday, gold. Shaft and slopes, 500 tons; free and refractory; steam; 3 stamps. F. H. Warner, supt.
" " " " " " " "	Louis Page & Co. Golden Era, gold. Shaft, 1,000 tons; free; water; 5 stamps. Louis Page, supt.
" " " " " " " "	Tibbits & Green. Last Chance, gold. Shaft; free; steam; 5 stamps. L. C. Tibbits, supt.
" " " " " " " "	Vine Spring Mining Co., C. B. Tilley, prest.; F. H. Tyler, secy.; J. B. Barnett, treas.; F. L. McPherson, mgr. Cap. \$50,000. Vine Spring, gold. Shaft and tunnel, 3,000 tons; free; water; 10 stamps. F. L. McPherson, supt.
Copley, Shasta Ry. 543.	Balaklala Mining Co., Redding, Cal. S. Weil, prest.; A. C. Ellis, mgr. Balaklala, gold and silver. Shaft and tunnel; free and refractory. A. C. Ellis, supt.
" " " " " " " "	Polar Star Mining Co. Cap. \$1,000. Polar Star, gold. Tunnel, 1,000 tons; refractory. W. W. Nichols, supt.
" " " " " " " "	Henry Ruhlmg. Indian Queen, gold. Tunnel, 300 tons; free; water; arrastre.
" " " " " " " "	Van de Veer & Bullard. Scotch Chief and Santa Clara, gold. Tunnel, 1,500 tons; free; water.

## GOLD AND SILVER—(CONTINUED).

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWNS AND COUNTY.	
Copperopolis, Calaveras Ry. Milton 692.	Huggin & Hearst, San Francisco, Cal., 51 Nevada Block. Irwin C. Stump, secy. and treas.; August H. Schmelzel, mgr. Thcom. gold. Tunnel; steam; mill. August H. Schmelzel, supt.
Cottage Grove, Siskiyou Ry. Yreka 692.	Thomas Dobbins & Fred Martin. Cap. \$2,000. Dobbins, gold. Placer; hydraulic.
" " " "	George Ten Eyck. Cap. \$15,000. Gold. Placer; hydraulic.
" " " "	H. Wm. Thomas. Gold. Placer.
Coulterville, Mariposa Ry. Waterford 692.	P. P. Mast, Springfield, Ohio. P. P. Mast, pres.; C. L. Mast, secy. and mgr. Cap. \$120,000. Banner, gold and silver. Tunnel; free; water; 10 stamps. C. L. Mast, supt.
" " " "	Tyro Mining Co., F. C. Jarvis, pres.; N. W. Crocker, secy. and treas.; Charles Sutherland, mgr. Tyro, gold. Shaft, 7,200 tons; free, refractory; steam; 10 stamps. Charles Sutherland, supt.
" " " "	Virginia Mining Co., Springfield, Ohio. J. W. Crowell, pres. and secy.; C. L. Mast, mgr. and supt. Cap. \$50,000. Virginia, gold, silver. Shaft, tunnel, slope; free; steam; 10 stamps.
Crescent City, Del Norte Ry. 352.	W. Engley & Wagner Co., A. W. Engley, pres.; C. M. Wagner, secy. and mgr.; H. Stowe, treas. Myrtle and South River, gold, silver and copper. Open, placer; water. C. M. Wagner, supt.
Cuyamaca, San Diego Ry. Lakeside 649.	Estate of R. W. Waterman. Waldo S. Waterman, mgr. Stonewall, gold. Shaft, 25,000 tons; free; steam; 20 stamps. Waldo S. Waterman, supt.
Daggett, San Bernardino Ry. 26.	S. P. Blade. Sampson, silver. Free and refractory.
" " " "	Clark Bros. Queen of the Desert, Mammoth Chief and Meteor, gold and silver. Free; steam. F. L. Clark, supt.
" " " "	William Hyten & H. T. Smith. Wanderer, gold. Free.
" " " "	Riggs & Campbell. Banner, Dandy and others, gold and silver. Shaft and tunnel; free; hand. Frank Riggs, supt.
" " " "	Riggs, McMahon & Riggs. New Year's Gift and others, gold, silver and lead. Tunnel; refractory; hand. Frank Riggs, supt.
Danvers, Placer Ry. Colfax 692 (23 m.).	Golden River Mining Co., Paris, France, 21 Place Vendome. M. Desmignons, mgr. Cap. \$18,450. Golden River, gold. Tunnel and slope, 36,000 tons; free; steam and horse. Chas. T. Hoffman, supt.
" " " "	Pioneer Mining Co., San Francisco, Cal., 230 Montgomery st. L. C. Bresse, secy. Pioneer, gold. Tunnel, 8,400 tons; free; water; 20 stamps. D. J. Sullivan, supt.
Darwin, Inyo Ry. Keeler 168.	J. A. MacKenzie. Lucky Jim and Christmas Gift, silver, lead. Shaft and tunnel; refractory; steam.
" " " "	Phoenix Mining Co., San Francisco, Cal., 314 California st. Silver and lead. Slope, 100 tons; refractory; horse. Max Schoen, supt.
" " " "	P. Reddy, San Francisco, Cal., 330 Pine st. Geo. H. Hardy, secy. Defiance and Independence, gold, silver and lead. Shaft and tunnel, 800 tons; refractory; steam. E. A. Reddy, supt.
" " " "	Chas. Richardson. Cap. \$1,000. Good Hope, gold, silver and lead. Shaft and tunnel, 50 tons; refractory; hand.
Deadwood, Trinity Ry. Redding 692 (28 m.).	J. T. Brown. Gold. Placer; hydraulic and arrastre.
" " " "	Brown Bear Mining Co., F. O. Hollingsworth, mgr. Brown Bear, gold and quartz. Tunnel, 6,000 tons; free; steam; 15 stamps. G. E. Sargeant, supt.
" " " "	Mrs. Mary Folan. Vermont and Sir John, gold. Tunnel, 100 tons; free; steam; mill.
" " " "	Harkness Mining Co. Harkness, gold. Tunnel. J. H. Frissell, supt.
" " " "	James Kelly. Emmet, gold. Tunnel; free; water, arrastre.
" " " "	Lila Mining Co. Lila, gold. Tunnel; free; steam; 10 stamps. Theo. Gruss, supt.
" " " "	D. O. Morehead, Forest Hill, Cal. Cap. \$5,000. Center, gold. Tunnel and slope; free; horse.
" " " "	Thorne Bros. Two Brothers, gold. Tunnel and shaft; free.
Descanso, San Diego Ry. Lakeside 649 (23 m.).	Charles Ellis. Independence, gold. Shaft and tunnel; free.
" " " "	T. Noble & Sons. Eureka, gold. Tunnels and shafts; free; water; 2 stamps.
" " " "	Dan, Oneil. Gold. Shaft (developing); free; water.
" " " "	Gilbert L. Seybold. Cap. \$1,200. Cascade, gold. Shaft and open pit, 15 tons; free; hand and water. G. L. Seybold, supt.
Diamond Spg., El Dorado Ry. Diamond 692.	R. T. Morrison. Cap. \$25,000. Mathies Creek, gold. Shaft and tunnel (developing); free; water; mill. R. T. Morrison, supt.
Dillon, Siskiyou (P. O. Cottage Grove) Ry. Yreka 692.	Halvorson & Lard. Cap. \$5,000. Horse Shoe Bend, gold. Placer; hydraulic. A. Halvorson, supt.
Dogtown, Eldorado (P. O. Grizzly Flat) Ry. Placerville 692.	Wiley Sexton. King, gold. Placer; hydraulic.
Downsville, Sierra Ry. 692.	Black Hawk Gravel Mining Co., San Francisco, Cal., 100 Washington st. James Brodie, pres. and mgr.; Samuel D. Simmons, secy. and treas. Cap. \$100,000. Black Hawk, gold. Open, placer; water.
" " " "	Gold Bluff Mining Co., New York City, 64 College place. John H. Piper, pres.; Putnam Conklin, secy.; A. E. Williams, treas.; Wm. Kraft, mgr. Cap. \$100,000. Gold Bluff, gold. Tunnel, 18,000 tons; free; water; 20 stamps. William Kraft, supt.
" " " "	Red Oak Mining Co., Carson City, Nev. Geo. T. Mills, pres.; S. R. Noyes, secy.; M. Cohn, treas.; W. W. Mason, mgr. Cap. \$5,000,000. Red Oak, gold. Tunnel, placer; hand. W. W. Mason, supt.

## GOLD AND SILVER (CONTINUED).

LOCATION OF MINE, RAILWAY, WATER ROUTES AND SHIPPING POINT.		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN	AND COUNTY.	
Dundlap	Fresno Ry. Fresno 25 miles.	J. W. Collee, Cap. \$6,000. Homestake, gold. Placer.
"	"	Moore & Davis. Oro Fino, gold. Shaft and tunnel, 100 tons; refractory; water, arrastre. S. C. Moore, supt.
El Dorado	El Dorado Ry. 692.	Church Gold Mining Co., San Francisco, Cal., 303 California st. Thos. R. Church, pres.; A. W. Barrows, secy.; W. W. Montague, treas. Church, gold. Shaft and tunnels, 7,000 tons; free; water; 10 stamps. James Richards, supt.
"	"	J. M. Vandegriff. Los Padre, gold. Shaft; free and refractory; water.
El Foro	Orange Ry. McPherson 26.	Santiago Canyon Silver Mining Co., Los Angeles, Cal., 45 Bryson-Bonebrake Block. R. S. Law, pres.; W. A. Vanderoock, secy., treas. and mgr. Cap. stk. \$2,000,000. Santiago Canyon, gold and silver. Shafts, tunnels and slopes, 1,000 tons; refractory; water and hand; crushers and concentrators. T. D. Hoxey, supt.
Flat Creek	Shasta Ry. P. O. Copley 545.	Morton & Moores Gold Mining Co., Copley, Cal. T. P. Mitchell, pres.; Luke Mitchell, secy.; Omar Morton, treas. Golden Calif. gold. Shaft and tunnel; free; water.
Forbestown	Butte Ry. Oroville 692 (25 m.).	Bazar, Hayward & Vail, San Francisco, Cal., 234 California st. A. Hayward, pres., secy. and treas. Sutters, gold and silver. Shaft, free; water; 10 stamps. H. E. Vail, supt. and mgr.
"	"	Beehive Mining Co. Beehive, gold. Shaft and tunnel; free; steam, 8 stamps.
"	"	Mrs. M. A. G. Blake. Beehive and Extension, gold. Shaft and tunnel; free; steam, 8 stamps.
"	"	Carlisle & Boggs. Carlisle, gold and silver. Open pit and tunnel, refractory, water. J. O. Carlisle, supt. Edison Mines. Edison, gold and silver. Tunnel; free. L. R. Harrison, supt. and mgr.
"	"	Col. A. Hayward, San Francisco, Cal., 234 California st. Shakespear, gold and silver. Shaft, 180 tons; free; steam; 10 stamps. G. W. Price, supt.
"	"	Rendall & Roberts. Garden Ranch, gold. Placer; water. A. F. Roberts, supt. and mgr.
"	"	W. W. Stow, San Francisco, Cal., 408 California st. Gold Bank, gold and silver. Shaft and tunnel, 32,850 tons; free and refractory, water; 40 stamps and concentrator. Harry P. Stow, supt.
Forest City,	Sierra Ry. Nevada 490-490 m.).	Bald Mountain Extension Gold Mining Co., Downieville, Cal. Robert Forbes, pres.; J. W. Orear, secy. and treas. Cap. stk. \$999,000. Bald Mountain, gold. Tunnel. Wm. Meikle, supt.
Forest Hill,	Placer Ry. Colfax 692.	Homestake-Consolidated Quartz Mining Co. Homestake, gold. Tunnel, free, water, 5 stamps. D. A. Russell, supt.
"	"	May Flower Gravel Mining Co., San Francisco, Cal., 330 Pine st., Room 18. Felix Chappellet, pres.; D. M. Kent, secy.; Bank of California, treas. Cap. stk. \$999,000. May Flower, gold. Tunnel, 30,000 tons; free; steam and water; 20 stamps. Harold T. Power, supt.
"	"	Chas. F. Reed, Drummond, gold. Shaft and tunnel, 5,000 tons; free; steam, mill.
Fort Jones	Siskiyou Ry. Vreka 692.	Allen Bros. Co., Quartz Valley, Cal. Thos. Allen, pres.; H. S. Mathews, secy.; A. R. Clark, treas.; Edward Allen, mgr. Cap. stk. \$60,000. Green Mountain, gold. Shaft and tunnel, 800 tons; free; steam; 10 stamps. John P. Dee, supt.
French Gulch,	Shasta Ry. Redding 692.	Wm. Brown. Sibly, gold. Free and refractory; water; mill.
"	"	Gladstone Mining Co., Cleveland, Ohio, 29 Euclid av. B. F. Powers, pres.; F. C. Bauls, secy. and treas.; C. J. Clark, mgr. Cap. stk. \$120,000. Gladstone, gold. Tunnel, 15,000 tons; steam and water, stamp. C. J. Clark, supt.
Garden Valley,	El Dorado Ry. Placerville 12 m.s. Auburn 692 (14 m.).	Idlewild Gold Mining Co., San Francisco, Cal., 306 Pine st. Wm. S. Chapman, pres.; Edw. F. Stone, secy.; Anglo-Californian Bank, treas.; E. W. Chapman, mgr. Cap. stk. \$1,000,000. Idlewild, gold. Shaft and slope, 25,000 tons; free; water; 20 stamps. E. W. Chapman, supt.
"	"	Rozecrans Mining Co., San Francisco, Cal., 39 Merchants' Exchange. H. S. Robinson, pres.; A. E. Ball, secy. and treas.; H. S. Morey, mgr. and supt. Cap. stk. \$50,000. Rozecrans, gold. Slope (developing); free; steam; 10 stamps.
Genesee	Plumas Ry. Reno, Nev., 692.	Genesee Valley Gold Mining Co., San Francisco, Cal., Nevada Block. Joseph Gruss, pres.; treas. and mgr.; Jacob Stauffeld Jr., secy. Cap. stk. \$100,000. Genesee, gold. Shaft, 400 tons; free; water; 10 stamps. Joseph Gruss, supt.
"	"	Graham Brown & Young. Augustus Graham met. Green Letice, gold, silver and copper. Tunnel; hand and vatet, arrastre.
Glencoe	Calaveras Ry. Valley Springs 692 (30 miles).	Banner Gold Mining & Milling Co., San Francisco, Cal., 206 Fillmore st. R. H. Webster, pres.; secy. and treas. A. J. Rhodes, mgr. Cap. stk. \$ 0 0 0 0. Banner, gold. Shaft, 850 tons; steam and water; 8 stamps. A. J. Rhodes, supt.
"	"	Industrial Mining & Milling Co., San Francisco, Cal., 430 Montgomery st. D. R. McIntosh, pres. and mgr.; L. B. Gartland, secy.; C. Shea, treas. Cap. stk. \$500,000. Industrial, gold. Shaft, 20 tons; free; steam, 10 stamps. D. R. McIntosh, supt.
Gold Rock Camp	S. Diego Ry. Otilby 692.	Frank C. Young & Thomas Johnson. Gold Rock, gold. Shaft and tunnel, 10,000 tons; free; steam. Thos. Johnson, supt.
Gorman's Slati'n	Ventura Ry. Lamester 692.	Frazier Mining Co., Los Angeles, Cal., First National Bank Bldg. John D. Bieknell, pres.; Frank Cozant, secy.; First National Bank, treas. Cap. stk. \$100,000. Frazier, gold. Shaft and tunnel; free and refractory; steam; mills. Geo. Gleason, supt.
Graniteville	Nevada City, 690, 28 miles.	Gaston Ridge Mill & Mining Co., San Francisco, Cal., 312 Sacramento st. F. M. Cartan, pres.; John F. Nugent, secy.; T. McCarty, treas.; P. Foley, mgr. Cap. stk. \$1,000,000. Gaston Ridge, gold. Tunnel, 8,000 tons; free; steam; 10 stamps. Patrick Foley, supt.
"	"	John Hippert. Liberty, Pope and Hot Water, gold. Tunnel and shaft, 100 tons; free; water, 2 arrastres; 2 stamps.
"	"	Ozall Bros. Chattanooga, gold; 20 tons; free; hand, mill.
"	"	T. Staples. Gaston Ridge, gold. Tunnel and shaft; free; water and steam; 10 stamps.

## GOLD AND SILVER—(CONTINUED).

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY	
Grass Valley, Nevada Ry. 490.	Allison Ranch Ford. Martin Ford, prest. and mgr.; J. E. Carr, secy. Cap. stk. \$2,500,000. Allison, gold. Shaft; free. Martin Ford, supt.
"	Balfie Consolidated Mining Co. E. Matson, prest.; D. D. Bowman, secy.; Citizens' Bank, treas.; Joseph Snyder, mgr. Cap. stk. \$900,000. Balfie, gold. Tunnel; free; water; mill. Joseph Snyder, supt.
"	Boston Mining Co. Bennett Dunstan, prest.; M. McDonough, secy. and treas.; Thomas Ople, mgr. Cap. stk. \$90,000. Granite Hill, gold. Shaft and slope; free; water. Thomas Ople, supt.
"	California Mining Co. Charles E. Uren, prest.; J. W. Thomas, secy.; Citizens' Bank, treas. Cap. stk. \$100,000. California, gold and silver. Shaft, 700 tons; free; steam; 5 stamps, mill. James Gugas, supt.
"	William Campbell. Norambaqua, gold. Shaft; free; steam and water.
"	Centennial Quartz Mining Co. Samuel Granger, prest.; Jacob Weissbein, secy.; Weissbein Bros. & Co., treas.; A. W. Stoddart, mgr. Cap. stk. \$300,000. Centennial, gold. Shaft; free; steam. A. W. Stoddart, supt.
"	Central North Star Mining Co. J. R. K. Nuttall, prest.; Jacob Weissbein, secy.; Weissbein Bros. & Co., treas. Cap. stk. \$1,000,000. Central North Star, gold. Shaft; steam. James Bennellack, supt.
"	John C. & Edward Coleman & Geo. D. McLean. Lucky Quartz, gold. Slope; free.
"	Crown Point Consolidated Mining Co. A. Gauthier, prest. and mgr.; J. J. Rodgers, secy. Crown Point, gold. Shaft, 10,000 tons; free; water; 10 stamps. A. Gauthier, supt.
"	Daisy Hill Mining Co. Daisy Hill, gold. Shaft; free; steam and water. Frank Morse, supt.
"	Gold Bar Quartz Mining Co. W. F. Corwin, prest.; W. H. Welton, secy. and mgr.; Wm. George, treas. Cap. stk. \$1,000,000. Gold Bar Quartz, gold. Shaft; free; steam and water. W. H. Welton, supt.
"	Gold Point Consolidated Gold & Silver Mining Co. S. Granger, prest.; A. B. Brady, secy.; Watt & Co., treas.; James Bennellack, mgr. Cap. stk. \$50,000. Gold Point, gold. Shaft and tunnel; free; water. Jas. Bennellack, supt.
"	Golden Treasure Mining Co. Mrs. F. Sauvee, treas.; Frank Dulmaine, mgr. Golden Treasure, gold. Steam. Frank Dulmaine, supt.
"	Green Mountain Gold Mining Co. Wm. George, prest.; Elam Biggs, secy. and treas. Cap. stk. \$300,000. Green Mountain, gold. Shaft; free; steam.
"	Hartery Consolidated Mining Co. Geo. W. Whiteside, prest.; J. McThomas, secy.; Citizens' Bank, treas.; Geo. Malnhart, mgr. Cap. stk. \$1,000,000. Hartery, gold. Free; steam. Geo. Malnhart, supt.
"	Idaho Quartz Mining Co. Edward Coleman, prest. and mgr.; Geo. W. Hill, secy.; John C. Coleman, treas. Cap. stk. \$31,000. Idaho Quartz, gold. Slope, 16,000 tons; free; water; 40 stamps. Edward Coleman, supt.
"	Irish-American Mining Co. Martin Ford, prest. and mgr.; John Mulroy, secy. Cap. stk. \$2,500,000. Irish-American, gold. Shaft, 50 tons; free; horse; mill. Martin Ford, supt.
"	J. M. Lakeman. Spring Hill and Extension, gold. Slope; free; steam.
"	McGuire & Biggs Placer Mine Co. Gold. Placer; free.
"	Maryland Gold Mining Quartz Co. S. P. Dorsey, prest. and mgr.; L. V. Dorsey, secy. and treas. Cap. stk. \$100,000,000. Maryland, gold. Shaft and tunnel; free; water. S. P. Dorsey, supt.
"	Mendo Mining Co. J. M. Lakeman, prest. and mgr.; Peter Johnson, secy.; H. Sylvester, treas. Cap. stk. \$15,000. Boneward Bound, Illinois and Wisconsin, gold. Slope, 300 tons; free; steam; stamps. J. M. Lakeman, supt.
"	New Eureka Consolidated Gold Mining Co. San Francisco, Cal., 302 Montgomery st. John Skinker, prest.; A. Walrath, treas. and mgr. Cap. stk. \$1,000,000. Eureka, gold. Shaft; steam. A. Walrath, supt.
"	North Star Mining Co., San Francisco, Cal., 401 California st. James D. Hague, prest.; D. A. Jennings, secy.; Bank of California, treas.; Emile R. Abadie, mgr. Cap. stk. \$1,000,000. North star, gold. Slope, 18,000 tons; free; water; 40 stamps. Emile R. Abadie, supt.
"	Omaha Consolidated Gold Mining Co., San Francisco, Cal., Phelan Bldg. E. W. Hopkins, prest.; C. A. Grow, secy. and treas.; L. Gilson, mgr. Cap. stk. \$2,400,000. Omaha, gold. Slope, 3,000 tons; free; water; 28 stamps. George Malnhart, supt.
"	Original Empire Mining & Milling Co., San Francisco, Cal., 401 California st. Jas. D. Hague, prest.; D. A. Jennings, secy.; Bank of California, treas.; Geo. W. Starr, mgr. Cap. stk. \$1,000,000. Empire, gold. Slope, 18,000 tons; free; water; 40 stamps. Geo. W. Starr, supt.
"	Osborn Hill Mining Co. William Campbell, prest. and treas.; George Campbell, secy. Osborne Hill, gold. Shaft; free; steam.
"	Seven-Thirty Mining Co. James McLachlan, prest.; J. M. Thomas, secy.; Citizens' Bank, treas.; Cap. stk. \$50,000. Seven-Thirty, gold. Shaft, 300 tons; free; steam. J. McLachlan, supt.
"	State Ledge Mining Co. State Ledge, gold. Tunnel, 24,000 tons; free; water; 10 stamps. A. L. Perrin, supt.
"	Telegraph Mining Co. James Zawaskie, prest.; John F. Sullivan, secy.; T. J. Hurley, treas.; M. O'Connell, mgr. Cap. stk. \$365,000. Telegraph, gold. Shaft, 6,000 tons; free; steam; 5 stamps. Jas. Zawaskie, supt.
"	H. Uphoff. Washington, gold. Slope, 2,500 tons; free; steam and water.
"	Vulcan Mining Co. Martin Ford, prest. and mgr.; M. McDonough, secy. Cap. stk. \$2,500,000. Vulcan, gold. Shaft, 30 tons; free; horse. Martin Ford, supt.
"	Western Star Gold & Silver Mining Co., San Francisco, Cal., Safe Deposit Bldg., Room 8. Jno. S. Ott, prest.; Jno. A. Reed, secy.; Gustav Kartschoke, treas.; F. Zeiler, mgr. Cap. stk. \$1,000,000. Western Star, gold and silver. Shafts and tunnels; free; steam and water. F. Zeiler, supt.
"	White Oak Gold Mining Co. J. J. Orr, prest.; Jno. Gadden, secy.; E. McCann, treas. White Oak, gold. Shaft and tunnel; free; steam. J. J. Orr, supt.
"	Williams Bros. Deer Creek, gold. Tunnel and shaft; free; hand. Richard Williams, supt.

## GOLD AND SILVER—(CONTINUED).

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Grass Valley ... Nevada (Continued.)	Work Your Own Diggins Mining Co., J. R. K. Nuttal, pres.; Jacob Weisslein, secy.; Weisslein Bros., treas.; C. A. Brockington, mgr. Cap. \$tk. \$60,000. Work Your Own Diggins, gold. Shaft and incline, 4,000 tons; free; steam; 10 stamps. C. A. Brockington, supt.
" " " "	Wyoming Consolidated Mine, B. F. Rimmels, pres.; W. E. Parsons, secy.; Citizens' Bank, treas. Cap. \$tk. \$300,000. Wyoming, gold. Slope; free; steam. B. F. Rimmels, supt.
Gray Eagle Bar, El Dorado (P. O. Michigan Bluff Ry. Forest Hill 622.	Thomas McCall. Cap. \$30,000. McCall, gold. Tunnel; free; hand. John Page, supt.
Green Valley ... El Dorado Ry. Shingler Springs 622.	Pyramid Mining & Milling Co., San Francisco, Cal., 173 Railroad av. Chas. Milly, pres.; Geo. W. Harvey, secy.; J. W. Hodgkin, treas.; W. H. Harvey, mgr. Cap. \$tk. \$100,000. Pyramid, gold. Shaft; refractory; water and steam; 5 stamps. Will H. Harvey, supt.
Greenville, ... Plumas Ry. Reno 491.	Blind Lead Mining Co., D. McIntyre, mgr. Blind Lead, gold. Tunnel; free.
" " " "	McGill & Standart. Gold. Tunnel and shaft, 3,300 tons; free; water; 20 stamps. G. Standart, supt.
Greenwood, ... El Dorado Ry. Auburn 622.	Jacob Baessler. Vankee Bar, gold. Placer; water.
" " " "	A. Bellaorta. Beraner, gold. Open pit; hand.
" " " "	Martin Bhebtrow. Invisible, gold. Tunnel, placer; water.
" " " "	Wm. Bordt. Flora, gold. Tunnel, 10 tons; free; hand.
" " " "	Samuel Kaiser. Ohio, gold. Shaft, free; hand.
" " " "	L. E. P. Laehance. Oakland, gold. Shafts, tunnels and pits; free; hand.
" " " "	Osborn Gold Mill & Mining Co., San Francisco, Cal., 308 Pine st. W. E. Lamb, pres.; W. J. Garnett, secy.; Wm. Fargo & Co. Bank, treas. Cap. \$tk. \$300,000. Triumph, Excelsior, Donozo, gold. Tunnel and shaft; water. Frank W. Baze, supt. and mgr.
" " " "	Revenge Mill & Mining Co., Philadelphia, Pa., 229 S. Fourth st. Revenge, gold. Tunnel and open pit; free; water; 5 stamps.
Grizzly Flats, ... El Dorado Ry. Shingler Springs 622.	McAfee, Missamore & Pool. Mount Pleasant, gold. Tunnel, 300 tons; free; steam; 10 stamps.
" " " "	Middle Creek Gravel Mining Co., Sacramento, Cal. 2022 1st. C. T. Robb, pres.; B. F. Parsons, secy. and treas.; S. A. Laine, mgr. Cap. \$tk. \$275,000. Middle Creek, gold. Tunnel; free; steam. S. A. Laine, supt.
" " " "	E. R. Moroy. Cap. \$5,000. Moroy and Sunday, gold. Shaft and tunnel, 200 tons; free; water; 5 stamps.
" " " "	Mount Pleasant Mining Co., New York City, 18 Wall st. James D. Hague, pres. Mount Pleasant, gold and silver. Shaft; free; steam; 10 stamps.
Groveland, ... Tuolumne Ry. Oak Dale 622 45 m. 1.	Cosmopolite Mining Co. Cap. \$5,000. Cosmopolite, gold. Tunnel; free; hand, 5 stamps. H. M. Stanley, supt.
" " " "	A. B. Crulekshank. Cap. \$45,000. Mary Allen and La Mascotte, gold and quartz. Tunnels, 5,400 tons; free; steam; 10 stamps.
" " " "	James Brothers. Cap. \$2,000. Two Brothers, gold. Shafts and tunnels, 50 tons; free; hand; 5 stamps. J. P. James, supt.
" " " "	Mount Zion Mining Co. Cap. \$2,800. Mount Zion, gold. Shaft; free; steam.
" " " "	Rhode Island Mining Co., T. C. Reid, pres.; Winslow Hubbard, secy. Rhode Island, gold. Shaft and tunnel; free and refractory; hand.
" " " "	Winslow Hubbard. Ellen Winton and Eagle Bluff, gold. Shafts and tunnels; free and refractory; hand.
Happy Camp, ... Siskiyou Ry. Montague 622 00 m. 1.	A. Clausen. Bald Hornet, gold. Placer; water.
" " " "	Del Norte Mining Co., San Francisco, Cal., 728 Montgomery st. Henry Pierce, pres.; Wm. H. Mead, secy. and treas.; S. S. Richardson, mgr. Cap. \$tk. \$200,000. Del Norte, gold. Placer; free; hydraulic.
" " " "	Dillon Hill Mining Co. Cap. \$8,000. Dillon Hill, gold. Placer; hydraulic. M. Mann, supt.
" " " "	C. Gordon. Cap. \$7,000. Pennsylvania, gold. Placer; hydraulic.
" " " "	David Huey. Prospect Hill, gold. Placer; hydraulic.
Hart ... Shasta Ry. Gold Mine Spur 622.	R. G. Hart sr., Redding, Cal. Cap. \$850,000. Texas Consolidated, gold and silver. Tunnels, 10,000 tons. Free and refractory; steam; 20 stamps.
Havilah, ... Kern Ry. Caliente 622.	John Hayes. Cap. \$1,000. Ophir and Cauty, gold. Tunnel and shafts, 300 tons; free; steam; 5 stamps.
Hayden Hill ... Larsen Ry. Amesley 627 00 m. 1.	Brush Hill Co. Frank Vanglose, mgr. Cap. \$5,000. Brush Hill, gold. Shaft, 300 tons; free; water 10 stamps.
" " " "	Harbert & Lewis, Adin, Cal. W. F. Harbert, pres. and mgr.; James C. Lewis, secy. and treas. Gold and silver. Shaft, 350 tons; free; horse and water; 5 stamps. W. F. Harbert, supt.
" " " "	Hayden Hill Consolidated Mining Co., Bieber, Cal. C. S. McCoy, pres.; N. Bieler, secy. and treas.; D. McLane, mgr. Cap. \$tk. \$1,000,000. Big Valley and Modoc Chief, gold and silver. Tunnel; hand and water; 25 stamps. D. McLane, supt.
" " " "	C. A. McBride. Cap. \$500. R. Pay, gold. Placer, 100 tons; free; water; 5 stamps.
Henley ... Siskiyou Ry. Hornbrook 622.	H. C. Babcock. Gold, gravel. Tunnel, placer.
" " " "	Blue Gravel Mining Co., A. McFarland, pres.; I. O. Jillson, secy. and treas.; C. B. Jillson, mgr. Cap. \$tk. \$50,000. Blue Gravel, gold. Placer. C. B. Jillson, supt.
" " " "	Brass Wire Mining Co. Cap. \$tk. \$2,000. Brass Wire, gold. Placer; hydraulic. A. Harvey, supt.

## GOLD AND SILVER—(CONTINUED).

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN	COUNTY.	
Henley	Siskiyou	Wh. Lee & Co., Yreka, Cal. Gold. Placer.
"	"	Niles Mining Co. A. W. Niles, pres.; L. Wright, secy.; Geo. Lee, treas.; E. A. Niles, mgr. Cap. stk. \$500. Rocky Gulch Bonanza, gold. Placer.
"	"	Roberts & Thomas. Bumble Bee, gold. Shaft and tunnel, 22 tons; free. W. B. Thomas, supt.
"	"	Thomas & Roberts. Fairy Queen, gold. Tunnel, 60 tons; free. W. B. Thomas, supt.
Hildreth	Fresno	P. Bazinet. Eliza Jane, gold. Slope and tunnels, 12 tons; free; horse, arrastre.
Ry. Fresno City 622.	"	Joseph Markle. Gold. Slope; free; horse, arrastre.
"	"	Mrs. R. C. Williams. Cap. stk. \$5,000. Last Chance, Hughes, Turkey's Nest, gold. Tunnel, placer, 40 tons; free; horse, arrastre.
Hornbrook	Siskiyou	J. C. Brown. Indian Girl, gold. Open pit, 50 tons; free; water.
Ry. 622.	"	J. J. Fowler. Edison, gold. Free; water; arrastre.
Hunt's Hill	Nevada	A. G. Turner. Cap. \$20,000. Eastern and Main, gold. Placer and drift; hydraulic.
(P. O. You Bet) Ry. Nevada City 420.	"	
Indio	San Diego	Consolidated Dos Palms Mining Co., Kansas City, Mo., 400-405 Heist Bldg. Peter W. Kline, pres.; Robert A. Helm, secy.; Nelson F. Acers, treas.; C. E. Bloomer, mgr. Cap. stk. \$2,000,000. Dos Palms, gold. Tunnels; free.
Ry. Saton 622 (14 m.).	"	
Inskip	Butte	Christoff & Co. Cap. \$6,000. Owl, gold. Tunnel and shaft, 2 tons; free; hand.
Ry. Oroville 622.	"	Davis & Cory. West Branch, gold. Placer; water.
"	"	Manuel Enos. Cap. \$1,500. Ogden Revere, gold. Placer; water.
"	"	Golden Summit Blue Gravel Mining Co., Golden Summit, Cal. Golden Summit, gold. Deep placer, tunnel; hand.
"	"	Thomas Henderson. Cap. \$2,000. Golden Thread, gold. Tunnel, 25 tons; free; water.
"	"	Faustino Machado. Cap. \$500. Machado, gold. Placer.
Jackson	Alameda	Albany Gold Mining Co., San Francisco, Cal., 330 Pine st., Room 5. John Henderson, pres.; F. E. Lutz, secy.; H. R. Lonsberry, treas. and mgr. Cap. stk. \$1,000,000. Albany, gold. Deep shafts and tun- nels (developing); free; steam.
Ry. Lone 622 (12 m.).	"	W. N. Bar Due, San Francisco, Cal., cor. Mission and Twenty-first sts. Gold. Tunnels, shafts and drifts; free and refractory; water; 20 stamps and concentrator.
"	"	Wm. Doyle. Doyle, gold. Shaft and tunnel, 200 tons; free; water.
"	"	Kennedy Mining & Milling Co., San Francisco, Cal., 404 Montgomery st. John Barton, pres.; L. F. Reel- ing, secy. and mgr.; J. F. Parks, mgr. Shaft and tunnel, 37,000 tons; free; water and steam; 40 stamps. J. F. Parks, supt.
"	"	Zella Mining Co., San Francisco, Cal., 127 Montgomery st. Frederick O. Heydenfeldt, pres.; Thomas O. Heydenfeldt, secy. Crocker Woolworth National Bank, treas.; Zella, gold. Shafts, 48,000 tons; free; steam and water; 40 stamps and concentrator. W. F. Deterf, supt.
Jacksonville	Tuolumne	C. A. J. Waterman. Golden Crystal, gold. Shaft, tunnel and slope; free; hand.
Ry. Oakdale 622 (32 m.).	"	
James-town	Tuolumne	App & Co. Gold. Shaft; free; water and steam; 25 stamps.
Ry. Milton 622.	"	Dutch Mining Co. Dutch, gold. Shafts, 400 tons; free; horse; 5 stamps. R. Fitzgerald, supt.
"	"	G. A. Leland. Cap. \$20,000. Nigger Hill, gold. Hand.
"	"	Martha Washington Placer Mining Co., Oakland Cal., 1212 Webster st. Mrs. S. Gertrude Smyth, pres.; Mrs. P. T. Burrell, secy. and treas. Cap. stk. \$500,000. Peoria, gold. Placer; free; water and elec- tricity.
"	"	Rawhide Mining Co., San Francisco, Cal. W. A. Nevills, pres. and mgr.; A. Judson, secy.; John Ballard, treas. Rawhide, gold. Shaft; refractory; steam and water; 40 stamps. W. A. Nevills, supt.
"	"	Tuolumne Gold Mining Co., San Francisco, Cal. O. H. Bogart, pres.; I. Vollmer, secy.; I. Kallmes, treas. and mgr. Cap. stk. \$2,000,000. Table Mountain, gold. Shafts, drifts and tunnels; steam (devel- oping). I. Kallmes, supt.
Johnsville	Plumas	Franklin Consolidated Gold Mining Co. D. McFarlane, pres. and secy.; W. Sperry, treas.; T. L. Jones, mgr. Cap. stk. \$13,000. Franklin, gold. Tunnel, T. L. Jones, supt.
Ry. Chat 490.	"	Janison Mining Co. John Nevill, pres.; Sam W. Cheyney, secy. and mgr.; Bank of California, treas. Cap. stk. \$3,000,000. Janison, gold. Shaft and tunnel; free; water. Sam W. Cheyney, supt.
Julian	San Diego	Eagle Mining Co. Eagle, gold. Shaft and tunnel, 500 tons; free; mill. A. N. Frary, supt.
Ry. Lakeside 622.	"	Ella Mining Co. Ella, gold. Tunnel; free; horse. S. N. Wilcox, supt.
"	"	Owens Consolidated Mining Co., San Diego, Cal. H. A. Williams, pres. and treas.; John M. Harney, secy. Cap. stk. \$900,000. Owens, gold. Shaft; free; steam; 10 stamps.
Keeler	Inyo	James Jenkins. Harrison, silver. Tunnel and shaft, 30 tons; refractory.
Ry. 108.	"	Robert Lockett. Landmark, gold, silver and lead. Shaft and tunnel, 30 tons; refractory; hand.
Kennett	Shasta	Anglo California Gold Mining & Milling Co., Chicago, Ill., 232 Clark st. J. F. Lee, pres.; W. J. McMullen, secy.; E. H. Whitted, treas. C. M. Dobson, mgr. Cap. stk. \$1,000,000. Anglo-California, gold. Shafts and tunnels; free and refractory; water; 20 stamps. Charles Ferguson, supt.
Ry. 622.	"	



## GOLD AND SILVER—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Kernville..... Kern Ry. Caliente 692.	Bob Lee Mining Co. Robert Robinson, pres.; J. W. Robinson, secy.; Wm. Wicker, treas.; James King, mgr. Cap. stk. \$100,000. Bob Lee, gold. Shaft, 1,000 tons; free; water; 10-stamps. Luther Burton, supt.
Keyesville..... Kern (P. O. Kernville) Ry. Caliente 692.	J. W. Sumner. Cap. \$5,000. Mammoth and Tom Lane, gold. Tunnels and shafts, 200 tons; free; water; 5 stamps.
Letehar..... Fresno Ry. Fresno 692.	Frank Gross. Cap. \$5,000. Defiance, gold. Tunnel, 100 tons; free; horse, arrastre.
"....."	S. M. Jensen. Midnight Star, gold. Tunnel and shaft, free (developing).
"....."	Edward Lloyd. Cap. \$10,000. Confident, gold. Slopes and tunnels, 300 tons; free; water; 5 stamps.
Lewiston..... Trinity Ry. Redding 692.	Lewiston Hill Placer Mine, gold. Placer; hydraulic. Jas. W. Phillips, supt.
"....."	Shield & Scott. Ferry Gulch, gold. Placer.
Long Canon..... Placer (P. O. Michigan Bluff) Ry. Auburn 692.	W. B. Marshall. B. F., gold. Deep placer, tunnel; hand.
Lordsburg..... Los Angeles Ry. 26.	Kingsbaker, Edelman & Connolly, Los Angeles, Cal., 294 N. Los Angeles st. San Dimas, porphyry. Pit, hand and horse. John M. Connolly, supt.
Magalla..... Butte Ry. Oroville 692.	Joseph Gilnes. Willard, gold. Placer; hydraulic.
"....."	Magalla Consolidated Mining Co., Oroville, Cal. D. P. North, secy. Magalla, gold. Drift; free, water. S. P. Moody, supt.
Mariposa..... Mariposa Ry. Merced 692.	O. W. Ward. Whitlock, gold. Shaft and tunnel; free; steam.
Marysville..... Nevada Ry. Nevada City 490.	C. O. Sawtelle, E. W. Sawtelle & F. H. Greeley. Cap. \$4,000. Black Bull, gold. Placer, tunnel; free; horse.
Michigan Bar, Sacramento Ry. Carbonade 692.	Amador & Sacramento Canal Co. Mrs. Jennie B. Ritter, pres. and treas.; Henry S. Byam, secy. and mgr. Cap. stk. \$200,000. Hill Top, gold. Placer, hydraulic. Henry S. Byam, supt.
"....."	James Gordon. Cap. \$10,000. Gordon, gold. Placer; hydraulic.
Michigan Bluff..... Placer Ry. Colfax 692.	Dam Mining Co., San Francisco, Cal., cor. Broadway and Battery sts. Dam, gold. Free; gravel; horse and hand. Adolph Weske, supt.
"....."	Hurd & Bleford. Fox Flat, gold. Placer; hydraulic.
Middle Bar..... Amador P. O. and Ry. Jackson 692 (12 miles).	S. H. Howland. Caseo, gold. Slope, 10,000 tons; free; water; 10-stamps.
Middle Creek..... Shasta Ry. 692. (P. O. name Waugh)	Calumet Gold Mining Co. W. H. Garlick, pres. and treas.; A. B. Paul jr., secy.; Almarin B. Paul, mgr. Cap. stk. \$1,000,000. Calumet and Poor Man, gold. Tunnel, shaft and drift; refractory; water; 24 stamps. Almarin B. Paul, supt.
"....."	Crossbow Gold Mining Co., San Francisco, Cal., Room 62 Nevada Block. Julius Koebig, pres.; Henry D. Walker, secy.; Bank of California, treas.; Arnold Becker, mgr. Cap. stk. \$500,000. Crossbow and Skyblue, gold. Shaft and tunnel; free. M. Maryanski, supt.
Mokelumne Hill, Calaveras Ry. Valley Springs 692.	Horsevill & Bishop, San Francisco, Cal. Calaveras, blue lead; Whatcheer, gold. Placer; free; water and steam; 5 stamps. F. J. Horsevill, supt.
"....."	Mesorley & Co. Green Mountain, gold. Tunnel, 20,000 tons; free; water; 8 stamps. T. E. Mesorley, supt.
"....."	S. S. Moser. Excelsior Consolidated, gold. Placer; free, water.
"....."	Quaker City Gold Mining Co., San Francisco, Cal., 418 Market st. E. B. Rambo, pres. Quaker City, gold. Shaft; free; steam and water; mill. H. J. Mesorley, supt.
"....."	Sandy Bar Mining Co., San Francisco, Cal., Tivoli Opera House. Wm. Kreebling, pres. Cap. stk. \$1,000,000. Sandy Bar, gold. Free; water; 10 stamps; E. H. Davison, supt.
"....."	Thomas Sullivan. Gold. Placer, tunnel; free; water.
Mono Lake..... Mono Ry. Hawthorne, Nev. 108.	Hannam Bros. Charles A. Dyer, mgr. Cap. \$6,000. Charleston Consolidated, gold. Tunnel; free; water; 5 stamps. J. P. Hannam, supt.
Mtn. Ranch..... Calaveras Ry. Valley Springs 692.	Shenandoah Mining & Development Co., Oakland, Cal., 208 Twelfth st. Wm. F. Blood, pres.; Chas. E. Gillett, secy. and treas.; William Craig, mgr. Cap. stk. \$1,000,000. Hoosier, Way and Mary Lowry, gold and silver. Shafts and tunnels; free; water; 10 stamps. Wm. Craig, supt.
Nevada City..... Nevada Ry. 490.	Beekman Hill Gravel Mining Co. N. Weber, pres.; F. W. Boss, secy.; B. H. Miller, treas.; August Rapp, mgr. Cap. stk. \$50,000. Beekman Hill, gold. Tunnel and shaft (developing). August Rapp, supt.
"....."	Champion Mining Co., San Francisco, Cal., 320 Sansome st., Room 10. F. Zettler, pres.; Theo. Wetzol, secy.; Jos. Schuster, treas. Cap. stk. \$300,000. Champion, gold and silver. Shaft, 10,000 tons; free; water; 15 stamps. J. P. Goldstone, supt.
"....."	Craig Bros., San Francisco, Cal., 316 Montgomery st. Cap. \$150,000. Knickerbocker Consolidated, gold. Tunnel, placer, 30,000 tons; free; hydraulic. Walter R. Craig, supt.
"....."	Federal Loan Gold Mining Co. John Vincent, pres. and mgr.; Chas. J. Brand jr., secy.; A. Wtke, treas. Cap. stk. \$500,000. Federal Loan, gold and silver. Shaft and slope, 7,000 tons; free and refractory; water; 10 stamps. John Vincent, supt.
"....."	Fountain Head Gravel Mining Co. Q. J. Rolfe, pres.; E. Miller, secy.; Citizens' Bank, treas. Cap. stk. \$1,000,000. Fountain Head, gold. Shaft; water, hydraulic.
"....."	Gold Hill Mining Co., New York City, 59 Broadway. M. J. Shocraft, pres.; C. Littlefield, secy. and treas.; B. N. Shocraft, mgr. Cap. stk. \$800,000. Nevada City, gold. Shafts, 12,000 tons; free; water; 20 stamps. B. N. Shocraft, supt.

## GOLD AND SILVER—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN	COUNTY.	
Nevada City	Nevada (Continued.)	Manzanita Consolidated Gravel Mining Co. George C. Shaw, prest.; Robt. J. Simons, seey.; E. M. Preston, treas.; Robt. Simmons, mgr. Manzanita Consolidated, gold. Placer; water (developing). Robt. Simmons, supt.
"	"	Mayflower Mining Co. W. H. Martin, prest. and mgr.; John Waters, seey.; Robt. Martin, treas. Cap. stk. \$10,000. Mayflower, gold. Tunnel and shaft, 2,000 tons; free; water; 4 stamps. W. H. Martin, supt.
"	"	Mountaineer Mill & Mining Co., San Jose, Cal. J. A. Hornberger, prest.; A. E. Moody, seey. and treas.; W. A. Dennis, mgr. Cap. \$10,000,000. Mountaineer, gold. Slope and tunnel, 10,000 tons; free; water; 20 stamps. W. A. Dennis, supt.
"	"	Olin Gold & Silver Mining Co. Chas. Klingensdor, prest.; R. Casper, seey.; J. J. Ott, treas.; Carl Hesse, mgr. Cap. stk. \$1,500,000. Nebraska and Wait for the Wagon, gold. Placer; hydraulic. Geo. Nibell, supt.
"	"	Providence Mining Co., San Francisco, Cal. N. W. cor. Fourth and Bryant sts. Peter Tautphans, prest.; W. H. Widman, seey.; Bank of California, treas.; Carl Davis, mgr. Cap. stk. \$1,000,000. Providence, gold. Shafts and tunnel, 26,000 tons; free; water; 40 stamps. Carl Davis, supt.
"	"	Stiles Gold Mine, San Francisco, Cal., 310 Pine st. James Morgan, prest.; John A. Robinson, seey.; Bank of California, treas.; Wm. B. McSherry, mgr. Cap. stk. \$1,000,000. Stiles, gold. Shaft; free; steam. Wm. B. McSherry, supt.
"	"	West Harmony Gravel Mining Co., 61 Broad st. R. C. Walrath, prest. and mgr.; A. Isoard, seey.; W. W. Stow, treas. West Harmony, gold. Shaft, 60,000 tons; free; water; R. C. Walrath, supt.
Newcastle	Placer Ry. 692.	W. J. Lawrence. Cap. \$45,000. Lawrence and Jenny Lind, gold. Shaft, 7,000 tons; free; water; mills.
"	"	E. L. G. Steele & Co., San Francisco, Cal., 208 California st. Live Oak, gold. Slope; free; horse. Robt. Jones, supt.
Newhall	Los Angeles Ry. Sanger, 692.	Mary Frederick Mine. C. D. Rust, mgr. Gold. Tunnel and slope; free; hand, steam and water.
Ninshew	Butte Ry. Chico 692 (22 m.).	Eagle Gold Mining Co. Saul Rugh, prest.; T. C. Whitely, seey.; Bank of California, treas.; G. C. Higgins, mgr. Cap. stk. \$60,000. Eagle, gold. Tunnel; placer; hydraulic. G. C. Higgins, supt.
North Bloomfield	Nevada Ry. Nevada City 430 (14 miles).	Derbee Blue Gravel Mining Co., San Francisco, Cal., 320 Sansome st., Room 10. A. G. Chauchl, prest.; Theo. Wetzel sr., seey.; London, Paris and American Bank, treas.; Theo. Wetzel jr., mgr. Cap. stk. \$100,000. Derbee, gold. Placer, shaft, 50,000 tons; steam and hydraulic. Theo. Wetzel jr., supt.
"	"	North Bloomfield Gold Mining Co., San Francisco, Cal., 320 Sansome st. H. Pichoir, prest.; Bank of California, treas. Cap. stk. \$3,000,000. North Bloomfield, gold. Hydraulic. J. G. Mather, supt.
North Columbia	Nevada Ry. Colfax 692.	Delhi Mining Co., San Francisco, Cal., 320 Sansome st., Room 25. R. McMurray, prest.; C. F. Hunt, seey.; London, Paris and American Bank, treas. C. H. Mallen, mgr. Cap. stk. \$10,000,000. Delhi, gold and silver. Tunnel, 10,000 tons; free; water; 18 stamps. C. H. Mallen, supt.
"	"	Enterprise Gold Mining Co., North Columbia, Cal. Major J. S. McBride, prest.; C. S. Paine, seey.; R. McMurray, treas.; C. H. Mallen, mgr. Cap. stk. \$10,000,000. Enterprise, gold and silver. Shaft and tunnel; free; hand. C. H. Mallen, supt.
Novelty	Siskiyou Ry. Gazelle 692 (75 m.).	Gold Run Mining Co. Cap. \$30,000. Gold Run, gold and silver. Tunnel, 2,000 tons; free; water; 4 stamps. A. Dumenbrink, supt.
"	"	Know Nothing Quartz Mining Co. Know Nothing, gold. Tunnel, 1,000 tons; free; water; 4 stamps. Louis Bevans, supt.
Oak Bar	Siskiyou Ry. Vreka 692.	Jensen & Co., gold. Placer; water. C. Jensen, supt.
"	"	C. H. Peck & Co. Peck's Bad Boy, gold. Free; water, arrastre. C. H. Peck, supt.
Ogilby	San Diego Ry. 692.	P. B. Mathiason, St. Louis, Mo., 5310 N. Second st. Capital \$30,000. Mother Loade, gold. Shaft and tunnels; free.
"	"	Pasadena Gold Mining Co., Pasadena, Cal. W. T. Grimes, prest.; P. B. Mathiason, seey.; Wm. Borthwick, mgr. Cap. stk. \$200,000. Rosa Lowman, gold. Tunnel; free; hand; 20 stamps. Wm. Borthwick, supt.
"	"	Paymaster Mining Co., Boston, Mass. Chas. P. Hemenway, prest.; John Dodd, seey.; T. Quincey Browne, treas.; H. W. Blaisdell, mgr. Cargo, Muehacho, gold. Shaft, 18,000 tons; free; steam; 50 stamps. Hiram W. Blaisdell, supt.
Omo Ranch	El Dorado Ry. Latrobe 692 (30 miles).	Crystal Gold Mining Co., San Francisco, Cal., 314 Eddy st. George H. Hawes, prest.; S. A. Kelly, seey. and treas.; L. L. Alexander, mgr. Cap. stk. \$250,000. Crystal, Creole, Mountain Quail and Creole North, gold. Shaft and tunnel; free and refractory; water; 8 stamps. L. L. Alexander, supt.
Omo	Shasta Ry. Hudson 692.	Joseph E. Dell, Shasta, Cal. Summit, gold. Tunnels, 250 tons; refractory. J. Scranton, supt.
"	"	Davis & King, Sunny Hill, Cal. J. P. W. Davis, mgr. King, gold. Tunnel, 300 tons; refractory; water, arrastre; mill. J. P. W. Davis, supt.
"	"	N. Gardiner, Red Hill, gold. Placer; hydraulic.
"	"	Sharp Mining Co., San Francisco, Cal., 426 Townsend st. E. R. Hall, prest.; Louis Sharp, seey. and treas.; L. V. Loomis, mgr. Cap. stk. \$20,000. Grey Eagle, gold. Tunnels, 1,500 tons; free and refractory; water; 5 stamps, mill. L. V. Loomis, supt.
Ophir	Placer Ry. New Castle 692.	Wm. Geach, Auburn, Cal. Cap. \$20,000. Central and Humburg, gold. Shaft; free; horse.
"	"	John Holbrook & Son, New Castle, Cal. Cap. \$30,000. June Bug and Lena Rivers, gold. Shaft, 1,000 tons; refractory; water; 5 stamps. N. T. Holbrook, supt.
"	"	Hubbard & Reed, Auburn, Cal. Gold Blossom, gold. Shaft, 4,000 tons; refractory; water; 10 stamps. E. L. Hubbard, supt.
"	"	N. Maring & Son. Bullion, gold. Shaft; free and refractory; steam.
"	"	W. R. Mounahan. Monumental, gold and silver. Shaft; free; horse (developing).

## GOLD AND SILVER—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN	AND COUNTY.	
Ophir.....	Placer (Continued.)	Ophir Gold & Silver Mining Co. W. Steel, pres.; J. W. Mackey, secy.; C. C. Handy, treas.; L. Ferguson mgr. and supt. Cap. stk. \$300,000. Ophir, gold and silver. Shaft, 1,300 tons; free; water; 10 stamps.
"	"	Chas. A. Reed. St. Lawrence, gold. Tunnel and shafts; free and refractory; hand mill under construc- tion.
"	"	Schubal & Co., New Castle, Cal. Boulder, gold and silver. Shaft and drift; free and refractory; water.
"	"	Orto T. Walter. Morning Star, gold. Shaft, free and refractory; water and hand.
"	"	James S. Winn. Brush Fence, gold. Tunnel, 1,500 tons; free.
Orleans Bar ..	Humboldt Ry. Arcata 682.	Allen & Lord. Cap. \$4,000. Red Cap and French Bar, gold. Placer; hydraulic. A. H. Allen, supt.
"	"	A. Markusen. Cap. \$4,000. Croton Bar, gold. Placer; hydraulic.
"	"	Orleans Bar Mining Co., London, Eng., 110 Cannon st., E. C. G. A. Batchelor, pres.; P. L. Young, secy., treas. and mgr. Wilder, gold. Placer; hydraulic; plant. P. L. Young, supt.
Oro Grande S. Bernardino (P. O. Hallowell) Ry. 26.		Joseph Griskell. Side Winder and Key Hole, gold and silver. Shafts and drifts; refractory; 10 stamps. mill.
"	"	Pacific Gold & Silver Extraction Co., Los Angeles, Cal. M. M. Morrison, pres.; E. L. Dohney, secy.; J. B. Rentehefer, treas. and mgr. Cap. stk. \$10,000. O. G. and O. K., gold and silver. Shaft, 4,500 tons; free and refractory; steam; 10 stamps. J. B. Rentehefer, supt.
Patterson Mng. Dist Mono (P. O. Sweetwater, Nev. Ry. Hawthorne, Nev., 108.		Great Western Consolidated Mining Co., San Francisco, Cal. Wm. Irwin, pres.; Martin Jones, secy., H. C. Callahan, treas. Cap. stk. \$10,000,000. Great Western, silver. Tunnel, free (developing).
"	"	Rattler Mining Co., Sweetwater, Nev. Cap. stk. \$10,000. Rattler, gold and silver. Drifts (developing). A. S. Kilpatrick, supt.
Pentz.....	Butte Ry. Oroville 26.	Durgin Mining Co., San Francisco, Cal., 308 California st., D. A. Hiller, pres.; Walter N. Kempton, secy.; Grangers' Bank, treas.; L. J. Lewis, mgr. Cap. stk. \$1,000,000. Durgin, gold. Tunnel; placer, 2,000 tons; free; water. L. J. Lewis, supt.
Perris.....	San Diego Ry. 26. (6 miles).	Adyor Mining Co., East St. Louis, Ill. F. J. Krouse, pres. and mgr.; Elliott B. Page, secy. and treas. Cap. stk. \$100,000. Adyor and Kosmo, gold. Tunnel; free.
"	"	Morthner Curren, Los Angeles, Cal. Colorado, gold. Slope (developing); free. Frank A. Garbutt, supt.
"	"	Good Hope Consolidated Gold Mining Co., J. M. Sclafus, pres.; J. Everett Bird, secy. and mgr.; E. M. Bird, treas. Cap. stk. \$100,000. Good Hope, San Jacinto and Annex, gold. Shaft and slope, 15,000 tons; free; steam; mills. J. B. Doran, supt.
Pike City.....	Sierra Ry. Nevada City 40.	King Solomon Mining Co., Grass Valley, Cal., Citizens' Bank, Main st. Elam Biggs, pres.; J. M. Thomas, secy.; Citizens' Bank, treas.; W. H. Weldon, mgr. Cap. stk. \$2,000,000. King Solomon, gold. Tunnel- ing; free; water; 10 stamps. W. H. Weldon, supt.
Placerville ..	El Dorado Ry. 682.	Barnes Mining Co. H. L. Robinson, mgr. Barnes, gold. Shaft, free and refractory; steam. H. L. Rob- inson, supt.
"	"	Blair Drift Mine, San Francisco, Cal. H. O. Bacon, pres. secy. and treas.; F. P. Bacon, mgr. Blair, gold. Tunnel (developing).
"	"	Bobby Burns Mining Co. Henry G. Miller, treas. Bobby Burns, gold. Shaft; free; water; 10 stamps. Henry G. Miller, supt.
"	"	El Dorado Big Tunnel & Mining Co. H. S. Morey, pres.; George W. Kimble, secy.; Thos. Alderson, treas.; L. McNeill, mgr. and supt. Cap. stk. \$100,000. El Dorado Big Tunnel, gold. Tunnel; water.
"	"	El Dorado Water & Deep Gravel Mining Co. Arthur Young, pres.; William R. Colomb, secy. and treas. Thirty mines, gold. Hydraulic.
"	"	Middlecreek Mill Mining Co., Sacramento, Cal., 2022 I st. C. S. Robb, pres.; B. F. Parsons, secy. and treas.; S. A. Lane, mgr. Cap. stk. \$5,000. Middlecreek, gold. Tunnel; hand. S. A. Lane, supt.
"	"	Richard & Gregory. Samuel Gregory, secy. and treas.; George Gregory, mgr. Oak Ranch, gold. Shaft and slope, 250 tons; steam; 10 stamps. George Gregory, supt.
"	"	W. P. Stanley. Toll House, gold. Shaft and drifts; water; 10 stamps, mill. W. C. Green, supt.
"	"	Toll House Mining Co. Hook and Ladder, gold. Shaft and drifts; free; water; 10 stamps. W. C. Green, supt.
Plymouth.....	Amador Ry. 482.	Bay State Mining & Development Co. W. T. Jones, pres.; A. J. Foster, secy.; J. Woolford, treas. Cap. stk. \$200,000. Bay State, gold. Shaft; steam. W. T. Jones, supt.
"	"	Oseola Consolidated Mining Co., San Francisco, Cal., 307 Montgomery st. Jacob Wray, pres.; Holland Smith, secy.; Jos. Wertheimer, treas.; Michael Wertheimer, mgr. Cap. stk. \$10,000,000. Oseola, gold and silver. Shaft; free and refractory; water. J. W. Brown, supt.
Quincy.....	Phumas Ry. Reno, Nev., 682.	W. S. Dean. Genesee, gold. Placer; hydraulic.
"	"	Golden Gate Mining Co. Golden Gate, gold. Tunnel, shaft and open pit; free; steam; 10 stamps. C. E. McLaughlin, supt.
"	"	Goodwin & Kelley. Cap. \$50,000. Hungarian, gold. Placer; hydraulic.
"	"	A. E. Leavitt. New Town Flat, gold. Shaft and tunnel; hand.
"	"	Frank Vere. Cap. \$10,000. Vere's, gold. Placer; hydraulic.
Railroad Flat ..	Calaveras Ry. Spring Valley 682.	H. S. Ellsworth. Keystone, gold. Shaft, 300 tons; free; hand; 5 stamps.
"	"	Henry Timm. Cap. \$3,000. Varuna, gold. Shafts, 100 tons; hand.
Raymond.....	Fresno Ry. Herbert Switch 682.	Cook Bros. Cap. stk. \$100,000. Gold. Open pit, 1,500 tons; horse.

## GOLD AND SILVER (CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINTS.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Redding ..... Shasta Ry. 692.	Isaac Atwood. Lloyd, gold. Shaft and tunnel; free; water.
" " " "	Benjamin N. Bugbey, Sacramento, Cal., Court-House. Cap. \$56,000. Little Nellie, gold. Tunnel, 2,500 tons; free and refractory; water; mill. J. M. Gleaves, supt.
" " " "	Don Carlos Gold Mining Co., Santa Cruz, Cal., 179 Pacific av. I. L. Thurber, prest.; L. Markham, secy. and mgr.; City Bank of Santa Cruz, treas. Cap. stk. \$100,000. Don Carlos. Tunnel; free and refractory; water and electricity; mill. Chas. Thistedhwaite, supt.
" " " "	Eureka Tellurium Gold Mining Co., Peter Scherer, prest.; George C. Jones, secy.; Bank of Shasta Co., treas. Cap. stk. \$1,250,000. Eureka, gold. Shaft and tunnel; free and refractory; steam. Peter Scherer, supt.
" " " "	Christensen & Foster, T. W. Foster, mgr. Cap. \$10,000. Black Jack, gold. Tunnel, 15,000 tons; free; water; mill. C. P. Christensen, supt.
" " " "	W. C. Hart & Co., T. H. Hart, mgr. Bismark Consolidated, gold and silver. Tunnels; free; water; mill. W. C. Hart, supt.
" " " "	Reed Mines Consolidated Co., San Francisco, Cal., Nevada Block. I. L. Howard, prest.; A. L. Cheminant, secy.; James Duncan, treas.; Robert Stevenson, mgr. Cap. stk. \$1,000,000. Reed, gold. Tunnels and shafts; free and refractory; steam; 5 stamps. Robert Stevenson, supt.
Relief Hill ..... Nevada (P. O. North Bloomfield) Ry. Nevada City 430.	Waukeshan Consolidated Co. Waukeshan, gold. Tunnel, placer; free; horse; hydraulic. John R. Jones, supt.
Riverside, San Bernardino Ry. 692.	Gavilan Mining & Milling Co., A. S. White, prest.; C. W. Sylvester, secy. and mgr.; J. S. Castleman, treas. Cap. stk. \$1,000,000. Gavilan, gold. Shaft and tunnels; free; mills. B. R. Williams, supt.
Rommel Creek ..... Siskiyou (P. O. Orleans) Ry. Ar- cata 692.	Rommel Creek Mining Co., Arcata, Cal. Wm. Lord, prest., treas. and mgr.; Fred Gent, secy. Cap. stk. \$30,000. Rommel Creek, gold. Placer; water. John L. Fehely, supt.
San Andreas ..... Calaveras Ry. Valley Springs 692	Agostini & Ortion. G. Agostini, prest.; A. Ortion, secy.; E. Ortion, mgr. Cap. \$15,000. Last Chance, gold. Shaft and tunnel; free; steam and water. G. Agostini, supt.
" " " "	John Rathgel. Cap. \$100,000. Cordova, shaft. Free; steam; 20 stamps. J. Holland, supt.
" " " "	Ben. K. Thorn. Illinois, gold. Shaft; free; horse.
" " " "	Thorpe Mining Co., Fourth Crossing, Cal. Moses Thorpe, mgr. and supt. Thorpe, gold. Shaft; free and refractory; water; 10 stamps (developing).
" " " "	Union Shaft Gold Placer Mining Co. Wm. M. Murphy, prest.; Ira Hill Reed, secy. and mgr.; James Tiscornia, treas. Cap. stk. \$48,000. Union Shaft, gold. Shaft; free; water and steam; 8 stamps. Ira Hill Reed, supt.
San Bernardino, San Bernardino (Ry. 692, 40 miles.)	Bear Valley Mining Co., 643 W. Third st. Lewis Deck, prest.; John R. Lusby, secy.; Ernest Waghorn, treas.; Chas. L. Metzgar, mgr. Cap. stk. \$1,000,000. Cordova, Moonstone, Iron Mask, Pittsburg, East End, West End, gold, silver and lead. Shafts and tunnels; refractory. Chas. L. Metzgar, supt.
Santa Cruz ..... Santa Cruz Ry. 532, 692.	A. H. Fitch. Stribling, gold and silver. Tunnel; free and refractory; steam; 5 stamps.
Sawyer's Bar ..... Siskiyou Ry. Gazelle 692 (75 m.).	A. Ahlgran. Red Hill, gold. Placer; hydraulic.
" " " "	C. Barry & Co. Whistle Bear, gold. Open pit; placer; water.
" " " "	G. W. Bigelow & Sons. Cap. \$7,000. Channel, gold. Placer; water.
" " " "	S. L. Finley, gold. Placer; water.
" " " "	Gold Bull Mining Co., Canton, Ohio. I. P. Hole, prest.; L. M. Jones, secy.; L. L. Miller, treas. Cap. stk. \$1,000,000. Mountain Laurel and Kiamath, gold. Tunnel, 4,200 tons; free; steam and water; 20 stamps. Albert Ball, supt.
" " " "	Frank Manha & Co. Cap. \$25,000. Heleher, gold. Placer; hydraulic. Frank Manha, supt.
" " " "	P. Napoles & Co. Cap. stk. \$60,000. Progress, gold. Placer; water. Pedro Napoles, supt.
" " " "	Fred Olson. Cap. \$2,000. Olson, gold. Placer; hydraulic.
" " " "	Edward Roberts. Roberts, gold. Tunnel and shaft, 1,500 tons; free; water, arrastre.
" " " "	Uncle Sam Quartz Mining Co. Uncle Sam, gold. Shaft and tunnel; free; water; 8 stamps. Edmund Sheffield, supt.
" " " "	John C. Windeler. Panther Hill, gold. Placer; hydraulic.
Scott River ..... Siskiyou Ry. Yreka 692.	Reynolds & Jacobs. Skunk Hill, gold. Placer; hydraulic.
Seiad Valley ..... Siskiyou Ry. Yreka 692.	W. T. Grider. Cap. \$8,000. Mississippi, gold. Placer; water.
" " " "	Lee Yat Co. Cap. stk. \$10,000. Wood Bros., gold. Placer; hydraulic. M. B. Phillips, supt.
" " " "	John S. Lowden sr., Hauburg Bar, Cal., Lowden's Ranch. Cap. \$20,000. Jack Lowden, gold. Placer; water and hydraulic. J. S. Lowden, supt.
" " " "	J. P. Shinar & Bro. Kenyon Claim, gold. Placer; free; water.
Shasta ..... Shasta Ry. 692.	David Pesentia. Live Oak, gold. Shaft, tunnel, 150 tons; free; steam.
Shingle Springs, El Dorado (P. O. Green Valley) Ry. 692.	Dividend Mining Co., San Francisco, Cal.; 173 Railroad av. D. C. W. Hodgkins, prest., secy. and treas.; Aylmer Polton, mgr. Cap. \$12,000. Dividend, gold. Placer; hand and water.
" " " "	Sailor Jack Mining Co., Oakland, Cal., 1010 Washington st. D. P. Gray, prest.; Sol. Rogers, secy.; H. H. Worley, treas. Sailor Jack, gold. Tunnel; free; steam; mill. Harry, Prideoaux, supt.

## GOLD AND SILVER (CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Sierra City . . . . . Sierra Ry., Nevada City 490.	A. C. Busch. Phoenix, gold. Tunnel, 15,000 tons; free; water; 10 stamps.
" " " "	Butte Saddle Gold Mining Co., Francis Joseph Seitz, pres.; Antone Seitz, secy.; F. J. Seitz, treas. and mgr. Cap. stk. \$500,000. Butte Saddle, gold. Shaft and tunnel; free.
" " " "	Chips Mining Co., San Francisco, Cal., 70 Nevada Bldg. W. E. Dean, pres. and treas.; Chas. F. Elliot, secy. and mgr. Cap. stk. \$100,000,000. Chips, gold. Tunnel, 4,500 tons; free; water; 12 stamps. Samuel Locke, supt.
" " " "	Sierra Buttes Gold Mining Co., Ltd., London, Eng., 138 Leadenhall st., E. C. F. Tondron, pres.; John Saul, secy.; Wm. Johns, mgr. Cap. stk. \$1,225,000. Sierra Buttes, gold. Tunnel, 7,200 tons; free; water; 10 stamps. Stephen Thomas, supt.
" " " "	Young America Consolidated Mining Co., Thos. Brennan, pres.; J. H. Knuthson, secy. Cap. stk. \$2,500,000. Young America, gold. Tunnel, 25,000 tons; free; water; 40 stamps. John H. Henderson, supt.
" " " "	Yuba Consolidated Gold Mining Co., John H. Henderson, pres.; J. H. Knuthson, secy.; Hagerty & Lehman, treas. Cap. stk. \$16,000. Yuba, gold. Tunnel; placer. Gabe Cortello, supt.
Spelling Ry., Merced 692.	Mrs. Sophia Jacobs. Minnesota and Spangley, gold. Free and refractory; 10 stamps. Pawle Daggarto, supt.
Sonora . . . . . Toluimne Ry., Oakdale or Milton 692.	Badger Mining Co., A. E. Ellis, pres.; J. M. Palmer, secy. and treas.; Geo. E. Stayton, mgr. Badger, gold. Shaft and tunnels; free; water. Geo. E. Stayton, supt.
" " " "	Consolidated Eureka Mining Co., San Francisco, Cal., 29 California st., Hayward & Hobert, pres. and mgr.; C. T. Bridge, secy. and treas. Consolidated Eureka, gold. Shaft, 14,400 tons; free; steam and water; 20 stamps. C. H. Thomas, supt.
" " " "	New Albany Mining Co., New Albany, gold. Shaft, 3,000 tons; free; water, 10 stamps. W. Long, supt.
Sonsbyville . . . Toluimne Ry., Oakdale 692.	Leechman Prospecting Co., San Francisco, Cal., 508 California st., John S. Cox, pres.; Charles Christie, secy.; John Leechman, mgr. Kellz, gold and silver. Shaft and tunnels, 4,000 tons; free; water; 10 stamps. William Sharwood, supt.
" " " "	W. Sharwood. Porto Fino, gold. Shaft; free; steam (developing).
" " " "	Toluimne County Development Co., John Sewers, pres.; C. Herrmann, secy. and treas. Cap. stk. \$100,000. Platt and Gilson, gold and silver. Shaft, 7,200 tons; free; steam and water; 10 stamps. A. Trittenbach, supt.
S. Riverside-S. Bernardino Ry., Elmore 26.	Peterson Bros., Terra Alta, Cal. Cap. \$7,500. Occidental and Lucky Turn, gold and silver. Shaft, tunnel and slopes; free and refractory. David Peterson, supt.
Spenoeyville . . . Nevada Ry., Wheatland 692.	Bitner & Pletzeck. Cap. \$100,000. Champion Consolidated, gold, silver and copper. Tunnel and shaft, 100 tons; refractory; water and electricity. 4 apt. C. T. Bitner, supt.
" " " "	Goodhope Mining Co., Grass Valley, Cal. W. Pascoe, pres.; R. Vincent, secy. and treas.; A. Gale, mgr. Cap. stk. \$300,000. Good Hope, gold and silver. Shaft, free; water. R. Vincent, supt.
" " " "	W. H. Jackson. Cap. \$25,000. Jackson No. 2, gold, silver and copper. Tunnel, refractory; hand.
" " " "	Mammoth Mining Co., Cap. \$50,000. Mammoth, gold, silver and copper. Tunnel, free and refractory. water. John F. Dempsey, supt.
Stella . . . . . Shasta Ry., Middle Creek 692.	J. C. Thiekstun, Los Angeles, Cal. Cap. \$2,500. Stella, gold. Tunnel, free; water.
" " " "	West End Co., Cap. stk. \$10,000. West End, gold. Tunnel and shaft, free; water; 10 stamps, 1 quartz mill. Wm. Andrew, supt.
" " " "	Olivey P. Woodward jr., Mountain View, gold and silver. Tunnel and shaft, refractory.
Sulphur Creek . . . Colusa Ry., Williams 692.	T. M. Cooper, Williams, Cal. Cap. \$20,000. Clyde, gold. Shaft and tunnel, 6,000 tons; steam; mill. W. S. Stevens, supt.
" " " "	Manzanita Gold Mining Co., Philadelphia, Pa., 818 Drexel Bldg. W. W. Gibbs, pres.; R. A. C. Smith, secy. and treas.; Geo. V. Northey, mgr. Manzanita, gold and quicksilver. Tunnels; refractory. steam; 10 stamps and 3 quartz mills. Geo. V. Northey, supt.
Sunny South . . . Placer (P. O. Michigan Bluff) Ry., Auburn 622.	Hidden Treasure Mining Co., W. S. Davies, secy. Cap. \$100,000. Hidden Treasure, gold. Tunnel, placer, 60,000 tons; horse. Harold T. Power, supt.
Sutter Creek . . . Amador Ry., Ione 692.	Belmont Gold Mining Co., San Francisco, Cal., 330 Pine st., Room 5. Martin Jones, pres.; F. E. Luty, secy.; H. R. Lounsbury, treas.; J. H. Tibbits, mgr. Cap. stk. \$500,000. Belmont, gold. Shaft and tunnel, 6,000 tons; free; horse; 10 stamps. J. H. Tibbits, supt.
" " " "	Heeter Gold Mining Co., San Francisco, Cal., 517 Clay st. T. B. Valentine, pres.; James B. Hughes, secy.; D. B. Francis, treas. Cap. stk. \$300,000. Hunter, gold. Shaft, free; water. S. D. Valentine, supt.
" " " "	South Eureka Mining Co., J. L. Mayon, pres.; Jackson Dennis, secy. and treas. Gold. Shaft; water. J. F. Parks, supt.
" " " "	Wildman Gold Mining Co., Boston, Mass., 18 Central st. W. Emerson, pres.; Irving O. Whiting, secy. and treas.; John Tregloan, mgr. Cap. stk. \$120,000. Wildman, gold. Shaft, 20,000 tons; free; water; 30 stamps. John Tregloan, supt.
Taylor Mine . . . El Dorado (P. O. Greenwood Ry.) Auburn 622 (16 m.)	Billwald Gold Mining Co., San Francisco, Cal., 306 Pine st., Room 4. W. S. Chapman, pres.; Edw. F. Stone, secy.; Angelo-California Bank, treas. Taylor, gold. Shaft, 20,000 tons; free; water and electricity; 40 stamps. E. W. Chapman, supt.
Tremesal San Bernardino Ry., S. Riverside 26 and 692.	L. Lacher. Cap. \$500. King Solomon and Queen Sheba, gold and silver. Tunnel, 5 tons; free; steam; 5 stamps. L. Lacher, supt.
Three Rivers . . . Tulare Ry., Visalia 782, 783.	Wm. O. Clough, Visalia, Cal. Lady Emma, gold and silver. Shaft and tunnel; free; water.

## GOLD AND SILVER—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Thioloquo.....Yuba (P. O. Marysville.)	Marysville Tunnel & Quartz Mining Co., G. H. Boyd, prest.; P. J. Williams, secy.; J. A. Mahen, treas.; F. B. Crane, mgr. Cap. stk. \$1,000,000. Marysville, gold and silver. Shaft and tunnel; free. F. B. Crane, supt.
Trinity Centre.....Trinity Ry. Redding 692 (51 in.).	Diddy & Conwell. Cap. \$10,000. Snow Gulch, gold. Placer; hydraulic.
"....."	Parry Bros. Cap. \$500. Parry, gold. Placer; water. M. F. Parry, supt.
Tuttlefont.....Toulumne Ry. Milton 692.	Gagnere Mining Co., San Francisco, Cal., C. O. Dean, prest.; Geo. R. Wilson, secy.; J. P. Gagnere, mgr. Cap. stk. \$10,000,000. Gagnere, gold. Shafts and tunnels; free; water; 20 stamps.
Twenty-nine Palms Mining Dist., S. Bernardino (P. O. Riverside) Ry. Whitewater 692.	Twenty-Nine Palms Mining & Milling Co., Riverside, Cal., 466 Magnolia av. Cap. stk. \$2,000. Oro Fino, Oro Miucho and San Salvador, gold and silver. Shaft; free; hand and steam; quartz mill. Thos. Bakewell jr., supt.
Valley Springs, Calaveras Ry. 692.	Horsevill & Co., San Francisco, Cal. Horsevill, gold. Placer; free; steam and water. F. J. Horsevill, supt.
Victor.....San Bernardino Ry. 692.	Black Hawk Gold Co., Los Angeles, Cal. Jno. E. McFee, prest.; Harry Del Mar, secy.; Alex. Del Mar, treas. Cap. stk. \$2,000,000. Black Hawk, gold. Tunnels and shafts; refractory; steam; 10 stamps, mill.
"....."	Morongo Mining & Milling Co., Riverside, Cal. Dr. K. D. Sugart, prest.; S. H. Herrick, secy.; W. S. Swenart, treas.; D. A. Wheeler, mgr. Cap. stk. \$1,000,000. Rose, gold. Shaft. 3,000 tons; refractory; steam; 5 stamps. D. A. Wheeler, supt.
"....."	Riverside Silver Development Co., Riverside, Cal., 158 Seventh st. W. A. Hoyt, prest.; S. S. Nowlin, secy.; Orange Growers' Bank, treas.; John S. Reece, mgr. Cap. stk. \$10,000. Silver Reef, gold and silver. Shafts and tunnels; free; horse. John S. Reece, supt.
"....."	Valley Gold Mining Co., Ltd., Holcomb Valley, Cal. W. E. Pedley, mgr. Valley, gold. Placer; hydraulic. F. Pedley, supt.
Volcano.....Amador Ry. Lone 692.	A. H. Gracey. Lone Willow, gold. Shaft and tunnel; free; steam; quartz mill.
"....."	A. H. Gracey & J. D. Matthew. New Castle, gold. Tunnel; free.
"....."	Volcano Gold Gravel Mining Co., Santa Cruz, Cal., cor. Cooper and Front sts. Christian Hoffmann, prest.; F. D. Scott, secy.; Pacific Bank, treas.; John Eckart, mgr. Cap. stk. \$5,000,000. Volcano, gold and silver. Open pit and tunnel; placer; free; hydraulic. John Eckart, supt.
Walker.....Siskiyou Ry. Yreka 692.	Eli Kelly & Co. Cap. \$3,000. Manifold Compensator, gold. Open pit; water (developing).
Washington.....Nevada Ry. Colfax 490.	Battle Mining Co. Battle, gold. Tunnel; free; steam; 20 stamps.
"....."	German Mining & Milling Co., Rochester, N. Y. H. M. Reichenbach, prest.; Albert Will, v. prest.; S. C. Passavant, secy.; R. E. Haskell, treas.; M. D. Cooley, mgr. Cap. stk. \$800,000. German, gold. Tunnel; free; water; 10 stamps. M. D. Cooley, supt.
"....."	Fritz Meister. Alta and Waldeck, gold. Shaft and tunnel; water; 6 stamps, mill.
"....."	C. Phelps. Phelps, gold. Placer; free; hydraulic.
"....."	W. L. Williamson & M. M. Cole. Giant King, gold and silver. Tunnel; free; water.
Watsonville.....Santa Cruz Ry. Elliott 692.	Pajaro Mining Co., Sacramento, Cal., 429 J st. F. R. Waggoner, prest.; Jos. W. Tryon, secy.; Stanton Myers, treas.; R. D. Waggoner, mgr. and supt. Cap. stk. \$10,000. Pajaro, gold and iron. Tunnel. 3,000 tons; free; mill.
Weaverville.....Trinity Ry. Redding 692.	Trinity River Hydraulic Gold Mining Co., Denver, Colo., Boston Bldg. Wm. Gelder, prest.; L. L. Bailey, secy. and treas.; A. G. Dunbar, mgr. Cap. stk. \$500,000. Hubbard, Denver and Turner, gold. Placer.
Wieland.....Amador Ry. Lone 26.	Clinton Consolidated Gold Mining Co., San Francisco, Cal., 234 Montgomery st. Chas. S. Wieland, prest.; Chas. E. Gunn, secy.; Nevada Bank and Wells, Fargo & Co. treas. Cap. stk. \$5,000,000. Clinton Consolidated, gold and silver. Tunnel and shaft. 27,000 tons; free; steam and water; 30 stamps. John B. Ferris, supt.
Williams.....Colusa Ry. 692.	H. M. Cooper. Cap. \$60,000. Clyde, gold. Shaft and tunnel; free; steam; mill. James Hawkins, supt.
Wolf.....Nevada Ry. Auburn 692.	Live Oak Consolidated Gold Mining Co., San Francisco, Cal., 1011 Fourth st. J. A. Maffett, prest.; H. J. Goethe, secy.; D. O. Mills & Co., treas. Cap. stk. \$25,000. Live Oak, gold. Shaft (developing).
You Bet.....Nevada Ry. 490.	G. S. Brown. Brown's, gold. Slope and hydraulic; free; water; 8 stamps.
"....."	Jas. McManus. Cap. \$250,000. Fool's Hill, gold. Tunnel, 2,000 tons; free; water; 10 stamps.
Yreka.....Siskiyou Ry. 692.	Eli Kelly. Bullion, gold. Shaft; free; hand and water.

## IRON

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, BLAST FURNACES, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Daggett.....San Bernardino Ry. 26 (30 miles).	California Iron, Steel & Tin Plate Co., Albuquerque, N. M. T. R. Gable, prest.; C. L. Hubbs, secy. and mgr.; Jesse Anthony, treas. Cap. stk. \$3,000,000. Dick Turpin and Tip Top Groups. Shafts; free.
Livermore.....Alameda Ry. 692.	H. H. Pitcher. Mendenhall, 1,000 tons, chrome, iron. Jos. Tirkell, supt.

## IRON—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, BLAST FURNACES, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
San Luis Obispo, San Luis Obispo Ry. Port Hartford 552.	W. Copeland (lessee), Monterey st. W. Copeland, pres. and mgr.; Capt. Faucher, secy.; L. Rackliffe treas. Pick and Shovel, chrome, iron. Tunnel, 80 tons, hand. W. Copeland, supt.

## MICA

LOCATION OF MINE, RAILWAY, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF PRODUCT, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Laur Ry. 20.	Los Angeles C. H. Clayton. Cap. \$5,000. McKinley. Open pit; hand.

## MINERAL PAINT

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF PRODUCT, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, PAINT MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Red Bluff Ry. 182, 140.	Tehama Consolidated Chrome Co., P. C. Crimbaum, pres. and treas.; J. A. Heshwood, secy. and mgr. Cap. \$tk. \$290,000. Tehama, chrome. Open pits, 3,000 tons; hand. J. A. Heshwood, supt.

## QUICKSILVER AND ANTIMONY

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Etina (P. O. Lidell) Ry. St. Helena 622.	Etina Quicksilver Mining Co., Boston, Mass., 126 State st. John G. Wright, pres.; Henry Hastings, secy. and treas.; M. G. Rhodes, mgr. Cap. \$tk. \$750,000. Etina Mines, quicksilver. Shafts, tunnels and slopes, 10,000 tons; cinnabar; steam and air; furnaces. M. G. Rhodes, supt.
Calistoga Ry. 692.	Black Bear Consolidated Quicksilver Mining Co., J. O. Culver, pres.; W. L. Culver, secy. and treas.; L. W. Fee, mgr. Black Bear, quicksilver. Tunnel and shaft; free. L. W. Fee, supt.
"	Eastern Quicksilver Co., San Francisco, Cal., 420 Montgomery st. T. A. Mudge, pres.; F. A. Berlin, secy. Cap. \$tk. \$200,000. Liverpool, Plymouth, etc., quicksilver. Shaft; steam.
"	Great Western Quicksilver Mining Co., San Francisco, Cal., 328 Montgomery st. Gilbert Pahache, pres.; Abraham Halsey, secy.; H. M. Newhall & Co., treas. Cap. \$tk. \$5,000,000. Great Western, quicksilver. Shaft and tunnel, 24,000 tons; cinnabar; steam; furnaces. Andrew Rocca, supt.
Cambria, San Luis Obispo Ry. San Simeon 552.	Oceanic Quicksilver Mining Co., San Francisco, Cal., 320 Sansome st. Peter Dean, pres. Oceanic, quick- silver. Open cuts, tunnel and shaft, 25,000 tons; cinnabar; steam; furnace.
Guerneville Ry. 651.	Great Eastern Quicksilver Mining Co., Oakland, Cal., 611 Market st. Richard Abbey, pres.; Alfred Abbey, secy. and mgr. Great Eastern, quicksilver. Shaft and tunnel, 10,000 tons; steam. Alfred Abbey, supt.
Hendalsburg Ry. 529.	Cinnabar King Mining Co., J. S. Young, pres.; J. W. Rose, secy.; W. P. White, treas.; Edward White, mgr. Cap. \$tk. \$600,000. Cinnabar King, quicksilver. Tunnel; hand. Edward White, supt.
Hollister Ry. 692.	Stayton Mining Co., San Francisco, Cal., 410 Pine st. R. F. Knox, pres.; F. Smith, secy. and treas. Cap. \$tk. \$50,000. Stayton, quicksilver. Shafts and tunnels; refractory; furnace.
"	George Vaughan. Cap. \$25,000. Vaughan. Slope and tunnel; hand.
Kernville Ry. Caliente Sta'n 692.	Sumner & Brown. Standard, antimony. Shaft and tunnel. J. W. Sumner, supt.
Knoxville Ry. Napa 582.	Antonio McMillan, San Francisco, Cal., 25 Second st. Cap. \$100,000. Redington, quicksilver. Shafts and tunnels, 10,000 tons; cinnabar; steam; furnace. Thomas Callaghan, supt.
"	Lake Mining Co., San Francisco, Cal., 110 Pine st. R. F. Knox, secy. and treas. Cap. \$tk. \$600,000. Man- hattan, quicksilver. Shafts, tunnels and open pit; cinnabar; steam; furnace. J. J. Harkins, supt.
Leland Ry. Castella Sta'n 692.	Integral Quicksilver Mining Co., New York City, Room 18, 39 Broadway. Archibald B. McCaw, pres.; Wm. J. Simpson, secy. and treas. Cap. \$tk. \$3,000,000. Integral, Blockade, Boston and 30 others, quicksilver. Shaft, tunnels, slopes, 60,000 tons; steam, electricity, water; furnace. Archibald B. McCaw, supt.
Lower Lake Ry. Calistoga 692.	J. C. Baker, Baker, quicksilver. Shaft and tunnels, 2,000 tons; horse and hand; retorts. C. Baker, supt.
"	Sulphur Bank Quicksilver Mining Co., San Francisco, Cal., 300 California st. Louis E. Parrott, pres.; T. Whittingham, secy.; London and San Francisco Bank, 101, treas. Cap. \$tk. \$1,000,000. Sulphur, quick- silver. Open, 12,000 tons; steam; furnace. Richard White, supt.
Middletown Ry. Calistoga 692.	Bullion Quicksilver Mining Co., Thos. Habshaw, mgr. Cap. \$tk. \$15,000. Bullion, quicksilver. Shaft and tunnel; cinnabar; horse; furnace.
"	Munz & Ransdell. Chicago, quicksilver. Shaft, tunnel and open pit; hand.

## QUICKSILVER AND ANTIMONY—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
New Alhaden, Santa Clara Ry. 692.	Quicksilver Mining Co., New York City, 20 Nassau st. David Mahany, prest.; A. L. Bailey, secy.; Jas. D. Smith, treas.; R. K. Bulmore, agt. Quicksilver, shaft and tunnel, 25,178 $\frac{1}{2}$ tons; cinnabar; steam and electricity; furnace. Jas. Harty, supt.
Oat Hill, ..... Napa Ry. St. Helena 622.	Napa Consolidated Quicksilver Mining Co., Boston, Mass., 86 State st. F. H. Odiorne, prest.; W. B. Buck- munster, secy. and treas. Cap. stk. \$700,000. Manzanita and Eureka, quicksilver. Shaft and tunnels, 20,000 tons; cinnabar; steam; furnace. B. M. Newcomb, supt.
San Simeon, S. Luis Obispo Ry. 552.	Black Hawk Mining Co. John Secombe, prest. and mgr.; W. S. Whitaker, secy.; Geo. Van Gorden, treas. Cap. stk. \$2,000; indv. cap. \$5,000. Black Hawk, quicksilver. Tunnels and slope; gray black; hand; retorts. John Secombe, supt.
Sulphur Creek, ..... Colusa Ry. 529.	Abhoff Quicksilver Mining Co., San Francisco Cal., 310 Pine st. J. L. Rathbone, prest.; J. W. Pew, secy. Abhoff, quicksilver. Slope and tunnel, 8,000 tons; cinnabar; steam; furnace. H. L. Lightner, supt.

## SALT

LOCATION OF MINE OR WELL, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF PRODUCT, KIND OF MINE OR WELL, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Alvarado, ..... Alameda Ry. 552.	Crystal Salt Works, Newark, Cal. Cap. \$75,000. Crystal dairy. Salt marsh, 5,000 tons; evaporation. Plum- mer Bros., supts.
Mt. Eden, ..... Alameda Ry. 552.	Capt. Richard Barton. 5,000 tons; sea water; evaporation.
" .....	F. Ohlson. 500 tons; evaporation from sea water.
" .....	Mrs. E. A. Oliver. Course. 1,500 tons; evaporation from sea water.
" .....	Union Pacific Salt Co., San Francisco, Cal., 216 Sacramento st. John Barton, prest., treas. and mgr.; W. F. Barton, secy. Course. 15,000 tons; evaporation.
Otay, ..... San Diego Ry. 552, 692.	La Punta Salt Werks. J. E. Shaffer (agent), San Diego, Cal. Course. 600 tons; steam; evaporation.
San Francisco, Alameda Ry. 26, 552, 692.	Solar Salt Works, 211 and 213 Sacramento st. Cap. \$35,000. Evaporation, 4,200 tons; steam. Geo. Beattie, supt.
San Lorenzo, Alameda Ry. 552.	Peter Mathiesen Salt Works, Hans Mathiesen, mgr. Course. Salt marsh, 1,500 tons; evaporation; hand and horse.
Sites, ..... Colusa Ry. 692.	Antelope Crystal Salt Co., J. W. Good, prest.; T. Harrington, secy.; Colusa County Bank, treas.; J. P. Rathburn, mgr. Cap. stk. \$50,000. Course. Well, evaporation; horse. J. P. Rathburn, supt.

## SLATE

LOCATION OF QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF QUARRY, KIND OF SLATE, KIND OF QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, MILLS, ETC., AND NAME OF QUARRY SUPERINTENDENT.
TOWN AND COUNTY.	
Kelsey, ..... El Dorado Ry. Placerville 622.	Jacob Strahle Slate Co., San Francisco, Cal., 533 Market st. W. E. Shipman, prest.; R. J. Davis, secy. and treas.; Jacob Strahle, mgr. Cap. stk. \$100,000. Strahle. Open, 2,000 tons; water.
Placerville, ..... El Dorado Ry. 632.	El Dorado Big Tunnel & Mining Co. H. S. Morry, prest.; Geo. W. Kimble, secy.; Thos. Alderson, treas.; L. McNeil, mgr. Cap. stk. \$100,000. El Dorado. Open and tunnel; water. L. McNeil, supt.
" .....	Perine & Mothersole, Chili Bar, Cal. Chili Bar, open; water. Geo. J. Mothersole, mgr.

## SODA

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF PRODUCT, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Keeler, ..... Inyo Ry. 108.	Inyo Development Co., Carson, Nev. H. M. Yerington, prest.; G. F. Ford, secy. and treas.; L. F. J. Winkle, mgr. Cap. stk. \$1,250,000. Owen's Lake, soda. Pacer, 2,000 tons; steam; mill, 6,000 tons. L. F. J. Winkle, supt.



## STONE, MARBLE, GRANITE AND ONYX

LOCATION OF MINE OR QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE OR QUARRY, KIND OF STONE, KIND OF MINE OR QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STONE OR MARBLE MILLS, LIMESTONES AND CAPACITY, ETC., AND NAME OF MINE SUPERINTENDENT.
Aetion.....	Los Angeles Ry. 692.	R. E. Nickel. Cap. \$5,000. Red sandstone. Open pit; hand.
Aguia Caliente.....	Sonoma Ry. 651.	M. K. Cady. Cap. \$50,000. Basalt. Open pit; hand.
Bayside.....	Humboldt Ry. 552.	Pacific Coast Construction Co., Eureka, Cal. A. Ballantyne, pres.; W. Simpson, secy.; Thomas Brown, treas. and supt.; James Simpson, mgr. Cap. \$100,000. Jacoby Creek, sandstone. Open pit, 70,000 tons; steam; mill.
Columbia.....	Tuolumne Ry. Oakland 632.	Columbia Marble Co., San Francisco, Cal., 347 Brannan st. Cap. \$75,000. Columbia, marble. Open pit; water; marble; mill.
Cordelia.....	Solano Ry. 622.	Alex. McNaughton. Cap. \$2,000. Haden Hill Quarry, basalt. Open; horse; mill, 1,000 tons.
".....	"	E. R. Thomson, San Francisco, Cal., 28 Phelan Bldg. Cap. \$50,000. Thomson's Quarry, basalt. Open. 100,000 tons; steam; crusher. Wm. Nickel, supt.
Day's Spur.....	Fresno (P. O. Raymond) Ry. 692.	Day Granite Co., San Francisco, Cal., 1009 Scott st. Granite. 10,000 tons; steam. I. G. Day, supt.
Edna.....	San Luis Obispo Ry. Rock Sliding 531, 692.	Consolidated Bituminous Rock Co., San Francisco, Cal., Room 113 Phelan Bldg. A. C. Bassett, pres.; F. C. Lewis, secy.; Anglo-Californian Bank, Ltd., treas.; Jas. H. Swift, mgr. Cap. \$500,000. Bituminous. Open, 200,000 tons; hand.
Exeter.....	Tulare Ry. 692.	Rocky Point Granite Works. Cap. \$10,000. Rocky Point, granite. Open, 350 tons; hand. D. R. Griffith, supt.
Felton.....	Santa Cruz Ry. 692.	H. T. Holmes Lime Co., San Francisco, Cal., 321 Mission st. H. T. Holmes, pres.; E. H. Hawkins, secy.; Wm. Jones, treas. Cap. \$750,000. Holmes. Open, 1,000 tons; hand; limekilns, 4,000 tons. Wm. Russell, supt.
Gaviota.....	Santa Barbara (P. O. Los Angeles) Ry. 552.	Gaviota Mining Co., Los Angeles, Cal., S. W. cor. Temple and New High sts. W. N. Theler, pres. and mgr.; L. F. Graves, secy.; W. E. Elie, treas. Cap. \$1,250,000. Gaviota, bituminous rock. Open pit.
Hillsdale.....	Santa Clara Ry. Graystone 692.	Jacob Pfeiffer, Graystone Station, Cal. Cap. \$10,000. Goodrich, sandstone. Slope, 2,000 tons; steam, hand. John Pfeiffer, supt.
Inyo.....	Inyo Ry. 108.	Inyo Marble Co. of California, San Francisco, Cal., 137 Montgomery st. Julius Jacobs, pres.; Geo. W. Laws, secy.; G. P. Rivford, treas. and mgr. Cap. \$1,000,000. Inyo, marble. Open pit, 3,000 tons; steam and water; marble. W. C. Fidge, supt.
King City.....	Monterey Ry. 692.	H. G. Livingstone. San Lorenzo, bituminous rock. Slope, 100 tons; hand.
Lime Kiln.....	Tulare Ry. Exeter 692.	Pogue & Sons, Lime Kiln, Cal. Kaweah Lime Works, marble and lime. Open pit, 100 tons; kiln, 1,000 tons.
Lincoln.....	Placer Ry. 692.	Byrne Bros. Cap. \$2,000. Granite. Open pit; 300 tons; steam.
".....	"	T. L. Coffey. Cap. \$1,000. Granite. Open pit, 300 tons; horse.
".....	"	T. H. Jeter. Cap. \$5,000. I. N. L. granite. Open pit, 2,000 tons; horse.
Loomis.....	Placer Ry. 692.	Carlaw Bros., Sacramento, Cal., Tenth and R sts. Cap. \$25,000. Carlaw, granite. Open pit, 2,000 tons; horse; gang sawmill. Geo. W. Turner, supt.
".....	"	M. J. Healy & Co., San Francisco, Cal., 314 Montgomery st. Cap. \$30,000. Loomis, granite. Open pit, 2,400 tons; steam. W. E. Cook, supt.
".....	"	Western Granite & Marble Co., San Jose, Cal., 370 N. First st. B. D. Murphy, pres.; W. K. Beans, secy.; Commercial Bank, treas.; O. H. Barnhart, mgr. Cap. \$100,000. Crystal Lake and Loomis, granite, 2,500 tons; steam; mill. J. A. Grant, supt.
Lordsburg.....	Los Angeles Ry. 26.	W. P. Rhoades, Los Angeles, Cal., 125 W. Second st. Lordsburg, red sandstone. Hand.
Los Angeles.....	Los Angeles Ry. 26 and 692.	Lauravein Granite Co., Los Angeles, Cal., cor. Requena and Wilmington sts. E. T. Craig, pres.; J. J. Craig, secy.; J. H. Craig, treas.; M. Craig, mgr. Cap. \$10,000. Lauravein, granite. Open pit, 1,200 tons; horse. John H. Craig, supt.
Los Gatos.....	Santa Clara Ry. 692.	Los Gatos Lime Co., San Francisco, Cal., 323 Montgomery st. T. Lemmen-Meyer, pres.; W. S. Somersell, secy.; George E. Whitney, treas.; John E. Ellis, mgr. and supt. Cap. \$1,200,000. Los Gatos Lime Co.'s Quarry, blue limestone. Open pit, 5,000 tons; hand; kiln, 2,500 tons.
Los Guallejos.....	Sonoma (Nota P. O. Ry. 651, 632).	N. W. Griswold, San Francisco, Cal., 29 New Montgomery st. Basalt. Open, 250 tons; hand; mill.
Nevada City.....	Nevada Ry. 400.	E. D. Bridges, P. O. Box 139. Pine Grove, granite. Open, 1,000 tons; horse and hand; mill.
Niles.....	Alameda Ry. Farwell's Spur 692.	Farwell Stone Co., San Francisco, Cal., 319 Pine st., Room 44. Wm. Farwell, pres.; I. M. Merrill, secy.; Bank of California, treas. Cap. \$100,000. Niles & Farwell, sandstone. Open, 300,000 tons; horse and hand. Wm. Farwell, supt.
Oakland.....	Alameda Ry. Leona 692.	California Improvement Co., 1009 1/2 Broadway, Rooms 24 and 25. W. H. Bailey, pres.; W. M. Rank, secy. and treas.; F. H. Meyers, mgr. Cap. \$500,000. Laundry Farm, blue rock, 60,000 tons; steam; crusher. W. H. Masterman, supt.
".....	"	Oakland Paving Co., (locat.) 906 Broadway. C. T. H. Palmer, pres. and treas.; C. T. Blake, secy. Cap. \$30,000. Trap rock. Open; steam and hand; crusher. M. H. Eastman, supt.
Penn's Grove.....	Sonoma Ry. Petaluma 651.	Wilkinson & Kollas. Cap. \$1,000. Harper's, basalt. Open pit, 1,000 tons; hand.
Petaluma.....	Sonoma Ry. 651.	John Lynch. Basalt. Slope, 1,500 tons; hand. John Lynch, supt.
Plymouth.....	Amador Ry. Carbonate 692.	Amador Marble Co., Oakland, Cal., P. O. Box 388. Ernest Hough, secy.; D. E. Collins, treas. and mgr. Amador, marble, 300 tons; water; mill. D. McAdams, supt.

## STONE, MARBLE, GRANITE AND ONYX—(CONTINUED)

LOCATION OF MINE OR QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT.			NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE OR QUARRY, KIND OF STONE, KIND OF MINE OR QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STONE OR MARBLE MILLS, LIMEKILNS AND CAPACITY, ETC., AND NAME OF MINE SUPERINTENDENT.	
TOWNS	AND	COUNTY.		
Raymond	.....	Fresno Ry. 692.	Day Granite Co., San Francisco, Cal., 1009 Scott st.	Day, granite. Open, 8,000 tons; steam.
"	.....	"	A. McLennan, San Francisco, Cal., 1616 Jackson st.	Cap. \$20,000. McLennan's, granite. Slope; steam.
"	.....	"	J. F. Milne & Co., Box 61. J. F. Milne, mgr.	Cap. stk. \$2,500. Milne, granite. Slope; hand.
"	.....	"	Raymond Granite Co. James Mildrum, prest.; John Bowrie, secy.; J. Hutcheon, treas.; Alex. Mann, mgr. and supt.	Mann's, granite. 150,000 tons; hand.
Riverside, San Bernardino	.....	Ry. 692.	G. W. Clark, Box 301. Cap. \$10,000. Casa Blanca, granite.	Open pit and slope, 20,000 tons; horse and hand. G. W. Clark, supt.
"	.....	"	Evans & Middleton, Box 737. Cap. stk. \$14,500. Arlington, granite.	Open pit, 1,700 tons; hand; mill.
Rocklin	.....	Placer Ry. 692.	Copp & Waters. Copp & Waters, white granite.	Open pit, 1,500 tons; steam.
"	.....	"	Degan & Brady, San Francisco, Cal., 423 Eleventh st.	Cap. \$150,000. Degan & Brady's, granite. Open pit, 200,000 tons; steam; mill. P. O'conn, supt.
"	.....	"	Hytner & Wickman, Box 24. Granite.	Open pit; horse.
"	.....	"	Rocklin Granite Co., Oakland, Cal. I. L. Delano, prest. and mgr.; Ernest Hough, secy. and treas.	Cap. stk. \$20,000. Rocklin, granite. Open pit, 4,000 tons; steam; mill. I. L. Delano, supt.
San Diego	.....	San Diego Ry. 649.	Clark-Rockfellow Granite Co., 1234 D st. E. F. Rockfellow, prest. and secy.; C. E. Clark, mgr.	Cap. stk. \$10,000. Granite. Open pit; steam; polishing; mill.
"	.....	"	Excelsior Paying Co., Consolidated Nat. Bank Bldg. J. W. Thompson, prest.; Gratz K. Brown, secy. and mgr.; Consolidated Nat. Bank, treas.	Cap. stk. \$50,000. Rockville, porphyry. Open, 20,000 tons; steam; crusher. Chas. M. Hough, supt.
San Luis Obispo,	.....	San Luis Obispo Ry. 551.	San Luis Obispo Bituminous Rock Co., Los Angeles, Cal., 214 S. Broadway. W. J. Brodrick, prest.; G. A. Robinson, secy.;	First Nat. Bank of Los Angeles, treas.; J. A. Fairchild, mgr. Cap. stk. \$5,000,000. Bituminous rock. Open, 20,000 tons; hand.
Santa Cruz	.....	Santa Cruz Ry. 551, 692.	Consolidated Bituminous Rock Co., San Francisco, Cal., Room 143 Phelan Bldg. A. C. Bassett, prest.; F. C. Lewis, secy.;	Anglo-Californian Bank, Ltd., treas.; Jas. H. Swift, mgr. Cap. stk. \$500,000. Bituminous. Open, 20,000 tons; hand.
"	.....	"	X. P. Perine Paying and Construction Co., San Francisco, Cal., 116 Phelan Bldg. X. P. Perine, prest.; R. C. Mattingly, secy.;	Pacific Bank, treas.; Frank Walker, mgr. Cap. stk. \$100,000. Enright Deposit, bituminous rock. Open pit and slope, 5,200 tons; hand. J. A. Enright, supt.
Santa Rosa	.....	Sonoma Ry. Annabel 692.	C. G. Borg & H. C. Patridge, San Francisco, Cal., 302 Montgomery st.	Annabel, basalt block. Open pit, 30,000 tons; hand. C. G. Borg, supt.
"	.....	"	City Street Improvement Co., San Francisco, Cal., Merchants' Exchange Bldg., Room 32. J. W. McDonald, prest. and mgr.;	W. E. Dennison, secy. McDonald, basalt block. Open pit, 500 tons; hand; mill. Thos. O'Connor, supt.
"	.....	"	T. A. Ducharm. Cap. \$21,758. Ducharm, granite.	Open pit; hand; mill. T. A. Ducharm, supt.
"	.....	"	J. W. McDonald, San Francisco, Cal., 234 Montgomery st.	Cap. \$100,000. Basalt rock. Open pit, 700,000 tons; hand. Thos. O'Connor, supt.
Sonoma	.....	Sonoma Ry. 651.	H. C. Mannel. El Campo, stone.	Open pit; horse and hand; mill. Harvey Manuel, supt.
"	.....	"	J. W. McDonald, San Francisco, Cal., 234 Montgomery st.	Cap. \$100,000. Basalt rock. Open 430,000 tons; hand. A. Pinelli, supt.
South Riverside,	.....	San Bernardino Ry. 26.	Porphyry Paying Co., Los Angeles, Cal., 41 Baker Block. J. D. Wheeler, prest.; H. A. Palmer, secy.;	Partners' & Merchants' Bank, treas.; Gratz K. Brown, mgr. Cap. stk. \$100,000. Porphyry. Open, 20,000 tons; steam; crushers. Frank McBride, supt.
Sutter Creek	.....	Amador Ry. June 692.	Carrara Marble Quarry of Amador Co., San Francisco, Cal., 500 Battery st. Paul Barbieri, prest.;	Charles Bondero, secy.; Bank of California, treas. Cap. stk. \$500,000. Carrara, marble. Open, 2,500 tons; hand; mill.
Temeñula Sta.	.....	San Diego Ry. 26.	C. N. Fernahl & Son. Cap. \$4,000. Granite.	200 tons; hand.
Victor	.....	San Bernardino Ry. 692.	Conrad Schaefer, Los Angeles, Cal., 227 W. First st.	Cap. \$20,000. Granite and marble. Open pit, 17,640 tons; hand; marble mill.
"	.....	"	Verde Antique Marble Co., National City, Cal., National av. and Tenth st.	Verde Antique, marble. Open pit; hand; marble mill. Geo. K. Phillips, supt.

SEE ALSO SUPPLEMENTARY LIST

# COLORADO

## ASPHALTUM

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Rangely . . . Rio Blanco Ry. Fruita 215.	R. Tovey and others. Cap. \$50,000. Tunnel. R. Tovey, supt.

## CEMENT

LOCATION OF MINE OR QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE OR QUARRY, KIND OF PRODUCT, KIND OF MINE OR QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, CEMENT MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Colorado City . . El Paso Ry. 25, 215.	The Stewart Stone & Cement Co., Colorado Springs, Colo., 116 N. Water st. John Curr, pres.; J. E. McIntyre, secy.; G. H. Stewart, gen. mgr. and secy. Cap. stk. \$60,000. Cement, 3,000 tons; steam; water; mill, 3,000 tons.

## COAL—ANTHRACITE

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, COKE OVENS, AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Anthracite . . . Gunnison Ry. Crested Butte 215.	Colorado Fuel Co., Denver, Colo., 704 Boston Bldg. J. C. Osgood, pres.; D. C. Beaman, secy.; A. C. Cass, treas.; J. A. Kehler, mgr. Cap. stk. \$5,000,000. Anthracite No. 1. Tunnel, 84,288 tons; steam and horse; breaker, N. C. Wheelrpt, supt.
La Veta . . . . . Huernano Ry. 215.	John Herbin (local). Tunnel and shaft, hand.

## COAL—BITUMINOUS

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, COKE OVENS, AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Baldwin . . . . . Gunnison Ry. 776.	Union Pacific Coal Co., Omaha, Neb., Ninth and Farman sts. G. W. Megeath, gen. supt. Cap. stk. \$20,000,000. Baldwin. Shaft, 14,571 tons; steam. John Webb, supt.
Berwind . . . . . Las Animas Ry. 215.	Colorado Coal & Iron Co., Pueblo, Colo., Edward J. Berwind, pres.; Thomas E. H. Curtis, secy. and treas.; E. M. Steek, gen. mgr. Cap. stk. \$10,000,000. El Moro No. 2. Slope, 180,000 tons; steam. David Allen, supt.
Boulder . . . . . Boulder Ry. 776.	Allen & Bond (local). Slope, 1,000 tons; steam. H. W. Allen, supt.
" . . . . . " . . . . .	The Boulder Coal & Fire Clay Co., Thomas C. Johnson, pres.; J. B. Hickey, secy.; James C. Hawkins, treas.; T. C. Johnson, mgr. Slope, 90,000 tons.
Canfield . . . . . Boulder Ry. 776.	Charles Dale. Cap. \$5,000. Standard. Shaft, 5,000 tons; steam.
Canon City . . . . . Fremont Ry. 26, 215, 776.	United Coal Co., Denver, Colo., 724 Ernest & Cramer Bldg. James Carmon Jr., pres.; C. L. Spencer, secy.; J. J. Thomas, mgr. Cap. stk. \$1,000,000. Shaft, drift; steam. John Simpson, supt.
Cardin . . . . . Garfield Ry. 26.	Grand River Coal & Coke Co., Colorado Springs, Colo., J. B. Wheeler, pres.; S. S. Earle, secy.; W. S. Cherry, v.-pres. and gen. mgr. Cap. stk. \$2,000,000. Spring Gulch, Marlon and Sunshine. Tunnel and slope, 220,000 tons; steam; 250 coke ovens, capacity 75,000 tons. J. Anderson, supt.
Chandler . . . . . Fremont Ry. 26, 215.	The Western Fuel Co., Pueblo, Colo., 115 C St. J. H. Bennett, pres.; G. J. Dunbaugh, secy. and treas.; J. A. Joy, mgr. Cap. stk. \$500,000. Chandler. Shaft, 100,000 tons; steam. G. A. Shields, supt.
Coal Creek . . . . . Fremont Ry. 215.	Colorado Coal & Iron Co., Pueblo, Colo., Edward J. Berwind, pres.; Thomas E. H. Curtis, secy. and treas.; E. M. Steek, gen. mgr. Cap. stk. \$10,000,000. Coal Creek. Slope, 200,000 tons; steam. Robert Milliken, supt.
Coal Park . . . . . Boulder Ry. Lafayette ss.	Baker Coal Mining Co., Denver, Colo., 1625 Champa st. E. B. Light, pres.; Ben Macdonald, secy. and treas.; D. W. Davis, mgr. Cap. stk. \$10,000. Baker. Slope, 25,000 tons; steam. Thos. Vaughn, supt.
Coalridge . . . . . Garfield Ry. Newcastle 26, 215.	The Colorado Fuel Co., Denver, Colo., 704 Boston Block. J. C. Osgood, pres.; D. C. Beaman, secy.; A. C. Cass, treas.; J. A. Kehler, mgr. Cap. stk. \$5,000,000. Coalridge No. 5. Tunnel, slope, 11,211 tons; steam; horse. Paul Blount, supt.
Cortez . . . . . Montezuma Ry. Durango 215.	George E. Houser (local). Giant. Tunnel, slope, 50 tons; horse, hand. S. J. Houser, supt.
Crested Butte . . . . . Gunnison Ry. 215.	Colorado Coal & Iron Co., Pueblo, Colo., Edward J. Berwind, pres.; Thomas E. H. Curtis, secy. and treas.; E. M. Steek, gen. mgr. Cap. stk. \$10,000,000. Crested Butte No. 2. Slope, 220,000 tons; steam; 154 coke ovens, 60,000 tons. Wm. Grant, supt.

## COAL—BITUMINOUS—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.			NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, COKE OVENS, AND NAME OF MINE SUPERINTENDENT.
TOWN	AND	COUNTY.	
De Beque		Mesa	Shirley & Hinds. Cap. \$10,000. De Beque and Jenkins. Tunnel; hand (developing).
Ry. 215.			
Delta		Delta	Rollins Bros. (local). Cap. \$3,000. Rollins. Tunnel; hand.
Ry. 215.			
"		"	E. B. Wilson, Montrose, Colo. Cap. \$2,000. Delta. Tunnel; hand (developing).
"		"	J. J. Winton & J. D. Roberts, Delta, Colo. Cap. \$20,000. Tunnel, 2,000 tons; horse. J. J. Winton, supt.
Durango		La Plata	Champion Coal Co. Benjamin Ritter, prest.; M. J. McCloskey, secy.; Mr. Boyle, treas.; A. Shore, mgr. Cap. stk. \$300,000. Champion. Tunnel; steam (developing). Benjamin Ritter, supt.
Ry. 215.			
"		"	San Juan Coal Co. J. E. Ward, prest.; M. L. Peck, secy. and treas. Cap. stk. \$100,000. San Juan. Slope, 40,000 tons; gravity. John Kolz, supt.
"		"	San Juan Smelting Co. Mine for own use.
"		"	Ute Coal & Coke Co. H. J. Ross, prest.; L. C. Jakway, secy., treas. and mgr. Cap. stk. \$150,000. Coppinger. Tunnel, 20,000 tons; horse. J. A. Coppinger, supt.
Engle		Las Animas	Colorado Coal & Iron Co., Pueblo, Colo. Edward J. Berwind, prest.; Thomas E. H. Curtis, secy. and treas.; E. M. Steek, gen. mgr. Cap. stk. \$10,000,000. El Moro No. 1. Slope, 300,000 tons; steam; 250 coke ovens, 50,000 tons. Alex. Pollock, supt.
Ry. El Moro 215, 217.			
Erie		Weld	Boulder Valley Coal Co. John McKissick, prest.; J. M. Shore, secy.; John G. McCartney, treas. and mgr. Cap. \$15,000. Boulder Valley. Shaft, 15,000 tons; steam.
Ry. 776.			
"		"	North-Western Coal Mining Co., Denver, Colo. Chas. E. Quincy, prest.; W. H. Nicholson, secy.; Alfred J. Vivian, treas. and mgr. Cap. stk. \$100,000. Boulder Valley. Shaft, 365,000 tons; steam. Phelex MacKena, supt.
"		"	The United Coal Co., Denver, Colo., 524 Ernest & Crammer Bldg. James Cannon jr., prest.; C. L. Spencer, secy.; J. J. Thomas, mgr. Cap. stk. \$1,000,000. Shaft, drift; steam. John Simpson, supt.
Forbes		Las Animas	The Trinidad Fuel Co., Trinidad, Colo. Geo. M. Forbes, prest. and mgr.; James L. Bridge, secy. and treas. Cap. \$1,000,000. Monarch. Tunnel, 120,000 tons; horse. Chas. S. Wood, supt.
Ry. 215, 776.			
Golden		Jefferson	J. B. & Wm. Church, Denver, Colo., 819 Seventeenth st. Cap. \$10,000. Star. Shaft, 4,272 tons; steam. Benjamin Rowe, supt.
Ry. 776.			
"		"	Golden Cooperative Co. Cap. \$7,000. Cooperative. Shaft, 7,500 tons; steam, horse. Geo. H. Goldsworthy, mgr. and supt.
"		"	Golden Pressed & Fire Brick Co., Denver, Colo., 819 Seventeenth st. J. B. Church, prest., treas. and mgr.; Benjamin Rowe, secy. Cap. stk. \$300,000. Star. Shaft, 4,172 tons; steam. Daniel Williams, supt.
"		"	White Ash Coal Mining Co. E. E. Goodrich, prest.; Geo. M. Butler, secy.; W. N. Whitehead, treas.; F. G. Butler, mgr. Cap. stk. \$300,000. Loveland, White Ash, Murphy. Shaft, 250,000 tons; steam. Evan Jones, supt.
Grand Junction		Mesa	W. T. Carpenter. Cap. \$100,000. Book Cliff. Tunnel, 10,000 tons; horse and gravity.
Ry. 26, 215, 626.			
Gray Creek		Las Animas	The Gray Creek Coal & Coking Co., Trinidad, Colo. D. A. Chappell, prest. and mgr.; S. S. Murphy, secy.; W. B. Cunningham, treas. Cap. stk. \$200,000. Gray Creek. Tunnel; steam, horse; 50 coke ovens. Jno. Cameron, supt.
(P. O. Trinidad) Ry. 776.			
Gunnison		Gunnison	Gunnison Coal & Iron Co. W. Street, prest.; A. J. Reily, secy. and treas.; C. T. Siles, mgr. Cap. stk. \$5,000,000. Castle Mountain. Tunnel; horse.
Ry. 215.			
Hastings		Las Animas	Colorado Coke Co., Trinidad, Colo., 201 E. Main st. A. H. Danforth, prest.; D. A. Chappell, secy. and treas.; John Cameron, mgr. Cap. stk. \$100,000. Coke ovens, 35,000 tons; steam, horse. John Cameron, supt.
Ry. 26, 776.			
"		"	The Victoria Coal Co., Trinidad, Colo., 201 E. Main st. Delos A. Chappell, prest. and mgr.; Sanford S. Murphy, secy.; W. B. Cunningham, treas. Cap. stk. \$1,000,000. Victor. Tunnel, 250,000 tons; steam, horse; 100 coke ovens, 40,000 tons. John Cameron, supt.
Hebron		Larimer	Riach Bros. (local). Little Grizzly. Shaft, 300 tons; horse.
Ry. Dillon 215, 776, 80 miles.			
King		Park	Union Pacific Coal Co., Omaha, Neb., Ninth and Farina sts. G. W. Megeath, gen. supt.; Geo. L. Black, asst. supt. Cap. stk. \$20,000,000. Como, Nos. 5 and 6. Slope, 47,592 tons; steam. Thomas Ramsay, supt.
Ry. Como 776.			
Lafayette		Boulder	Padfield & Hopkins. Cap. \$40,000. Gladstone. Shaft, 60,000 tons; steam. Wm. Padfield, supt.
Ry. 776.			
"		"	The United Coal Co., Denver, Colo., 524 Ernest & Crammer Bldg. James Cannon jr., prest.; C. L. Spencer, secy.; J. J. Thomas, mgr. Cap. stk. \$1,000,000. Shaft, drift; steam. John Simpson, supt.
La Veta		Huerfano	W. H. Adanson. Cap. \$5,000. Indian Creek. Tunnel, 5,000 tons; horse. E. Frankenberg, supt.
Ry. 215.			
Louisville		Boulder	Ame Coal Mining Co., Denver, Colo., 1631 Champa st. L. E. Andrews, prest.; John Cornell, secy.; John Chamber, treas. Cap. stk. \$100,000. Arme. Shaft, 70,000 tons; steam.
Ry. 776.			
"		"	Ajax Coal Mining Co., Boulder, Colo. M. V. Johnson, prop. Cap. \$50,000. Ajax. Shaft, 20,000 tons; steam. Thomas Jones, supt.
"		"	The Citizens' Coal & Coke Co., Denver, Colo. Thomas Trumbull, prest.; Thomas E. Bassett, secy. Shaft, 36,000 tons; steam.
"		"	The Hecla Coal Mining Co., J. H. Hood, prest. and mgr.; Wm. Cadwrey, secy.; J. P. Donley, treas. Cap. stk. \$100,000. Hecla. Shaft, 35,000 tons; steam. J. Hood, supt.
"		"	The United Coal Co., Denver, Colo., 524 Ernest & Crammer Bldg. James Cannon jr., prest.; C. L. Spencer, secy.; J. J. Thomas, mgr. Cap. stk. \$1,000,000. Shaft, drift; steam. John Simpson, supt.
Marble		Gunnison	Pacific Coal & Coke Co., Denver, Colo., 802 Boston Bldg. Orlando Metcalf, prest.; Wm. F. Reed, secy. and treas. Cap. stk. \$1,000,000. Tunnel; electricity (developing).
Ry. Elk Mountain 26, 215.			

COAL—BITUMINOUS—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, CORE OVENS, AND NAME OF MINE SUPERINTENDENT.
Meeker	Rio Blanco Ry. New Castle 215.	F. W. Fairfield & Sons, Meeker, Colo. Peacock. Tunnel.
"	"	Harry Golden. Cap. \$5,000. Meeker. Tunnel, 1,200 tons; horse and hand.
Morrison	Jefferson Ry. Mt. Carbon 776.	B. Prince & Son, Mount Carbon. Slope, 18,000 tons; horse. B. Prince, supt.
New Castle	Garfield Ry. Mt. Carbon 215.	Grand River Coal & Coke Co., Colorado Springs, Colo. J. B. Wheeler, pres.; S. S. Earle, secy.; W. S. Chetty, v. pres.; and gen. mgr. Cap. stk. \$2,000,000. New Castle. Shaft, slope, tunnel, 150,000 tons; steam. F. Coryell, supt.
Paonia	Delta Ry. Delta 215.	Paonia Coal Co., W. T. Hawkey, pres.; T. C. Ward, secy.; W. A. Clark, treas.; Wesley Ault, mgr. Tunnel; horse (developing).
Pieton	Huerfano Ry. 215, 776.	The Colorado Fuel Co., Denver, Colo., 704 Boston Bldg. J. C. Osgood, pres.; D. C. Beaman, secy.; A. C. Cass, treas.; J. A. Kohler, mgr. Cap. stk. \$5,000,000. Pieton No. 6. Slope, 77,161 tons; steam, horse, Thomas Lawler, supt.
Platte Canon	Jefferson Ry. 776.	T. L. Morgan (local). Shaft.
Porter	La Plata (P. O. Durango) Ry. 215.	Porter Coal Co., Denver, Colo., 804 Boston Bldg. J. A. Porter, pres.; J. H. Pullen, secy. and treas.; S. E. Herr, mgr. Cap. stk. \$900,000. Porter. Drift, 65,000 tons; steam. Thomas Mason, supt.
Rico	Dolores Ry. 628.	Broughton & Derby (local). Pasadena. Tunnel, 1,000 tons; horse and hand. J. Richards, supt.
Ridgeway	Ouray Ry. 215.	J. O. Gorman. Cap. \$3,500. Tunnel; steam (developing).
Rouse	Huerfano Ry. 215, 776.	The Colorado Fuel Co., Denver, Colo., 704 Boston Bldg. J. C. Osgood, pres.; D. C. Beaman, secy.; A. C. Cass, treas.; J. A. Kohler, mgr. Cap. stk. \$5,000,000. Rouse No. 3. Slope, 233,157 tons; steam and horse. W. C. Thompson, supt.
Santa Clara	Huerfano Ry. 215, 776.	Colorado Coal & Iron Co., Pueblo, Colo. Edward J. Berwind, pres.; Thos. E. H. Curtis, secy. and treas.; E. M. Stock, gen. mgr. Cap. stk. \$10,000,000. Santa Clara. Shaft, 30,000 tons; steam.
Slater	Routt Ry. Rawlins 776.	Robert McIntosh (local). Tunnel, 50 tons; hand.
Sopris	Las Animas Ry. 215, 776.	The Colorado Fuel Co., Denver, Colo., 704 Boston Bldg. J. C. Osgood, pres.; D. C. Beaman, secy.; A. C. Cass, treas.; J. A. Kohler, mgr. Cap. stk. \$5,000,000. Sopris No. 4. Slope, 270,770 tons; steam, horse, 102 coke ovens, 14,700 tons. W. J. Murray, supt.
Tindale	Jefferson Ry. Redford 776.	Denver Coal Co., Ltd., Denver, Colo., 501 and 502 Boston Bldg. T. W. Tindall, chairman; A. B. Seel, secy.; Sam'l Newhouse, mgr. Cap. stk. \$500,000. Shaft; steam (developing). Jas. B. Miller, supt.
Trinidad	Las Animas Ry. 26, 215, 776.	E. T. Butler. Rowland. Tunnel, 5,000 tons; horse
"	"	George Jeffries. Bloom. Tunnel, 6,000 tons; horse.
"	"	The United Coal Co., Denver, Colo., 524 Ernest & Cramer Bldg. James Cannon Jr., pres.; C. L. Spencer, secy.; J. J. Thomas, mgr. Cap. stk. \$1,000,000. Shaft, drift; steam. John Simpson, supt.
Walsenburg	Huerfano Ry. 215.	Colorado Coal & Iron Co., Pueblo, Colo. Edward J. Berwind, pres.; Thos. E. H. Curtis, secy. and treas.; E. M. Stock, gen. mgr. Cap. stk. \$10,000,000. Walsenburg. Shaft, slope, tunnel, 120,000 tons; steam. Peter Cameron, supt.
Williamsburg	Fremont Ry. Florence 215.	The United Coal Co., Denver, Colo., 524 Ernest & Cramer Bldg. James Cannon Jr., pres.; C. L. Spencer, secy.; J. J. Thomas, mgr. Cap. stk. \$1,000,000. Shaft, drift, steam. John Simpson, supt.

COPPER

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, FUSIBLES, ETC., AND NAME OF MINE SUPERINTENDENT.
Gunnison	Gunnison Ry. 215.	J. F. Grant, Denver, Colo. Shaft, 9,000 tons; steam.
Sallida	Chaffee Ry. Belleview 215.	Sodalla Copper Co., Denver, Colo., cor. Larimer and Seventeenth sts. E. E. Emerson, pres.; J. W. O'Connor, secy. and treas. Cap. stk. \$200,000. Sodalla. Tunnel, 4,000 tons; hand.

GOLD AND SILVER

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
Alder	Saguache Ry. Round Hill 215.	C. P. Edmonds. North Star, gold, silver, lead. Shaft, refractory; hand (developing).
"	"	Manitou Mining Co., Poncho Springs, Colo. Frank M. Barnes, mgr. Cap. \$90,000. Manitou, gold, silver, lead. Tunnel; free; steam (developing). F. M. Barnes, supt.
"	"	Amos Slater, Salida, Colo. Cap. \$3,000. Little Goldie Group, gold, silver, lead. Shaft, tunnel; free; hand.
Alicante	Lake (P. O. Climax) Ry. 215, 776.	Alicante Mining Co., Climax, Colo. Alicante, gold, silver, lead. Shaft, tunnel, 5,500 tons; refractory.

## GOLD AND SILVER—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN	AND COUNTY.	
Alicante	Lake	Joe Fischer & John Buefleh, Leadville, Colo., 3148 Sixth st. Cap. \$30,000. Ground Hog, gold, silver, lead Shaft, tunnel, 1,000 tons; free; hand. Joe Fischer, supt.
"	(Continued.)	"
"	"	Gold Field Mining Co., Leadville, Colo. Felix Vogel, presnt. Gold Field, gold, silver, lead, 1,000 tons; refractory; steam.
"	"	T. & J. Shelton & J. Johnson, Leadville, Colo., 805 W. Elm st. T. Shelton, presnt.; J. Shelton, secy. and treas.; J. Johnson, mgr. and supt. Hamilton Nos. 1 and 2, gold, silver, lead. Tunnel, 60 tons; refractory, free; hand.
"	"	Walter Scott Mining & Milling Co., Colorado Springs, Colo., 25 Hageman Block, M. L. Chapman, presnt.; A. E. Carlton, secy.; A. B. Hookman, treas.; J. H. McMaster, mgr. Cap. stk. \$500,000. Walter Scott, gold. Shaft, 5,000 tons; free; steam; 20 stamps. R. H. Milner, supt.
"	"	G. C. Wortman, Climax, Colo. John Reed, gold, silver, lead. Shaft; refractory; horse, electricity.
Alma	Park	Green Mountain Mining Co., Chicago, Ill., Unity Bldg. John L. Beveridge, presnt.; Jos. R. Putnam, secy.; H. N. Hilbard, treas.; R. M. Whipple, mgr. Cap. stk. \$1,000,000. Gold. Shaft (developing). Wm. H. Gruse, supt.
"	"	Hall & Brank, G. W. Brank, presnt. and mgr.; John T. Brownlow, secy.; Assyria Hale, treas. Cap. stk. \$1,000,000. Dolly Varden, silver, gold. Shaft, tunnel, 800 tons; refractory; steam; hand.
"	"	The London Mining & Milling Co., Thomas Kiddle, mgr. and supt. London, Paris, Hard to Beat, and others, gold, silver, lead. Tunnel, 15,000 tons; free and refractory; steam; 20 stamps.
"	"	Masceote Gold Mining Co., Denver, Colo., No. 505 Mining Exchange Bldg. W. F. Kendrick, presnt.; A. J. King, secy.; P. M. Kendrick, treas.; James Moynahan, mgr. Cap. stk. \$2,000,000. 10 mines, gold and silver. Shafts and tunnels; free and refractory; electricity and compressed air (developing).
"	"	James Moynahan, Phillips, gold, silver. Shaft; hand.
"	"	David Murphy, Baitie, gold, silver. Refractory; horse; 400 tons.
"	"	The Orphan Boy Hill Cons. Mining Co., James Moynahan, presnt. and mgr.; Fremont Woodruff, secy.; John M. Walker, treas. Cap. stk. \$1,000,000. Orphan Boy, Senate, Evening Star, gold, silver. Tunnel, shaft, 10,000 tons; refractory; steam. James Millhan, supt.
"	"	Phillips Mining Co., St. Louis, Mo., 416 N. Second st. Isaac M. Mason, presnt.; George W. Boswell, secy.; H. H. Merrick, treas.; F. W. Buselman, mgr. Cap. stk. \$300,000. Phillips, gold, silver. Tunnel, 14,000 tons; refractory; steam; 50 stamps. J. H. Macdonald, supt.
"	"	Francis H. Weeks, Moose, silver. Tunnel; refractory. John M. Fritz, supt. and mgr.
"	"	The Woodmass of Alston Mining Co., Alfred H. Wilson, presnt.; Randall W. Wilson, v-pres. and mgr. Cap. stk. \$500,000. Great West, gold, silver, lead. Shaft, tunnel; free; horse. A. H. Wilson, supt.
Amethyst	Saguache	Park Regent Consolidated Mining Co., Creede, Colo. O. P. Pnole, presnt.; A. D. Davis, secy. and treas.; E. H. Crawford, mgr. Cap. stk. \$1,000,000. Park Regent, silver, lead. Steam. Eli Barrett, supt.
Ashcroft	Pitkin	Fitzpatrick & O'Hagan, Hendricks, silver, lead, copper. Tunnel; refractory; hand. J. F. Fitzpatrick, supt.
"	"	W. P. Green & J. Crowther, Ehuira, silver, copper. Shaft, tunnel. W. P. Green, supt.
"	"	Calvin Miller, Cap. \$50,000. Rose, gold, silver. Shaft, 50 tons; hand (developing).
"	"	The Panorama Mining & Prospecting Co., J. M. Leahy, presnt.; Fanny Fogg, secy.; J. J. Leahy, treas.; W. H. Fogg, mgr. Panorama, silver, lead. Tunnel; refractory; hand. J. M. Leahy, supt.
Aspen	Pitkin	Alta Argent Mining Co., Denver, Colo., Nos. 410 and 411 Boston Bldg. A. W. Powell, presnt. and mgr.; Jerome B. Wheeler, v-presnt.; Louis H. Jackson, secy. and treas. Cap. stk. \$2,000,000. Alta Argent, silver. Shaft; refractory; steam and electricity. W. McMillan, supt.
"	"	The Argentum-Junata Mining Co., Colorado Springs, Colo., J. J. Hagerman, presnt.; H. P. Lillibridge, secy. and treas.; R. J. Bolles, v-presnt.; C. E. Palmer, mgr. Silver (developing).
"	"	The Aspen Contact Mining Co., Colorado Springs, Colo., J. J. Hagerman, presnt.; H. P. Lillibridge, secy. and treas.; D. M. Hyman, v-pres.; W. E. Newberry, supt. Silver (developing).
"	"	Aspen Mining Co., Aspen, silver. Shaft, 40,000 tons; refractory; steam, electricity. Henry Paul, supt.
"	"	Aspen Mining & Smelting Co., New York City, 54 Wall st. J. B. Wheeler, presnt.; J. L. Tilton, secy.; Samuel S. Erie, treas.; Fred G. Bulkley, mgr. Cap. stk. \$2,000,000. Silver and lead. Shafts and tunnels, 25,000 tons; electricity.
"	"	Best Friend Mining Co., John H. Greener, presnt.; P. K. Mackin, secy. and treas. Best Friend, Sam Houston, gold, silver. Shaft, 1,000 tons; refractory; steam.
"	"	The Bi-Metallic Mining & Milling Co., Colorado Springs, Colo., J. J. Hagerman, presnt.; H. P. Lillibridge, secy. and treas.; D. M. Hyman, v-presnt.; W. E. Newberry, supt. Silver (developing).
"	"	Della S. Consolidated Mining Co., David C. Brown, presnt.; Theo. E. Little, secy.; H. P. Cowenhoven, treas.; D. W. Brunton, mgr. Cap. stk. \$1,000,000. Silver. Shaft, tunnel; refractory; steam, electricity. Samuel Leonard, supt.
"	"	Charles F. Drake Mining Co., Denver, Colo., Room 10 Hughes Bldg. Charles F. Drake, presnt.; S. W. Keene, v-presnt.; W. R. Root, secy. Cap. stk. \$1,000,000. Surprise, silver, lead. Tunnel; shaft; free; electricity.
"	"	F. C. Ewing & Co., Lena, silver. Shaft, tunnel; refractory.
"	"	Highland Mining & Tunnel Co., 300 West Hopkins st. Alois Thoman, presnt.; John B. Whitehead, secy.; Charles Thoman, treas.; James W. Magee, mgr. and supt. Cap. stk. \$1,000,000. Wilton Belle, No. 2, Highland View, gold, silver, copper. Tunnel; refractory.
"	"	Italian Mountain Mining Co., Frank Stewart, presnt. and mgr.; C. F. Scroggs, secy.; E. C. Stinson, treas.; Cap. stk. \$2,000,000. Homestake, silver, lead. Shaft; free; horse. D. J. Stewart Jr., supt.
"	"	The Mollie Gibson Consolidated Mining & Milling Co., Colorado Springs, Colo., J. J. Hagerman, presnt.; H. P. Lillibridge, secy. and treas.; R. J. Bolles, v-presnt.; C. E. Palmer, mgr. Mollie Gibson, silver.

## GOLD AND SILVER—(CONTINUED)

TOWN AND COUNTY.	LOCATION OF MINE, RAILWAY, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
Aspen	..... Pitkin (Continued.)	New York Tunnel Mining & Transportation Co., Chicago, Ill., 4 Sherman st., Frank Drake, pres't.; W. L. Wright, sec'y.; Gilbert Montague, treas. Cap. stk. \$2,500,000. New York, silver. Tunnel; steam.
"	"	Ophir Bell Mining Co., Room 12 Aspen Block, J. F. Freeman, pres't and mgr.; F. A. Shepard, sec'y.; W. T. Miltonberg, treas. Cap. stk. \$1,000,000. Ophir Bell, gold, silver. Tunnel (developing). S. F. Hunt, supt.
"	"	The Roaring Fork Mining Co., Fred G. Bulkeley, pres't and mgr.; W. P. Smith, sec'y.; A. P. Mackey, treas. Cap. stk. \$8,000,000. Silver. Shaft; drift; steam (developing).
"	"	Sierra La Plata Mining Co., 100 Mill st., 909 Main, H. B. Gillespie, pres't.; Charles F. Saunders, sec'y., treas. and mgr. Cap. stk. \$1,000,000. Woody Gulch, silver. (Developing.)
"	"	The Tenderfoot Consolidated Mining Co., W. W. Cooley, pres't.; Henry Clark, sec'y. and treas. Cap. stk. \$2,000,000. Tenderfoot, Lillian Gray and others, silver. Tunnel (developing).
"	"	Woody Creek Mining Co., F. C. Espenhain, pres't.; A. Thomas, sec'y. and treas.; J. J. Yeckel, mgr. and supt. Cap. stk. \$1,000,000. Leadville, silver, lead. Shaft, tunnel; refractory; steam.
Bald Mountain	..... Gilpin Ry. Black Hawk 776.	Rowena Mining Co., St. Louis, Mo., 920 North Main st., H. Reinstedler, pres't.; Henry Leschen, sec'y. and mgr.; C. E. Meyers, mgr. and supt. Cap. stk. \$200,000. Ivanhoe, Rowena, Rebecca, gold, lead. Shaft, 3,200 tons; free; refractory; steam.
"	"	The San Juan Mining & Milling Co., Denver, Colo., Room 36 Masonic Temple, A. J. Severance, pres't. Cap. stk. \$1,000,000. San Juan, gold, silver. Shaft, 3,000 tons; steam. W. A. Merril, supt.
Ballarat	..... Boulder (P. O. Jamestown) Ry. Boulder 776.	Ballarat Smuggler Mining Co., Denver, Colo., Room 7, Jacobson Block, W. E. Havtin, pres't.; J. M. Houghton, sec'y. and treas. Cap. stk. \$200,000. Ballarat Smuggler, gold, silver. Shaft, 500 tons; refractory; steam; 20 stamps. George M. Freeman, supt.
Barry	..... El Paso Ry. Florissant 26 (18 miles).	Alamo Mining Co., Colorado Springs, Colo., 116 East Pike's Peak av. F. E. Robinson, pres't.; E. W. McNeal, sec'y.; H. E. Bassett, treas.; L. Adams, mgr. and supt. Cap. stk. \$1,000,000. Little Huckle Berry, White Elephant and others, gold. Shaft, tunnel, open, 3,000 tons; refractory; horse.
"	"	Anaconda Mining & Milling Co., Denver, Colo., 1518 Wynkoop st., C. T. Harkinson, pres't.; H. W. Barry, sec'y. and mgr.; S. L. Altman, treas. Cap. stk. \$1,250,000. Excelsior, Great Vein, Anaconda and others. Open pit, shaft, tunnel, 15,000 tons; refractory, free; electricity; steam; 15 stamps. F. A. Reynolds, supt.
"	"	Blue Bell Mining, Milling & Prospecting Co., Colorado Springs, Colo., 112 East Pike's Peak av., Joseph E. Handley, pres't. and mgr.; John S. Lutz, sec'y.; George W. Carr, treas. Cap. stk. \$500,000. Blue Bell, Blanche, R. E. Lee and Hardpan, gold, silver, copper, lead. Shaft and tunnel; refractory, free; horse. Robert McLean, supt.
"	"	The Gold Eagle Mining & Milling Co., Colorado Springs, Colo., Daniel Gregg, pres't.; W. H. Fairall, sec'y.; George Foster, treas. Cap. stk. \$1,000,000. Golden Eagle, gold. Tunnel; free; hand. E. H. Nelson, supt.
"	"	Gold Standard Tunnel & Mining Co., Eben Smith, pres't.; E. G. Bettis, sec'y. and treas.; H. W. Barry, mgr. Cap. stk. \$100,000. Gold Standard, gold. Tunnel; electricity. Ed. Gilet, supt.
"	"	Mountain Tiger Mining Co., Samuel Gale, pres't.; F. D. Taylor, sec'y.; Fred, Williams, treas.; J. C. McKenna, mgr. Cap. \$100,000. Mountain Tiger, gold. Tunnels, hand (developing).
"	"	Work Mining & Milling Co., Colorado Springs, Colo., Midland Block, James Boshears, pres't.; H. E. Bassett, sec'y.; H. A. Mills, treas.; J. T. Reed, mgr. Cap. stk. \$1,250,000. Poorman, Morning Glory, Ida B. and others, gold, silver. Shaft, tunnel; refractory; hand; J. Skews, supt.
Beaver Park	..... El Paso (P. O. Colorado Sprgs.) Ry. Florissant 26.	Cut Diamond Mining & Milling Co., Colorado Springs, Colo., A. H. Swarested, pres't.; G. H. Badfish, sec'y. and mgr.; L. S. Slatona, treas. Cap. stk. \$1,000,000. Gold. Shaft, tunnel; free; steam.
Berthoud	..... Larimer Ry. Arkins 776.	Palmer, Hart & Co., Cap. \$50,000. Peacock, White Quail, gold, silver. Shaft; refractory; hand. James A. Downar, supt.
Bishell	..... Saguache P. O. and Ry. Del Norte 215.	The Grand View Mining Co., Del Norte, Colo., Wm. H. Cochran, pres't.; C. W. Thomas, sec'y.; John H. Shaw, treas.; L. R. McLeod, mgr. and supt. Cap. stk. \$500,000. Grand View, silver. Tunnel; free; hand.
Black Hawk	..... Gilpin Ry. 776.	The Bates-Hunter Mining Co., Denver, Colo., Mining Exchange Bldg., S. V. Newell, pres't.; G. H. Hatcher, sec'y.; W. R. Rathvon, treas.; W. M. McMechen, mgr. Cap. stk. \$1,000,000. Gold. Shaft; free; steam.
"	"	Belmont Mining Co., Henry Kroger, pres't.; Phillip Rohling, sec'y. and treas.; Wm. Mitchell, mgr. Cap. stock, \$25,000. Chemung, gold, silver, copper. Shaft, 800 tons; free; refractory; steam.
"	"	Fisk Mining & Milling Co., Denver, Colo., Room 3 Bank Bldg., F. C. Came, pres't.; D. E. Chase, sec'y., mgr. and supt.; L. H. Stockbridge, treas. Cap. stk. \$250,000. Fisk, gold, silver. Shaft; refractory, free; steam.
"	"	Free American Gold Mining Co., Denver, Colo., 355 Club Bldg., M. A. Downing, pres't.; S. H. Cobb, sec'y. and treas.; M. L. Cox, mgr. and supt. Cap. stk. \$500,000. Free American, gold. Shaft; free; steam.
"	"	Little Maude Gold Mining Co., Colorado Springs, Colo., L. Hall, pres't. and mgr. C. P. Wilkes, v. pres't.; R. B. Taylor, sec'y.; F. H. Hall, treas. Cap. stk. \$125,000. Little Maude, gold. Tunnel; free; hand (developing).
"	"	James A. Perley & Son, Cap. \$50,000. Black Jack, silver, gold, lead, copper. Shaft, 75 tons; refractory; steam.
"	"	Reed & Co., Cap. stk. \$200,000. Gregory-Bobtail, gold. Shaft, slope, 36,000 tons; steam; 125 stamps. J. W. Bostwick, supt.
"	"	The Yosemite Hydraulic Mining Co., Denver, Colo., 818 Ernest & Crammer Bldg., W. B. Teeters, pres't. and mgr.; C. M. Berry, sec'y.; M. P. Dalton, treas. Cap. stk. \$250,000. Yosemite, gold. Placer; hydraulic. W. B. Teeters, supt.
Bonanza	..... Saguache Ry. Villa Grove 215 (16 miles).	Arland Mining Co., Denver, Colo., 410 and 411 Boston Bldg., A. W. Powell, pres't.; R. H. Goddard, sec'y.; J. B. Peterson, treas.; K. W. Correll, mgr. and supt. Cap. stk. \$100,000. Sotheims, Colorado and Excelsior, silver and copper. Shafts and tunnel, 600 tons; free and refractory; steam; mill.
"	"	Baldwin et al., Cap. \$100,000. Gold, silver, copper. Tunnel, 50 tons; hand. J. D. Baldwin, supt.

## GOLD AND SILVER—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWNS AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL. LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE. KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
Bonanza .....	Saguache (Continued.)	Bonanza Mining Co., Springfield, Ohio, Kelly Arcade. O. S. Kelly, pres., secy and treas. Irving How- land, mgr. Cap. stk. \$200,000. Bonanza, gold, silver, lead. Shaft, 1,000 tons; refractory; horse. J. D. Baldwin, supt.
" .....	"	J. K. Brewster, Pueblo, Colo. Eagle, silver, lead. Shaft; refractory; steam (developing).
" .....	"	Hon. Charles Foster, Washington, D. C. Payson, gold, silver, lead. Shaft, steam; refractory. R. W. Correll, supt.
" .....	"	D. J. McIntosh, Superior, silver, lead. Shaft; free; refractory; horse (developing).
" .....	"	Samuel F. Rathvon, Denver, Colo. Exchequer, gold, silver, copper. Shaft; tunnel; refractory; hand. C. H. Leavitt, supt.
" .....	"	L. C. Valentine, Occidental, silver, lead. Slope; horse (developing).
" .....	"	Elf E. Weddington, Saint Louis, gold, silver, lead. Shaft, 50 tons; refractory; hand.
" .....	"	David G. Weems, Baltimore, Md., 6 South st. Michigan, Boss Mammoth, Empress and Josephine, sil- ver, lead, copper. Tunnel; shaft; refractory; hand (developing).
Boulder .....	Boulder Ry. 776.	Buckeye Mining & Milling Co. E. S. Teagarden, pres.; J. A. Teagarden, secy and treas. Cap. stk. \$850- 000. Buckeye, gold. Shaft; free and refractory; horse (developing).
" .....	"	C. G. Buckingham, Magnolia, gold. Shaft; tunnel; refractory.
" .....	"	Rock Island Gold Mining Co., Rock Island, Ill., cor. Fifth av. and Eighteenth st. Gustav Stengel, pres.; Wm. B. Ferguson, secy.; C. D. Gordon, treas.; H. C. Cleveland, mgr. and supt. Cap. stk. \$1,000,000. Rock Island, gold. Shaft; tunnel; refractory; steam; 100 stamps.
" .....	"	Sugar Loaf Mining & Milling Co., Denver, Colo., 1627 Champa st., P. O. Box 2895. Frank P. Kellogg, pres.; William H. Person, secy and treas.; Abraham Clawson, mgr. and supt. Cap. stk. \$20,000. R. B. Potter and Walker Lodes, gold. Shafts and tunnels; free; steam; 20 stamps (developing).
" .....	"	H. C. Thompson, Eighteenth st. Rebecca, Tellurium, gold and silver. Shaft (developing); refractory; steam.
" .....	"	G. R. Williamson, Yellow Pine Group, silver. Tunnel, 117 tons; refractory. G. A. Carlston, supt.
Box Elder .....	Larimer Ry., Granite Canon, 26, 215.	Rawlings & Parkhurst. L. A. Rawlings, pres.; M. B. Rawlings, secy.; G. S. Parkhurst, treas. Peeler Lode, gold, silver, lead. Tunnel; free (developing).
Breckenridge .....	Summit Ry. 776.	Dunkin Mining Co., Leadville, Colo., 115 E. Eighteenth st. Woodward Emery, pres.; William Faxon jr., secy.; James C. Elms, treas.; Warren F. Page, mgr. Cap. stk. \$5,000,000. Gold, silver, lead. Shaft, tunnel, 12,000 tons; refractory; steam. J. Q. Thomas, supt.
" .....	"	Extension Mining & Milling Co., Denver, Colo., 505 Mining Exchange Bldg. W. R. Head, pres.; A. J. King, secy.; Henry M. Fair, treas.; Geo. W. Fair, mgr. Cap. stk. \$500,000. Extension, gold. Tunnel, 4,000 tons; free; steam; 10 stamps. H. M. Fair, supt.
" .....	"	Glen Mohawk Mining Co., St. Louis, Mo., 404 Market st. O. L. Garrison, pres.; J. D. Foster, secy and treas. Cap. stk. \$250,000. May Flower, silver. Tunnel; refractory; water; steam; 20 stamps.
" .....	"	A. G. Hoopes, Orthodox Group, gold, silver, lead. Shaft, tunnel, 80 tons; refractory.
" .....	"	The Jessie Gold Mining & Milling Co., Chicago, Ill., 201 Lake st. R. S. Reynolds, pres.; W. L. Gray, secy and treas.; W. L. Wilson, mgr. and supt. Cap. stk. \$400,000. Gold, silver, Tunnel; free (de- veloping).
" .....	"	Juniata Mining & Milling Co., Denver, Colo. Geo. A. Shapleigh, pres. and treas.; Geo. S. Hayes, secy. and mgr. Cap. stk. \$250,000. Juniata Group, gold, silver, lead. Shafts, drift; free; steam; mill (developing).
" .....	"	J. W. Kauffman, St. Louis, Mo., Laclede Bldg. Minnie, silver, lead. Shaft, tunnel, 3,000 tons; steam. Thos. McKenna, supt.
" .....	"	The Oro Mining & Milling Co. H. H. Loomis, pres.; J. H. Thompson, secy and treas. Cap. stk. \$500- 000. Oro, Siam, Chief, Diamond Dick, gold, silver, lead. Shaft, tunnel; refractory; steam; mill. J. H. Thompson, supt.
" .....	"	The Ouray Mining & Milling Co. Thos. D. Price, pres. and treas.; Edward Price, secy. Cap. stk. \$500- 000. Ouray Group, silver. Tunnel, shaft; refractory; steam; mill, concentrator. Jacob Conrad, supt.
" .....	"	Revere Mining Co., St. Johnsbury, Vt. A. T. Spencer, pres.; F. W. Calden, secy.; A. C. Allen, treas.; Thos. McKenna, mgr. Cap. stk. \$500,000. Revere, gold, silver, lead. Shaft, tunnel, 36,000 tons; steam (developing).
" .....	"	Tecumseh Mining & Milling Co., Denver, Colo., 707 Ernest & Cramer Bldg. Geo. A. Shapleigh, pres. and treas.; Geo. S. Hayes, secy., mgr. and supt. Cap. stk. \$250,000. Tecumseh, gold, silver, lead. Tunnel (developing).
" .....	"	Treasure Mining & Milling Co., Pittsburg, Pa., 607 Ferguson Bldg. James G. Corcoran, pres.; W. E. Giberson, secy.; Andrew Johnson, treas.; C. K. Ohara, mgr. Cap. stk. \$50,000. Treasure, silver, Tunnel, shaft, 789 tons; free; steam. Carl Johnson, supt.
Buena Vista .....	Chaffee Ry. 26, 215, 776.	E. Block & Co. Martha Bonney, Lottie, gold, silver, copper, lead. Tunnel; refractory; hand (devel- oping). I. H. Wenner, supt.
" .....	"	Edward T. Bradford & Geo. H. Parsons, Colorado Springs, Colo., Pike's Peak av. Salvator and Princeton, silver and lead. Shaft and tunnel; refractory; horse (developing). Charles M. Sharpe, supt.
" .....	"	Cora Belle Mining Co. Cora Belle, gold, silver, lead. Tunnel; refractory; hand; mill. Asa Fox, supt. The Dandy Silver Mining Co. E. F. Williams, pres.; R. H. Clifford, secy.; C. M. Sharpe, mgr. and supt. Cap. stk. \$500,000. Dandy, Encyclopedia, silver. Tunnel; refractory; hand (developing).
" .....	"	The Fredonia Consolidated Mining Co. R. S. Appel, pres.; D. R. Ney, secy and treas.; R. T. Schlaflig, mgr. and supt. Cap. stk. \$100,000. Fredonia, lead, gold, silver, Tunnel, shaft; free; hand (developing).
" .....	"	Ph. Groves, Atlantic and Longfellow, gold, silver, lead, copper. Tunnel; refractory; hand. Emerson Gee, supt.
" .....	"	The Highland Mining Co. C. M. Sharpe, pres.; R. T. Schlaflig, secy. Cap. stk. \$300,000. Highland, Gambian, silver, lead. Tunnel; refractory; hand. C. M. Sharpe, supt.



GOLD AND SILVER (CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Buena Vista Chaffee (Continued.)	The Hortense Mining Co. Hortense, silver. Tunnel, shaft; refractory; hand. Eugene F. Teats, supt.
" " "	C. F. Landes & Co., Mt. Carmel, gold, silver, lead, copper. Tunnel, shaft; refractory; hand (developing). Con. F. Landes, supt.
" " "	C. A. Morse, Lizzie M., Mohawk, gold, silver. Tunnel; refractory; hand (developing).
" " "	The Mount Princeton Tunnel Co., H. R. Dean, pres.; J. Quincey Hunsicker, secy and treas.; C. M. Sharpe, mgr. and supt. Cap. stk. \$100,000. Wild Irish boy, silver, lead. Tunnel; refractory; hand (developing).
" " "	The Salvator Mining Co., Edw. T. Bradford, mgr. Salvator, silver, lead. Tunnel, shaft; refractory; hand. C. M. Sharpe, supt.
Caribon Boulder Ry. Boulder, 776.	The Poorman Silver Mines of Colorado, Ltd., Glasgow, Scotland, 1st W. George st., Leonard Gaw, pres.; R. A. Murray, secy. Cap. stk. \$500,000. Poorman Group, silver. Shaft, deep, 1,800 tons; refractory; steam; mill. Neil D. McKenzie, supt.
Carnero Saguache P. O. and Ry. Del Norte, 215.	Grand View Mining, Milling & Development Co., Del Norte, Colo. W. H. Cochran, pres.; Charles W. Thomas, secy., John H. Shaw, treas.; Isaac A. McLeod, mgr. and supt. Cap. stk. \$500,000. Grand View Lode, Mountain View Lode, gold, silver. Tunnel, free (developing).
Carson Hinsdale Ry. Lake City, 215.	The Carson Mining Co., Denver, Colo., 295 Mining Exchange Bldg. H. S. Hubbard, pres.; W. Coleman, secy.; W. B. Dungan, treas.; J. S. Chapman, mgr. and supt. Cap. stk. \$1,000,000. Big Indian, gold, silver. Shaft, tunnel; hand, steam.
" " "	Cresco Mining Co., Lake City, Colo. T. H. Wigglesworth, pres.; John T. Heard, secy.; A. Suedaker, mgr. Cresco, gold, silver. Tunnel; refractory. G. W. Crowe, supt.
" " "	Geo. H. Mining, Milling & Smelting Co., St. Louis, Mo. A. T. Perry, pres.; A. A. Hunkler, secy.; J. N. Hall, treas.; G. W. Cory, mgr. and supt. Cap. stk. \$200,000. Geo. H. Anna, Hattie, silver. Tunnel, 50 tons; hand.
Central City Gilpin Ry. 776.	Argyle Gold Mining Co., Chicago, Ill., 410 Chamber of Commerce. Percy C. Hamilton, pres. and treas.; Wm. Phelps, secy.; Henry F. Lowe, mgr. and supt. Cap. stk. \$1,000,000. Argyle, gold. Shaft, 12,000 tons; free; steam; 74 stamps.
" " "	Fisk Mining & Milling Co., F. C. Carne, pres.; D. E. Chase, secy. and mgr.; L. H. Stockbridge, treas. Cap. stk. \$250,000. Fisk, gold. Shaft; refractory; steam.
" " "	Gettysburg Mining Co., Denver, Colo. W. A. Mereng, pres.; N. O. Vashburg, secy. and treas.; J. B. Hafer, mgr. and supt. Cap. stk. \$300,000. Gettysburg, gold, silver. Shaft, 35,000 tons; free; steam.
" " "	The Gilpin-Franklin Gold Mining Co., Denver, Colo., Ernest & Cramer Bldg. John P. Olympius, pres.; Wm. A. Moore, secy.; Max Gaer, treas.; A. J. Smith, mgr. and supt. Cap. stk. \$300,000. Franklin, Lois, Clyde, gold. Shaft; free; horse.
" " "	The Galvonda Mining & Milling Co., Wm. J. Thomas, pres.; J. E. Street, secy., treas. and mgr. Cap. stk. \$200,000. Little Lalla, Little Mary, gold. Tunnel; free; steam; 10 stamps (developing). C. E. Street, supt.
" " "	Gold Rock Mining & Milling Co., Denver, Colo., Room 8 Tabor Block. John Demson, pres.; G. Krouse, secy. and treas. Cap. stk. \$500,000. Springdale, gold, silver, copper. Shaft; refractory; steam. J. Ben Lewis, supt.
" " "	The Gregory Consolidated Mining Co., Denver, Colo., 500 Mining Exchange Bldg. Joseph B. Hafer, pres. and mgr.; C. L. Schmidt, secy.; Louis Wagner, treas. Cap. stk. \$500,000. Gregory Second, gold, silver. Tunnel, shaft, 50,000 tons; refractory; horse, mill. Joseph B. Hafer, supt.
" " "	Geo. W. Hill, Banta, silver, gold. Shaft, drift; refractory, steam.
" " "	The Jupiter-Belmont Mining Co., Denver, Colo., 220 Seventeenth st. A. A. Bowhay, pres.; David Keith, v.-pres.; Chas. A. Johnson, secy.; A. P. Fennerty, treas.; Ulas M. Shaw, mgr. and supt. Cap. stk. pd. up \$300,000. Jupiter, St. Clair and Belmont, gold. Shaft; free; steam.
" " "	Geo. W. Mable, National, gold, silver. Shaft, 6,000 tons; free; steam.
" " "	New California Co., Ltd., London, Eng., Bloomfield House, London Wall. H. T. Walker, pres.; W. H. Rowe, secy. and treas.; Alfred Rickard, mgr. and supt. Cap. stk. \$800,000. California, gold, silver. Shaft, 10,000 tons; free; steam; 75 stamps.
" " "	The Pewabic Mining Co., Council Bluffs, Iowa, Lewis Hammer, pres.; Hon. Geo. F. Wright, secy. and treas.; John H. Kemp, mgr. and supt. Pewabic, gold, silver. Shaft; refractory; steam.
" " "	The Saratoga & Cypelos Gold and Silver Consolidated Mining Co. Joseph H. Berry, pres.; W. G. Smith, secy.; John Best, treas., mgr. and supt. Cap. stk. \$1,500,000. Saratoga, Cypelos, gold, silver. Shaft, 5,000 tons; refractory; steam.
" " "	Spur Daisy Mining Co., Denver, Colo., 304 Mack Block. L. W. Tatam, pres.; Irvin J. Garr, secy. and treas.; V. A. Macdonald, mgr. Cap. stk. \$300,000. Spur, Daisy, Two Sisters, Monitor, Little Chicago, gold, silver, lead, copper. Shaft, 50 tons; free; refractory; steam; horse. Daniel Munday, supt.
" " "	The Sutton Mining & Milling Co., Denver, Colo., Mining Exchange Bldg. L. W. Nichols, pres.; R. W. Cokell, secy.; W. B. Roof, treas. and mgr. Cap. stk. \$500,000. Alva Adams, Notaway, Muggie, gold, silver. Shaft, drift; refractory; steam (developing). John B. Sutton, supt.
Climax Lake Ry. Allicante 776.	G. C. Wortman. John Reed, gold, silver, lead. Shaft, 3,000 tons; refractory; electricity.
Como Park Ry. 776.	Leon Peabody. Peabody, gold. Placer; hand.
" " "	Peabody & Foot. City of Hamilton, gold. Tunnel, 100 tons; free; steam. 10 stamps. Henry Foot, supt.
" " "	J. M. Link. Henry Foot, mgr. Enreka, No Plus Ultra, Kentucky, gold. 1,200 tons; free; steam; 10 stamps.
" " "	Oliver & Martin. Mineral Ranch, gold. Tunnel, slope, 200 tons; free; water; 10 stamps.
" " "	Reed & Jarvis. Lena, gold, silver. Tunnel; free; hand; to stamps. D. R. Jarvis, supt.
Copper Rock Boulder Ry. 776.	C. G. Buckingham, Boulder, Colo. McDermott, Occidental, gold. Shaft, tunnel; free (developing).

## GOLD AND SILVER—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 FOUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWNS	AND COUNTY.	
Copper Rock	Boulder	Copper Rock Gold Mining Co., Denver, Colo., cor. Seventeenth and Champa sts., W. W. Booth, pres't.; Dr. F. H. Lay, secy.; J. K. Carlston, mgr. and supt. Cap. stk. \$100,000. Gold. Tunnel; free; 15 stamps.
"	"	Denver & Copper Rock Gold Mining Co., Denver, Colo., 1325 Seventeenth st., Wm. K. Burchinal, pres't.; Dr. F. H. Lay, secy.; Albert Lewin, treas.; A. B. Gibson, mgr. and supt. Cap. stk. \$1,000,000. Lucky, Locust, Lacy and others, gold. Shafts and tunnels; free (developing).
"	"	Gold Dust Mining & Milling Co., Denver, Colo., 617 Mining Exchange Bldg., L. D. Longhi, pres't. and treas.; R. F. Copes, secy.; W. J. Hegel, mgr. Cap. stk. \$500,000. Maud S., Gold Dust, Medicine Man, gold. Shaft, tunnel; free; 20 stamps. W. J. Hegel, supt.
"	"	Orphan Boy Mining & Milling Co., Denver, Colo., 613 Mining Exchange Bldg., Wm. Wise, pres't. and treas.; N. C. Merrill, secy. and mgr. Cap. stk. \$1,000,000. Orphan Boy, Kaiser Wilhelm, Emperor, gold. Tunnel, 2,500 tons; free; steam; 15 stamps. Chas. Davis, supt.
"	"	Orphan Boy Extension Mining & Milling Co., Denver, Colo., Hon. J. C. Helm, pres't.; N. C. Merrill, secy. and treas.; C. Davis, mgr. Cap. stk. \$1,000,000. Last Lode, Negotiable, gold. Shaft; free; steam.
"	"	Queen Bess Gold Mining Co., Denver, Colo., 520 Mining Exchange Bldg., A. C. Schlesinger, pres't.; D. L. Ezekiel, secy. and mgr.; H. W. Kirchner, treas. Cap. stk. \$100,000. Snicker Boy, gold. Shaft; free; hand (developing). John Falter, supt.
Creede	Saguache Ry. 215.	Amethyst Mining Co., David H. Moffatt, pres't.; W. S. Cheesman, secy. and treas.; L. E. Campbell, mgr. Cap. stk. \$500,000. Amethyst, silver, gold, lead. Slope, 22,000 tons; refractory; steam. Harry Allenby, supt.
"	"	The Antlers Mining & Milling Co., E. Barnett, pres't.; O. L. Godfrey, secy. and treas.; O. D. Davis, mgr. Cap. stk. \$1,000,000. Twenty claims, silver. Shaft; horse (developing). Mr. Crawford, supt.
"	"	Coin Silver Mining Co., O. P. Poole, pres't. and mgr.; W. H. Spurgeon, secy.; H. E. Johnson, treas. Cap. stk. \$500,000. White, Equitable, silver, lead. Shaft; steam (developing).
"	"	The Cressle & Cripple Creek Land & Mining Co., Denver, Colo., 1638 Curtis Bldg., Room 16. William Warren, pres't.; S. J. Shirley, secy. and treas.; Alonzo Abbott, mgr. Cap. stk. \$250,000. Cripple, Frego, Abbott's Dream and others, gold, silver. Shaft; free; hand (developing). Matthew A. Rowen, supt.
"	"	Creede Mining & Milling Co., Denver, Colo., 310 Boston Bldg., R. W. Woodbury, pres't.; F. A. Metcalf, secy. and treas.; D. J. Hutchison, mgr. and supt. Cap. stk. \$100,000. McGinty, silver. Tunnel (developing).
"	"	The Crown Point Mining & Milling Co., Howard C. Chapin, pres't. and mgr.; E. I. Howard, secy. and treas. Cap. stk. \$1,000,000. Crown Point, Kentucky Boy and others, silver. Shaft; free; horse (developing). Howard C. Chapin, supt.
"	"	Del Monte Mining & Milling Co., Colorado Springs, Colo., W. J. Willecox, pres't.; H. G. Lunt, secy.; J. A. Hayes, treas. Cap. stk. \$5,000,000. Del Monte, silver. Shaft (developing).
"	"	Four Hundred Acre Consolidated Diamond Drill Mining Co., Denver, Colo., F. P. Ernest, pres't.; Howard C. Chapin, secy.; George E. Swallow, treas.; A. F. Hazeltine, mgr. and supt. Cap. stk. \$3,000,000. Fifty claims, silver. Free; steam (developing).
"	"	Grand Pacific Mining Co., E. W. Harbutt, pres't.; L. D. Mather, secy.; A. H. Reynolds, treas.; J. B. Warner, mgr. and supt. Cap. stk. \$1,000,000. Grand Pacific, silver. Tunnel (developing).
"	"	The Holy Moses Mining Co., David H. Moffatt, pres't.; L. E. Campbell, mgr. Holy Moses, Ethel, gold, silver, lead. Tunnel, shaft, 6,000 tons; free; horse. Harry Allenby, supt.
"	"	King Solomon Mining & Milling Co., Denver, Colo., 207, 208 and 209 Boston Bldg., N. C. Creede, pres't.; Edwin I. Rogers, secy.; Geo. W. Robinson, treas.; Thos. Craig, mgr. and supt. Cap. stk. \$2,000,000. King Solomon, Belat, silver, gold. Shaft, tunnel; refractory; hand.
"	"	Little Maid Mining & Milling Co., Denver, Colo., 207, 208 and 209 Boston Bldg., Wm. G. Elder, pres't.; J. R. Sanville, secy.; N. J. Miller, treas. Cap. stk. \$2,000,000. Little Maid, Silver Plume, silver. Shaft, tunnel; refractory; hand. Wm. F. Hogan, mgr. and supt.
"	"	Mammoth Mining & Smelting Co., Pueblo, Colo., Central Block., E. H. Martin, pres't.; A. L. Murry, secy.; C. F. Roy, treas.; E. J. Wilcox, mgr. and supt. Cap. stk. \$2,500,000. Fourteen claims, silver, gold. Shaft, tunnel; refractory; free; steam, hand.
"	"	Mammoth Mountain Deep Mining & Tunnel Co., Denver, Colo., Mining Exchange Bldg., H. A. Ferguson, pres't.; H. E. Wood, secy.; W. S. Nichols, treas.; F. G. Peck, mgr. and supt. Cap. stk. \$1,250,000. Little Vernie, Black Girl, Baryta, gold, silver. Tunnel, shaft; free.
"	"	Nelson Tunnel & Mining Co., A. W. Brownell, pres't.; J. P. Wallace, secy.; E. F. Kelly, treas. Cap. stk. \$1,000,000. Triangle Lode, silver. Tunnel; refractory; water (developing). Ed. Wagner, supt.
"	"	Pueblo & Creede Mining & Milling Co., Pueblo, Colo., Union av., C. H. Watkins, pres't.; H. T. Wilson, secy. and treas.; Thos. R. Henahey, mgr. and supt. Cap. stk. \$500,000. Tenay Foundation, silver. Shaft; refractory; hand (developing).
"	"	Silver King Mammoth Mining Co., Denver, Colo., 626 Mining Exchange Bldg., Wm. H. Yankee, pres't.; W. H. Combs, secy. and treas.; Colin Timmons, mgr. and supt. Cap. stk. \$1,000,000. Silver King, Monitor and Merrimac, silver. Shaft; free; steam (developing).
"	"	U. S. Paymaster Mining Co., Denver, Colo., 35 Barclay Block., Evan Morton, pres't.; Geo. W. Trommlitz, secy. and mgr.; E. C. Humphrey, treas. Cap. stk. \$500,000. U. S., Colorado Boy, Paymaster, Johnny Bull, silver. Tunnel; refractory; horse (developing). E. F. Gordon, supt.
Crested Butte	Gunnison Ry. 215.	Chimberland Consolidated Mining & Milling Co., Aspen, Colo., Joseph Reese, pres't.; E. C. Stinson, secy.; H. T. Tinsington, treas.; J. M. Vincent, mgr. Cap. stk. \$1,000,000. Chimberland, gold, silver. Tunnel; free; compressed air. C. R. Metcalren, supt.
"	"	The Diamond R. Mining Co., Pueblo, Colo., 212 S. Union av., J. J. Langdon, pres't.; John S. Stewart, secy.; Julius Fish, treas. Cap. stk. \$500,000. Diamond (R) and Honest Old Grover, silver. Tunnel; refractory; hand (developing). C. F. McLaughlin, supt.
Crestone	Saguache Ry. Moffat 215 (18 m.).	Kunkel Bros., Banner, gold. Shaft; free; hand (developing).
"	"	Von Moltke Mining Co., Hugo Henkanfer, mgr. and supt. Von Moltke, gold, silver. Tunnel, shaft, 50 tons; refractory; hand (developing).

GOLD AND SILVER—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Cripple Creek, El Paso Ry. Hayden Divide 26 (18 miles).	Alamo Mining Co., Colorado Springs, Colo., cor. Pike's Peak av. and Tejon st. Hon. F. E. Robinson, pres.; E. W. McNeal, secy.; H. E. Bassett, treas.; Lloyd Adamson, mgr. Cap. stk. \$800,000. Four claims, gold. Shaft, tunnel; free; hand. L. Adamson, supt.
" "	The Alverta Gold Mining Co., Denver, Colo., cor. Seventeenth and Curtis sts. Edmund L. Scholtz, pres.; H. P. Ellis, secy.; Thomas Kewly, treas.; H. C. Lawrence, mgr. Cap. stk. \$200,000. Alverta, gold. Tunnel, shaft; free; hand. H. C. Lawrence, supt.
" "	Amazon Mining & Milling Co., Denver, Colo., Room 812 Boston Bldg. O. McTeaf, pres.; W. F. Reed, secy. and treas.; James J. Ducey, mgr. Cap. stk. \$200,000. Reform, Confidence and 5 other claims, gold. Shaft, tunnel, 9,500 tons; free and refractory; steam; 10 stamps. Charles Steele, supt.
" "	American Flag Mining & Tunnel Co., L. H. Gowley, pres.; W. E. Meek, secy.; J. R. McKinney, treas.; John Horgan, mgr. Cap. stk. \$50,000. Gold, Tunnel; free; hand. John Horgan, supt.
" "	Amaconda Gold Mining Co., Denver, Colo., 1518 Wynkoop st. D. H. Moffatt, pres.; C. T. Harkison, secy.; First National Bank of Denver, treas.; Eben Smith, mgr. and supt. Cap. stk. \$5,000,000. Amaconda, 10 claims, gold. Tunnels and shafts; steam.
" "	Anglo-American Prospecting & Developing Co., Box 386. W. R. Vacher, pres. and mgr.; J. C. Steele, secy.; H. H. Vacher, treas. Cap. stk. \$250,000. Fifteen claims, gold (developing).
" "	Badger Boy & Ivanhoe Mining Co., Colorado Springs, Colo. T. A. McMorris, pres.; W. C. Frost, secy. and treas.; Reuben Boney, mgr. Cap. stk. \$200,000. Badger Boy and Ivanhoe, gold. Shaft and tunnel; free (developing).
" "	Bull Mountain Gold Mining Co., Colorado Springs, Colo., Gazette Building. Count James Pourtales, pres.; Thos. C. Parrish, secy. and treas. Cap. stk. \$1,000,000. Twenty-two claims, gold and silver. Shaft, tunnels, 20 tons; refractory, free. Richard Lloyd, supt.
" "	B. V. Gold Mining Co., Colorado Springs, Colo., Gazette Building. Count James Pourtales, pres.; Thos. C. Parrish, secy. and treas. Cap. stk. \$70,000. Buena Vista, gold and silver. Shaft, tunnel, 80 tons; refractory, free. P. T. McDonald, supt.
" "	Champa Mining & Milling Co., Denver, Colo., 404 California Bldg. C. N. Guyer, pres.; Ed. P. Pitkin, secy.; S. S. Smythe, treas.; A. H. Smythe, mgr. and supt. Cap. stk. \$1,000,000. Champa, gold. Shaft and tunnels; free; 10 stamps (developing).
" "	Chat Mining & Milling Co., Colorado Springs, Colo. J. A. Hinebaugh, pres.; Geo. Lindley, secy.; D. Herron, treas.; H. Chatillon, mgr. and supt. Cap. stk. \$200,000. Rita Chat, Hubert Chat, and 3 others, gold. Shaft, placer; free; steam; 50 stamps.
" "	Clifton Mining & Milling Co., Colorado Springs, Colo., 125 and 127 S. Tejon st. T. M. Dolan, Clifton, Kan., pres.; A. W. Maxwell, secy.; W. D. Harmon, Clifton, Kan., treas.; Geo. O. Sevens, mgr. and supt. Cap. stk. \$300,000. Ella H., Clara D., gold. Shaft, free, steam.
" "	C. O. D. Gold Mining Co., Colorado Springs, Colo. E. M. Steadman, pres.; Clarence Edsall, secy. and treas.; Chas. L. Tift, mgr. and supt. Cap. stk. \$500,000. C. O. D., My Choice and Berkeley, gold and silver. Shaft; refractory, free (developing).
" "	Colfax Mining Co., Colorado City, Colo. J. R. Watt, pres.; A. R. Huff, secy.; Fred. Hilliker, treas. Cap. stk. \$1,000,000. Mammoth, Moose, Buffalo, Caribon and others, gold, silver. Shaft.
" "	Compact Mining & Milling Co., L. R. Thompson, pres.; H. R. Warren, secy. and mgr.; J. H. Parker, treas. Cap. stk. \$750,000. Compact, gold. Shaft and tunnel; free; horse (developing). Mark Thomas, supt.
" "	Conservative Mining & Milling Co., Colorado City, Colo. R. S. Brisson, pres.; M. J. Myers, Smith, secy.; Chas. A. Crane, treas.; M. O. Evans, mgr. and supt. Cap. stk. \$250,000. Gold, Shaft, tunnel; refractory, free.
" "	Coronado Gold Mining Co., Pueblo, Colo., Central Block. Paul Wilson, pres.; Chas. S. Sauerland, secy.; John H. Olmes, treas.; N. E. Gnyot, mgr. and supt. Cap. stk. \$1,500,000. Napoleon, Amy H., Kittle M. and others, gold. Open, 15,000 tons; free; electricity; 100 stamps.
" "	Cripple Creek Syndicate Mining & Milling Co., Denver, Colo., 1058 Lawrence st. John L. Russell, pres.; C. S. Hooper, secy. and treas.; A. K. Hoffman, mgr. and supt. Cap. stk. \$200,000. Cripple Creek syndicate, gold. Shaft, 15 tons; free; steam (developing).
" "	The Cripple District Mining Co., Denver, Colo., 1624 Curtis st. J. C. Rice, pres.; Chas. E. Liebold, secy. and treas.; S. O. Bennett, mgr. and supt. Cap. stk. \$250,000. Ten claims, gold. Tunnel; shaft (developing).
" "	Crystal Mining Co., 120 Bennett av. W. H. Young, pres., treas., mgr. and supt. Thos. Donnell, secy. Cap. stk. \$50,000. Panther, Storm and Monte Christo, gold. Shafts; free, hand (developing).
" "	The Denver & Cripple Creek Mining Co., Denver, Colo., 913 Seventh st. H. J. Kruse, pres.; E. A. Smith, secy.; E. H. Mason, treas.; J. A. Riggs, mgr. Cap. stk. \$300,000. E. H. Mason, America, City of Paris and others, gold (developing).
" "	The Double Eagle Mining Co., Colorado Springs, Colo., 21 Bank Bldg. Henry D. Gortner, pres.; John J. O'Neil, v. pres.; Bert W. Osborn, secy. and treas.; J. F. Topling, mgr. and supt. Cap. stk. \$1,000,000. Double Eagle, Crystal Reef, Nara Ellen, gold. Shaft; free; hand.
" "	The El Dorado Gold Mining & Milling Co., Colorado Springs, Colo. J. F. Seldomridge, pres.; J. F. Maybury, secy. and treas.; E. M. La Vergne, mgr. Cap. stk. \$1,000,000. El Dorado, Sangre and Cripple Creek, gold. Shaft, tunnel, placer; refractory and free; water.
" "	Elkton Mining & Milling Co., Colorado Springs, Colo., 107 1/2 South Tejon st. Geo. Bernard, pres.; Samuel Bernard, secy.; Van E. House, treas. Cap. stk. \$200,000. Elkton, Kentucky, Billy and Walter, gold and silver. Shaft and tunnel; free. Van E. House, supt.
" "	Free Coinage Gold Mining Co., Colorado Springs, Colo. S. I. Altman, pres. and mgr.; M. M. Baldwin, secy.; James H. Baldwin, treas. Cap. stk. \$1,000,000. Rising Sun, Wilson and others, gold. Shaft, drift; free (developing); hand. Ernest Miss, supt.
" "	Gold & Globe Hill Mining Co., Colorado Springs, Colo., 104 Pike's Peak av. A. Anderson, pres.; R. W. Anderson, secy.; Wm. W. Bassell, treas. Cap. stk. \$500,000. Gold, Globe and Iron King, gold. Tunnel, shaft, 3,000 tons; hand. J. R. McKinnie, supt.
" "	The Gold King Mining Co., Colorado Springs, Colo. E. A. Colburn, pres.; C. H. Dudley, secy. and treas. Cap. stk. \$1,000,000. El Paso, gold. Shaft and tunnel, 3,000 tons; refractory and free; hand; 15 stamps. Wm. Lemox, supt.

## GOLD AND SILVER—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWNS AND COUNTY.	
Cripple Creek, El Paso (Continued.)	Gold Standard Mining & Milling Co. L. D. Rodebush, prest.; Ely G. Bettis, secy. Cap. stk. \$1,200,000. Gold. Tunnel, shaft; steam, hand (developing).
"	Golden Eagle Mining & Milling Co., Colorado Springs, Colo. Daniel Gregg, prest.; W. C. Farrell, secy.; Geo. E. Foster, treas. Cap. stk. \$1,000,000. Comstock, Great Western and 7 other claims, gold. Placer, tunnel and shaft; free; steam.
"	Golden Gate Prospecting, Mining & Milling Co. Frank Lewis, prest. and mgr.; Peter McCrea, secy. and treas. Cap. stk. \$1,500,000. Fifteen lodes and placer claims; gold, silver. Shaft, tunnel, placer; refractory, free; water, steam and electricity. Dr. E. Lewis, supt.
"	The Granite Hill Mining & Milling Co., Colorado Springs, Colo. L. H. Gowdy, prest.; C. W. Older, secy.; A. S. Andrew, treas.; W. H. Gowdy, mgr. Cap. stk. \$1,250,000. Granite Hill and Chicago Hill (developing).
"	Ironclad Mining & Milling Co. Cap. stk. \$1,000,000. Gold. Tunnel, shaft; free. John S. Bogg, supt.
"	Jack Pot Mining Co., Colorado Springs, Colo. 112 E. Pike's Peak av. E. J. Hadfield, prest.; John S. Lentz, secy.; R. H. Graham, treas.; Lew Jackson, mgr. and supt. Cap. stk. \$1,250,000. Jack Pot, Iron Master, Providence and Mary Wynn, gold. Tunnel, shaft; free; hand.
"	The Jeff Davis Mining Co., Colorado Springs, Colo. C. M. Rice, prest.; C. B. Wilder, secy.; B. C. Hubbell, treas. Cap. stk. \$1,000,000. Jeff Davis and 6 other claims, gold. Shaft; refractory; J. W. Wells, supt.
"	Jefferson Mining Co. W. E. Craig, prest.; Geo. B. Meehlem, secy.; Geo. Mayhew, treas.; Samuel Bishop, mgr. and supt. Cap. stk. \$1,100,000. Game Cock, Jay Hawker, Hallie, gold. Shaft, tunnel, 60,000 tons; free; electricity; 20 stamps.
"	The Juno Mining & Milling Co., Denver, Colo., 249 Champa st. Emile Bern, prest.; Gordon H. Rankine, secy.; W. S. Winslow, treas.; Eli Pimshon, mgr. Toward, gold. Tunnel.
"	Le Clair Mining Co. Frank F. Castello, prest.; P. J. Ryan, secy.; H. L. Houghton, treas.; T. F. Houghton, mgr. and supt. Cap. stk. \$1,000,000. South Park, Le Clair and 2 others, gold and silver. Tunnel, shaft; free; refractory; hand (developing).
"	Legal Tender Mining and Milling Co. L. D. Rodebush, prest.; Ely G. Bettis, secy. Cap. stk. \$1,200,000. Gold. Tunnel, shaft; steam, hand (developing).
"	The Little Don Mining & Tunnel Co., P. O. Box 5. Geo. H. Hobson, prest.; G. B. Porris, secy.; Geo. C. Harper, treas.; Pueblo, John Downen, mgr. and supt. Cap. stk. \$1,000,000. Gold. Tunnel, shaft; hand.
"	Lille Mining & Milling Co., Denver, Colo., 1621 Stout st. I. J. Maceabe, prest. and treas.; M. R. Hill, secy.; John H. Maceabe, mgr. Cap. stk. \$250,000. Gold. Shaft; hand (developing). I. Childe, supt.
"	Lone Star Mining Co., John Hubbert, prest.; F. T. Osgood, secy.; F. T. Castello, treas.; E. B. Smettle, mgr. Cap. stk. \$1,000,000. Lone Star, gold. Free (developing).
"	Lone Star Mining and Milling Co. L. D. Rodebush, prest.; Ely G. Bettis, secy. Cap. stk. \$1,200,000. Gold. Tunnel, shaft; steam, hand (developing).
"	The Merie D. Gold Mining Co., 505 Carr av. E. C. King, prest. and mgr.; R. G. Mullin, secy.; Chas. H. Adams, treas. Cap. stk. \$1,000,000. Merie D., Jim Hiner, Archie, Winona, Lent M. and Poinne de Terre, gold. Shaft, tunnel; free; hand. E. C. King, supt.
"	The Mountain Chief Gold Mining & Milling Co. John K. Vanatta, prest.; John M. Buckley, secy.; C. H. McMasters, treas.; F. M. Cliney, mgr. Cap. stk. \$1,000,000. Mountain Chief, gold. Shaft, tunnel, 9,000 tons; free; horse. W. R. McElroy, supt.
"	Mutual Mining & Milling Co., Colorado Springs, Colo. E. F. Titus, prest.; C. S. Bailey, secy.; W. H. Gandy, treas. and mgr. Cap. stk. \$500,000. New Discovery, Cripple Creek, Mineral Hill, Mollie Gibson and Independence, gold. Shaft, tunnel; free; horse, hand. W. H. Gandy, supt.
"	National Belle Mining, Milling & Development Co., Fremont, Colo. James M. Parker, prest.; L. L. Stebbins, secy.; Samuel Strong, mgr. Cap. stk. \$500,000. Gold. Shaft, tunnel; free.
"	Orphan Belle Mining & Milling Co., Colorado Springs, Colo., 112 Pike's Peak av. J. H. Gardner, prest.; J. K. Vanatta, secy.; J. E. Hunter, treas.; R. J. Coleman, mgr. and supt. Cap. stk. \$500,000. Orphan Belle, gold, silver and copper. Shaft and slope; refractory; horse (developing).
"	People's Mining & Milling Co., Denver, Colo. M. J. Lawrence, prest.; R. G. Rockwell, secy.; F. L. Rohlind, treas.; Wm. Hodgson, mgr. Cap. stk. \$500,000. People's, gold. Shaft; free (developing). L. M. Bogart, supt.
"	Pharmacist Mining Co., Colorado Springs, Colo., P. O. Box 376. J. K. Miller, prest.; A. D. Jones, secy.; J. W. Miller, treas. Cap. stk. \$1,200,000. Pharmacist, gold. Shaft, 6,000 tons; horse. A. D. Jones, supt.
"	Phil Sheridan Mining & Milling Co., Pueblo, Colo., 301 Central Block. W. O. Campbell, prest.; Jas. A. Brown, secy. and treas.; J. C. Magner, mgr. and supt. Cap. stk. \$600,000. Phil Sheridan, gold and silver. Shafts and tunnels; refractory; hand (developing).
"	Pike's Peak Placer Mining & Milling Co. P. Johnson, prest.; Samuel Hershberger, v. prest.; A. W. Faurot, secy.; A. Sorders, treas.; Burt Pottinger, mgr. Cap. stk. \$1,000,000. Pike's Peak, gold. Placer; free; steam and water. J. T. May, supt.
"	Plain View Mining & Milling Co., Denver, Colo., 1630 Arapahoe st. Chas. E. Page, prest.; Chas. H. Pettie, secy.; John McLeod, treas. Cap. stk. \$300,000. Gold and silver. Shaft; free (developing). A. Vanderhoef, supt.
"	Pluto Mining Co., Colorado Springs, Colo. J. K. Miller, prest. and treas.; A. D. Jones, secy.; Harry Ferguson, mgr. Cap. stk. \$500,000. Alva Nos. 1 and 2 and Loin, gold. Placer, shaft, tunnel; refractory; horse. Theo. Thorn, supt.
"	Plymouth Rock Mining Co., Fremont, Colo. E. C. Hight, prest.; H. L. Shepherd, secy.; J. M. Parker, treas.; V. B. Krewson, mgr. and supt. Cap. stk. \$1,000,000. Plymouth Rock Nos. 1 and 2, World's Fair and others, gold and silver. Shaft; refractory; horse.
"	Pride of Cripple Creek Mining Co., Denver, Colo., 301 Seventeenth st. Milo A. Smith, prest.; Arthur H. Cawley, secy.; R. W. Woodbury, treas. Cap. stk. \$1,000,000. Pride of Cripple Creek and others, gold. Shaft (developing).

GOLD AND SILVER (CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINTS		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.	
TOWN	AND COUNTY.		
Cripple Creek.	El Paso (Continued.)	Pueblo Bell Mining & Milling Co., Pueblo, Colo. J. J. Lansing, pres.; D. Mitchell, secy.; T. A. Sloane, treas. Cap. stk. \$300,000. Olive, Pearl, Lena and Edsburg, gold. Shaft and tunnel; free.	
"	"	Shasta Mining, Milling & Prospecting Co., Colorado Springs, Colo. J. A. Tejon st. W. W. Williamson, pres.; J. W. Rice, secy.; D. Mitchell, treas.; A. E. Moxey, mgr. and supt. Cap. stk. \$1,250,000. Joe Jefferson, Lady Florence and 5 other claims, gold. Shaft, tunnel, refractory, free; hand, electricity; 35 stamps.	
"	"	R. M. Snavly & S. M. Rugg, Denver, Colo. R. M. Snavly, pres. and treas.; S. M. Rugg, secy. Cap. stk. \$500,000. Gertrude H. Gold Cord and H. P., gold, silver. Shaft; free; hand; 10 stamps. W. T. Camp bell, supt.	
"	"	Spring Creek Mining Co., Colorado Springs, Colo., 20 E. Pike's Peak av. Fran O. Woods, pres.; W. H. Bacon, secy. and treas. Cap. stk. \$800,000; indy. cap. \$25,000. Eight claims, gold, silver. Tunnel. Mr. Steal, supt.	
"	"	The Standard Mining & Land Co., Colorado Springs, Colo., Rooms 1 and 2 P. O. Block. L. E. Dwinell, pres.; W. E. McLain, secy.; J. A. Voorhees, treas.; G. A. Emery, mgr. and supt. Cap. stk. \$60,000. Door Key, McMember, Malta, Bangor and Morning Star, gold. Four shafts and tunnel; free; hand.	
"	"	The Star of the East Mining & Prospecting Co., A. P. Hall, pres.; G. L. Hall, secy.; A. B. Whitmore, treas.; W. W. McConnell, mgr. and supt. Cap. stk. \$1,000,000. Star of the East, gold. Shaft, free; steam.	
"	"	The Star of the West Mining and Milling Co., Colorado Springs, Colo. C. H. White, pres.; Sherwood Albrecht, secy.; O. G. Goffrey, treas.; W. P. Hartz, mgr. Cap. stk. \$1,000,000. Star of the West, Elk Horn, Rothschilds and Landon, gold, silver. Shafts.	
"	"	The Sweet Mining & Milling Co., Pueblo, Colo., 210 S. Union av. Barton Sweet, pres.; J. H. Sherman, secy.; G. H. Hard, treas.; A. A. McKnight, mgr. Cap. stk. \$1,500,000. Cons-coat, El Reno, World's Fair, gold. Shaft, 10,050 tons, free; horse. W. R. Walker, supt.	
"	"	The T. F. T. Mining & Milling Co., Colorado Springs, Colo., 106 E. Pike's Peak av. M. M. Baldwin, pres.; J. W. Bell, secy. and treas.; S. Blair, mgr. Cap. stk. \$500,000. T. F. T., gold. Shaft.	
"	"	Townsite Gold Mining Co., Colorado Springs, Colo. Chas. L. Nutt, pres.; E. Shirley Borden, secy. and treas.; A. D. De Masters, mgr. and supt. Cap. stk. \$1,000,000. Townsite, gold. Shaft; free and refractory; horse (developing).	
"	"	Tuscarora Gold & Silver Mining & Milling Co., Denver, Colo., 205 Boston Bldg. O. P. Grove, pres.; G. G. Speer, secy. and treas. Cap. stk. \$200,000. Tuscarora, gold and silver. Shafts and tunnels, free and refractory. C. P. Rolfe, supt.	
"	"	Union Gold Mining Co., Colorado Springs, Colo., Room 1 Midland Block. James Beshears, pres.; G. M. Carter, secy.; H. Morse, treas.; Geo. A. Jones, mgr. and supt. Cap. stk. \$1,250,000. Pike's Peak, Del monico, Orpha May, gold. Shaft, 600 tons; free; horse, hand; 20 stamps.	
"	"	Valley Lode Mining Co., Denver, Colo., 1638 Lawrence st. T. R. Speer, pres.; J. Richardson, v. pres.; C. S. Hooper, secy. and treas.; Cap. stk. \$300,000. Valley Lode, gold. Shaft, 175 tons; free, steam (developing). A. K. Hoffman, supt.	
"	"	The Virginia M. Consolidated Mining Co., Colorado Springs, Colo., 111 E. Kiowa st. R. H. Bryant, pres.; D. M. Sells, secy.; E. W. Sells, treas. Cap. stk. \$1,000,000. Gold and silver. Tunnel, shaft, open; refractory, free; hand (developing). W. A. Welch, supt.	
"	"	The Work Mining Co., Colorado Springs, Colo. J. Beshears, pres.; H. E. Bassitt, secy.; H. C. Mills, treas.; J. T. Deed, mgr. Cap. stk. \$1,250,000. Eight claims, gold. Shaft, tunnel; refractory; hand (developing). H. Schewes, supt.	
"	"	The World Mining & Milling Co., Denver, Colo. Dr. J. T. Reed, pres.; A. Huser, secy.; Robert Smith, treas.; E. F. Metlosky, mgr. Cap. stk. \$1,250,000. West View, Mohawk and others, gold and silver. Shaft, tunnel, drift; refractory and free; hand. John Bryant, supt.	
"	"	The Yellow Jacket Mining & Milling Co., Pueblo, Colo. Harry Barndollar, pres.; H. Williams, secy.; J. W. Gwynn, treas. Cap. stk. \$750,000. Yellow Jacket, gold. Shaft and tunnel; free; horse. Henry Brown, supt.	
Cristman Ry. 776.	Boulder	Andre Morel. Gold and silver. Tunnel, shaft, free, refractory; hand (developing).	
"	"	H. S. Niles & Sons. Gold Crown, Silver Bell, Joe Dandy, gold and silver. Shaft, free, refractory; water (developing).	
Crys-Al Ry. Carbonate 215.	Gunnison	The Bear Mountain Mining & Milling Co., Aspen, Colo., 303 Galena st. W. Porter Nelson, pres.; Edgar Stallard, secy. and treas. Cap. stk. \$2,000,000. Illinois, silver, gold and lead. Tunnel; refractory; hand (developing). B. F. Pinson, supt.	
"	"	Black Eagle Consolidated Mining Co., Aspen, Colo., Room 2 Wheeler Opera House Block. Henry R. Wood, ward, pres. and mgr.; W. E. Cochran, secy.; Henry T. Rossington, treas. Cap. stk. \$2,000,000. Black Eagle, silver. Shaft; free; horse, hand. J. W. Williams, supt.	
"	"	Elk Mountain Silver Mines Co., Chilledith, Mo. R. Barney, pres.; A. McVey, secy.; M. E. Crofflin, treas.; James Usher, mgr. and supt. Cap. stk. \$1,000,000. Elk Mountain, silver and lead. Tunnel, 100 tons; horse (developing).	
"	"	Mineral Point Mining Co., Abilene, Kan. L. Hoffman, pres.; J. H. Hoffman, secy. and treas. Cap. stk. \$300,000. Agatha, Daisy, silver, lead and copper. Tunnel, shaft, free; hand. John Walliser, supt.	
"	"	The Sheep Mountain Tunnel & Mining Co., Aspen, Colo. B. S. Phillips, pres. and mgr.; Geo. U. Feten, secy. and treas. Cap. stk. \$2,000,000. Gold, silver, lead and copper. Tunnel, 8,000 tons; free; water, electricity. B. F. Pierson, supt.	
Cumbres Ry. 215.	Conejos	J. C. Bradley Jr. & Co., J. C. Bradley Jr., pres. and secy.; G. W. Chase, treas. and mgr. Cap. stk. \$30,000. North Star, gold and silver. Tunnel, 520 tons; refractory; free; hand. J. A. Dumas, supt.	
Custer (not a P.O.) Custer Ry. Rockvale 26-6 m.	Custer	Jeff Steele Mining Co., Pueblo, Colo., E2 and E3 Central Block. John H. Voorhees, pres.; T. H. T. Schooley, secy.; T. A. Sloane, treas.; Jeff Steele, mgr. Cap. stk. \$250,000. Franklin, gold, silver, lead and copper. Tunnel, shaft; refractory; horse (developing).	
Dillon Ry. 215, 776.	Summit	John Besley. Maryland, gold. Placer; hand.	

## GOLD AND SILVER—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWNS	COUNTY.	
Dillon (Continued.)	Summit	James H. Ryan, Baltimore, Blind Tom, Jessie, War Eagle, gold, silver and lead. Tunnel, 75 tons; free; hand. W. H. Fish, supt.
"	"	Salt Lick Mining Co., Breckenridge, Colo. Cap. stk. \$10,000. Salt Lake, gold. Placer, open, 200 tons; free; water. Ed. Carter, supt. and mgr.
Dumont Ry. 776.	Clear Creek	Capital Mountain Mining, Tunnel & Milling Co., Thos. A. Ireland, pres.; Philip R. Stanhope, secy.; Wm. L. Ireland, treas. Cap. stk. \$500,000. Senator, "H. H.," gold, lead and silver. Tunnel, shaft, 150 tons; refractory; steam; 15 stamps. Philip R. Stanhope, mgr. and supt.
"	"	B. Edwards, A. H. Koren, Dr. Leininger, (Chicago, Ill., 108 E. Randolph st. Big Dipper, gold. Shaft and tunnel; refractory (developing).
"	"	The Lee Gold & Silver Mining Co., New York City, 45 Broadway. J. B. Herbert, pres. and mgr.; Lindley Murray, secy. and treas. Cap. stk. \$250,000. Lee, silver, gold, lead and copper. Shaft, tunnel; refractory. R. S. Herbert, supt.
"	"	R. G. Morrison. Phosphate, Rustle, silver, gold and lead. Tunnel; refractory (developing).
Durango Ry. 215.	La Plata	E. S. Reed & N. L. Twitchell. Charlie Ross, silver. Tunnel; hand.
"	"	J. S. Sheek, Hesperus, Colo. Cap. \$2,000,000. Southern Boy and others, gold and silver. Shaft, tunnel; refractory; hand (developing).
Edwards Ry. Allenton 215.	Eagle	Hockett & Wright. Hillside Group, Great Western, gold, silver and lead. Shaft, tunnel; hand. D. E. Wright, supt.
Empire Ry. 776.	Clear Creek	Headlight Mining & Milling Co., Colorado Springs, Colo., P. O. Box 241. I. J. Woodworth, pres.; M. T. Hale, secy.; C. M. Rice, treas. Cap. stk. \$1,000,000. Headlight, gold and silver. Shaft, tunnel; free; steam. A. J. Denton, mgr. and supt.
"	"	F. L. Peck. Gold Dirt, Dunderberg, Atlantic, gold. Shaft, tunnel; free; steam. F. L. Peck, supt.
"	"	D. A. Sherwood & Son. Golden Chariot, Golden Era, gold and silver. Tunnel, shaft, 600 tons; free; hand. D. A. Sherwood, supt.
Eureka Ry. Silverton 215.	San Juan	James A. Chapman, Lake City, Colo. Golden Chain, gold. Tunnel; refractory (developing).
"	"	Rasmus Hanson. Sunnyside Extension, silver, gold and lead. Tunnel, 5,000 tons; free, refractory; steam; 20 stamps.
"	"	F. W. Harlow & M. M. Engleman. Cap. \$5,000. Lake Lode, gold and silver. Shaft, open; free, refractory; hand. F. W. Harlow, supt.
"	"	Sunnyside Mining & Milling Co., Montrose, Colo. E. L. Osborn, mgr. Sunnyside, Republic, Little May, Chinax, gold, silver and lead. Tunnel, shaft; free; water; steam; 10 stamps. F. S. Thompson, supt.
Fairplay Ry. 776.	Park	Emmons Mining Co., Denver, Colo., 44 Jacobson Block. Geo. F. Batchelder, pres.; F. R. Miller, secy.; Fred Dick, treas.; Scott Wehber, mgr. Cap. stk. \$2,000,000. Silver and lead. Shaft, drift, 15,000 tons; refractory; steam; concentrator. Summit Home, supt.
Fall Creek (P. O. Placerville) Ry. 628 (12 miles).	San Miguel	Mt. Wilson Gold & Silver Mining Co., Placerville, Colo. E. C. Sherwood, pres.; O. T. Sherwood, secy. and treas. Cap. stk. \$800,000. Silver Pick and others. Tunnel, 150 tons; refractory; hand. J. T. Wanne-maker, mgr. and supt.
Farnham Ry. Jefferson 776 (7 m.).	Park	O. Granstrom & Co. Red Cloud, gold. Tunnel and shaft; free; mill (developing).
"	"	C. H. Pike. Blue Light, silver and lead. Tunnel, shaft; free; hand (developing).
"	"	Seven-Forty Consolidated Mining Co., Denver, Colo., Denver Club Bldg. E. R. Hallack, pres.; W. E. Huntington, secy. and treas.; J. C. Lewis, mgr. Cap. stk. \$500,000. Seven-Thirty and Silver Queen, gold, silver, copper, lead. Tunnel, 600 tons; free; hand. C. H. Pike, supt.
Florissant Ry. 26.	El Paso	Anchorite Leland Mining & Milling Co., Colorado Springs, Colo. Irving Howbert, pres.; A. Sutton, secy.; J. O. Plumb, treas.; H. A. Watson, mgr. and supt. Cap. stk. \$200,000; indiv. cap. \$25,000. Gold, silver, shaft and tunnel; refractory and free; horse.
"	"	Creede & Cripple Creek Mining & Milling Co., Colorado Springs, Colo. R. W. Anderson, pres.; H. E. Basset, secy.; D. P. Sell, treas. Cap. stk. \$800,000. Gold (developing).
"	"	Virginia "M." Mining Co., Colorado Springs, Colo. B. H. Bryant, pres.; D. M. Sells, secy.; E. W. Sells, treas.; W. A. Welch, mgr. Cap. stk. \$100,000. Lincoln, Midland, gold, silver, copper, lead. Shafts and drifts; refractory, free; 25 stamps.
Frisco Ry. 215, 776.	Summit	Gold Mint Mining Co., Denver, Colo. Geo. W. Bowman, pres.; Jno. C. McCoy, secy.; Geo. H. Raymond, treas. Cap. stk. \$100,000. Gold Mint, gold. Shaft, tunnel; free; water; 10 stamps. E. T. Howell, supt.
Fulford Ry. Eagle 215 (18 m.).	Eagle	Bartholf Bros. Polar Star Group, gold. Tunnel, slope, 15,000 tons; free; steam; mill. E. H. Bartholf, supt.
"	"	John Beauman & Jos. Domandl. Lucy and Golden Bell, gold. Tunnel, shaft, 2,000 tons; free; hand; 10 stamps. Jos. Domandl, supt.
"	"	Fulford Mining Co., Eagle, Colo. H. B. Fulford, pres.; E. J. Fulford, secy.; F. W. Fulford, treas.; A. L. Fulford, mgr. and supt. Toronto, gold, silver. Tunnel; free; horse.
"	"	B. S. Morgan & McSouth. Adelaide and Gold Dust Groups, gold, silver, copper. Tunnel, 100 tons; free; 10 stamps.
Gamble Gulch P. O. and Ry. Black Hawk 776 (8 miles).	Gilpin	Blaine Gold Mining Co. (lessors), Denver, Colo. Cap. stk. \$100,000. Blaine Group, silver. Tunnel; free; steam; 15 stamps. Jos. A. Gilmore, supt.
Gardner Ry. Summit 215 (20 m.).	Huerfano	J. G. Taylor. Grand View No. 2 and Little Pittsburg, gold, silver, lead and copper. Tunnel; hand.
Gaskill (P. O. Grand Lake) Ry. Georgetown 776 (60 m.).	Grand	Colorado & Kentucky Mining & Smelting Co., Louisville, Ky., Merchants' National Bank. J. H. Lindenberger, pres.; Everett M. Harmon, mgr. and supt. Cap. stk. \$3,000,000. Hidden Treasure, Excelsior and Silver Queen, silver. Tunnels; refractory.

GOLD AND SILVER—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
Georgetown	Clear Creek Ry. 776.	Baltimore Mining & Milling Co., Denver, Colo., 1316 Eighteenth st. John Fillins, prest. and mgr.; William H. Emmell, secy. and treas. Cap. stk. \$500,000. Baltimore Union, silver, lead. Tunnel, shaft; steam. Geo. Myers, supt.
"	"	Colorado Central (Consolidated Mining Co., New York. Paul Lichtenstein, prest.; W. E. Mantins, secy.; J. K. Creevey, treas.; Ernest L. Foster, mgr. and supt. Cap. stk. \$2,750,000. Colorado Central, silver, lead. Tunnel, shaft, 1,500 tons; water.
"	"	Essex Free Colnage Mining Co., Golden, Colo., P. O. Box 95. E. W. Rogers, prest. and mgr.; F. W. Rogers, secy. and treas. Cap. stk. \$250,000. Triumph, silver. Shaft; refractory (developing).
"	"	Gold Hill Mining Co., Brockton, Mass. Lowell M. Reynolds, prest.; Frank E. Angerer, secy.; O. A. Rollins, treas.; J. S. Alan, mgr. and supt. Cap. stk. \$1,000,000. Gold Hill, gold and silver. Tunnel; refractory; hand.
"	"	H. M. Griffin, and Second st., Seven-Thirty Group, 50 claims, gold, silver, lead and zinc. Shaft, tunnel; refractory; steam. Alfred Hedberg, supt.
"	"	Hamilton Gold & Silver Mining Co., St. Louis, Mo. Hamilton Daughaday, prest.; F. J. Casey, secy.; S. Dodd, treas.; David Kennedy, mgr. and supt. Cap. stk. \$500,000. Hamilton, gold, silver, copper. Shaft, 4,500 tons; refractory; steam.
"	"	Montrose Gold & Silver Mining Co., Georgetown, Colo. E. R. Strong, prest.; Guy F. Cole, secy.; J. D. Clapp, treas.; C. J. Nicholas, mgr. and supt. Cap. stk. \$500,000. Montreauland West Hip Van Winkle, silver, lead. Tunnel; refractory.
"	"	Mt. Metallban Mining Co., Ltd., London, England. Douglas A. Onslow, chairman; F. E. Webb, secy.; H. M. Griffin, mgr. Cap. stk. \$1,500,000. Stevens, gold, silver, lead and zinc. Shaft and tunnel; refractory. Thomas W. Jones, supt.
"	"	E. G. Naylor (lessee). Poorman, Bullion and Red Jacket, silver, gold. Shaft and tunnel; hand, horse.
"	"	Chas. R. Nish. Vice-President, silver, lead. Tunnel, 115 tons, free; hand. J. M. Copeland, supt.
"	"	Silver Glance Mining Co., James F. Tuckey, prest.; Fred P. Dewey, secy., treas. and mgr. Cap. stk. \$150,000. Silver Glance, silver, lead. Shaft, 325 tons, free; steam.
"	"	R. S. Willis. Matilda Fletcher, silver, lead. Tunnel, 50 tons.
Gilman Ry.	Rock Creek 215.	Calumet Mining Co. W. T. Vincent, mgr. Calumet, gold, silver, lead. Tunnel, shaft, 100 tons; free; horse.
"	"	T. W. Vincent. Combined Discovery, silver, lead. Tunnel, 1,000 tons, free.
"	"	E. A. Reynolds, Canon City, Colo., Fremont County Bank. F. A. Reynolds, prest.; F. E. McCreo, secy.; E. T. Walverton, mgr. and supt. Ben Butler, gold, silver. Tunnel, shaft, 300 tons; free; steam.
Glenwood Spgs.	Garfield Ry. 26, 215.	Grant & Murphy. Washington, silver, lead and iron. Shaft, tunnel, slope, horse and hand; 60,000 tons. Richard Grant, supt.
"	"	Oasis Mining Co., Sydney Broughton, prest.; J. T. Williams, secy.; G. R. Jones, treas.; J. H. Pierce, mgr. and supt. Cap. stk. \$100,000. Bonanza and Cornucopia, gold and silver. Tunnel, free; horse.
Gothic Ry.	Gunnison Ry. Crested Butte 215	Moss Rose Mining Co., Atchison, Kan. Moss Rose No. 2, silver. Tunnel, refractory; hand, Edwin A. Sperry, supt.
Grand Lake Ry.	Georgetown 776 (65 miles).	Grand Lake Mining & Smelting Co., Quincy, Ill. J. B. Schaff, prest.; F. Filch, secy.; T. W. Myers, treas. Cap. stk. \$2,500,000. Wolverine, Wolverine Extension, Jim Bowen, Sandy Campbell and other, silver. Tunnel and shaft, 500 tons, refractory, hand.
"	"	Robert C. Graves. Cap. \$5,000. Last Hope, gold. Shaft, 500 tons; free; horse.
"	"	Clyde W. King. Cap. \$2,500. Jimmy, gold. Shaft, 350 tons; free, horse.
"	"	J. N. Pettingell. Savage, silver, lead. Shaft and tunnel; refractory (developing).
"	"	J. L. Wescott. Iron King and Nabob, gold, silver. Tunnel; free; hand.
Granite Ry.	26, 215. Chaffee	Twin Lakes Hydraulic Gold Mining Syndicate, Ltd., London, England. Norman Smith, prest.; Vere Herbert Smith, secy. and treas.; B. Stanley Revett, mgr. and supt. Twin Lakes Placers, gold. Placer; hydraulic.
Gunnison Ry.	215. Gunnison	Midland Mining & Milling Co. D. B. Cherry, prest.; C. T. Sills, secy.; T. S. Ferris, treas.; J. C. Holmich, mgr. Cap. stk. \$600,000. Noah and Golden Acre, gold. Shaft, tunnel, 9,000 tons; steam, water, mill.
Hahn's Peak Ry.	Bault Ry. Bawlin, Wyo. 776.	D. Miller. Gold. Placer; water.
Hesperus	La Plata Ry. 628 (to miles.)	Hechtman & Lewis, Durango, Colo. Cap. \$5,000. Eagle Pass, gold, silver. Tunnel, shafts, 50 tons; refractory; hand; 10 stamps. J. F. Hechtman, supt.
"	"	James G. Sheek. Silver Belle. Tunnel, 2,000 tons; free; hand.
Hillside Ry.	Fremont Ry. Cotopaxi 215.	A. W. Coale & F. R. Hanna. Gem Jewel and Gem Palmer, gold, silver, platinum and nickel. Shaft, tunnel; hand; concentrator. A. W. Coale, mgr. and supt.
Horseshoe	Park Ry. Fairplay 776 (14 m.)	Cato Mining & Milling Co., Denver, Colo., care of Globe Smelting Co. A. Chanute, prest.; D. Sheedy, v. prest.; J. M. Walker, secy. and treas. Cap. stk. \$200,000. Only Chance, Adile and Cato, silver and lead. Shaft and tunnel, 8,000 tons; refractory; steam; concentrating mill, 60 tons. J. L. Loomis, supt.
"	"	N. L. Gibson & W. H. Powless. County Line, silver and lead. Open cut and shaft, 150 tons, free, hand.
"	"	Mrs. Henrietta C. Work. Dauntless, silver, lead. Tunnel; free; horse. G. A. Hanlin, mgr. and supt.
Howard Ry.	215. Fremont	Charles Chavers. New Discovery and Copper King, silver and copper. Shaft; refractory.
Howardsville Ry.	San Juan Ry. Silverton 215.	The Pride of Louisville, Louisville, Ky., 119 Third st. John W. Lucas, prest.; R. H. Doon, secy. and treas. Cap. stk. \$1,000,000. Rochester, Progressive, Courtland, etc., gold, silver, lead, copper. Tunnel, hand. John Netherton, mgr. and supt.
"	"	Louisa M. Ackett Mining Co., Denver, Colo., 846 Equitable Bldg. Olive Wright, prest.; Nellie Rugg, secy.; Libbie Martin, treas. Cap. stk. \$500,000. Geneva, gold. Free (developing).

## GOLD AND SILVER—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Idaho Springs, Clear Creek Ry. 776.	The Argonaut Consolidated Mining & Milling Co., Denver, Colo., Room 10 Jacobson Bldg. G. D. Johnson, pres. and mgr.; Max Baer, secy. and treas. Cap. stk. \$1,000,000. Twenty-five lode claims, 3 operating; gold, silver, lead. Shaft, tunnel, 100 tons; refractory; steam. G. D. Johnson, supt. Mine 7 miles from Ry.
"	Commonwealth Mining Co. John Cochran Jr., pres.; Thos. B. Bryan, secy.; Allen B. Wrisley, treas.; Geo. A. Chipman, mgr. Cap. stk. \$100,000. Little Mattie, Great Republic, etc., gold, silver, lead. Shaft; refractory; concentrator. Angus Sutherland, supt.
"	Constock Gold-Silver Mining & Milling Co., Denver, Colo., Room 7 Essex Bldg. S. C. Fulton, pres.; W. P. Caruthers, secy.; James W. Clarke, treas.; Thomas Woodward, mgr. and supt. Cap. stk. \$500,000. Constock, gold and silver. Shaft; refractory; steam.
"	The Edgar Union Mining Co. James Robson, pres.; J. H. Wright, secy.; Robert Turner, mgr. and supt. Cap. stk. \$30,000. Edgar Union, Fulton, Humphry, Constock, gold, silver. Shaft and drift; refractory; steam.
"	A. P. Fonda & Chas. Stinson, Kansas City, Mo., 707 New York Life Bldg. Gem, gold, silver. Tunnel, 100,000 tons; free.
"	Gold Bar Mining & Lode Co., Denver, Colo., 1543 Lawrence st. G. W. Enright, pres. and mgr. and supt.; J. H. Means, secy. and treas. Cap. stk. \$300,000. Gold Bar, gold. Placer; free; water.
"	Himrod & Hudson, New York, 191 Fulton st. Lamartine, gold, silver, lead. Shaft, 3,000 tons; refractory; steam. Silas Hanchett, supt.
"	Iron Duke Mining Co., Denver, Colo., 194 Washington av. Wesley Lyons, pres.; S. C. Jackson, secy.; R. A. Wagner, treas.; Washington Johnson, mgr. and supt. Cap. stk. \$50,000. Iron Duke, Hamilton, Jackson and Brown, gold, silver. Shaft and tunnel, 500 tons; refractory; free; horse; 5 stamps.
"	The Kohnroer & Donaldson Mining Co. Ltd., George Hopkins, pres.; W. H. Rowe, secy. and treas. Champion, Donaldson, Kohnroer, gold, silver, copper. Free and refractory; steam, water; 20 stamps; Geo. S. Vivian, mgr. and supt.
"	May Flower Mining & Milling Co., Minneapolis, Minn., Washington Bank. C. O. Nash, pres.; E. Davis, secy.; O. E. Brecke, treas. Cap. stk. \$1,000,000. May Flower, gold, silver. Shaft, 8,000 tons; refractory; steam; concentrator. A. H. Koren, supt.
"	P. Mixsell, Clarissa, gold, silver. Shaft; free; steam; 10 stamps.
"	Pewabic Mining Co., Denver, Colo., 410, 411 Boston Bldg. A. W. Powell, pres.; H. A. Wimbush, secy. and treas.; Fred Hills, mgr. Cap. stk. \$250,000. Ben Franklin, Uncle Sam and 4 others, gold and silver. Tunnel, 2,500 tons; free; hand. N. A. Wimbush, supt.
"	Estate of Jo. Reynolds, Jo. Reynolds, gold, silver, lead. Shaft, tunnel, 834 tons; refractory; steam. J. E. Chester, mgr. and supt.
"	The Salisbury Mining and Milling Co. John York, pres.; Samuel H. Cregar, secy. and treas. Cap. stk. \$150,000. Salisbury, gold, silver. Shaft, tunnel, 5,000 tons; refractory; steam; concentrator. Chas. A. Gehrmann, mgr. and supt.
"	The Stanley Mining Co. John York, pres.; Samuel H. Cregar, secy. and treas. Cap. stk. \$150,000. Stanley, gold, silver. Tunnel, shaft, 6,000 tons; refractory; steam. Chas. A. Gehrmann, mgr. and supt.
"	Tramway Mining & Milling Co., Denver, Colo., cor. Ellsworth and S. Water sts. Thomas L. Roberts, pres. and mgr.; E. Bucher, secy.; O. G. Smith, treas. Cap. stk. \$300,000. Gem, Dog Tray, Tom Kirby and 4 others, gold, silver, lead. Shaft, tunnel; free; horse. Samuel Marchington, supt. (developing.)
"	Treasure Vault Gold & Silver Mining Co., Milwaukee, Wis., 408 Milwaukee st. John E. Burton, pres. and treas.; Stoddard H. Martin, secy. Cap. stk. \$1,000,000. Treasure Vault, gold, 70 tons; free; hand. Geo. A. Hamilton, mgr. and supt.
Ironton Ry. 215.	Ouray
	Candice Mining & Milling Co., Clearfield, Pa. Hon. W. A. Wallace, pres.; Thos. L. Wallace, treas. Candice, gold, silver. Shaft, 100 tons; steam; L. H. Krebr, mgr. and supt.
	La Plata Mines, Ltd., London, Eng., 11 Poultony st., E. C. Henry Richards, secy.; Philip Argall, mgr. Cap. stk. \$2,000,000. White Cloud, silver. Shaft; steam (developing). John R. Mitchell, supt.
	Midnight Mining Co., Ouray, Colo. Sam. W. Gregory, pres.; Geo. H. Keen, secy.; Alfred E. Keet, treas. Cap. stk. \$300,000. Midnight, Daylight, silver, gold, lead, 2,500 tons; free; steam. P. J. Holmgren, supt.
	The Mine Owners' Trust, London, Eng., 11 Poultony st., E. C. Philip Argall, mgr. Cap. stk. \$150,000. Several prospects (developing). John R. Mitchell, supt.
	Saratoga Mining Co., St. Louis, Mo., 417 Olive st. E. C. Simmons, pres.; W. K. Spinney, secy.; Geo. L. Allen, treas. Cap. stk. \$1,000,000. Saratoga, gold, silver. Tunnel; refractory; steam. L. R. Fry, supt.
Irwin Ry. Crested Butte 215 (8 miles).	Gunnison
	Forest Queen Mining Co. F. W. Fuller, pres. and mgr.; B. F. Woodward, secy. Cap. stk. \$1,000,000. Forest Queen, gold, silver. Shaft, tunnel; refractory; steam, water. F. W. Fuller, supt.
	The Ruby King Mining Co., Colorado Springs, Colo., Room 20 Bank Bldg. Louis R. Ehrlich, pres.; Frank White, secy.; Lewis A. Cyril, treas.; Frank G. White, mgr. Cap. stk. \$1,000,000. Ruby King, Republic, silver, gold. Shaft, tunnel. John Koons, supt.
Jackson Ry. Gunnison 215.	Gunnison
	Capt. M. W. Cline. Brutus, Sheba Queen and others, gold, silver. Tunnel; refractory; free; hand.
Jamestown Ry. Boulder 776 (14 miles).	Boulder
	H. C. Albertson & Wm. Brown. Cap. \$10,000. Baltimore Belle, gold. Shaft. H. C. Albertson, supt.
"	G. J. Evans. Silver Ledge, gold, silver. Shaft and tunnel; refractory. Walter Clemons, supt.
"	Gebhard & Brown, Buena, gold. Shaft, tunnel, 600 tons; refractory; horse.
"	Golden Age Mining & Milling Co. Robert F. Harrison, pres. and mgr.; Wm. E. Harrison, secy.; John W. Fullis, treas. Cap. stk. \$1,000,000. Golden Age, gold, silver. Shaft and tunnel; free and refractory; steam; 25 stamps. Wm. E. Harrison, supt.
"	O. N. Heckman. Cap. stk. \$50,000. Mand 8, and Star Groups, gold, silver, copper. Tunnel; refractory. W. W. Emmett, supt.



GOLD AND SILVER—(CONTINUED)

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James-town <i>(Continued)</i>	Boulder	Mountain Chief Mining & Milling Co., Denver, Colo., 5 and 6 Steele Block. Dr. J. R. Van Allen, v. pres.; C. V. Mead, secy. and treas.; A. J. Denton, mgr. Cap. stk. \$1,000,000. Mountain Chief Group, gold, silver. Shaft, tunnel; refractory; hand. R. H. Poage, supt.
"	"	Wylie Mining & Milling Co., Denver, Colo., 929 Seventeenth st. Judge O. N. Hilton, pres.; I. E. Devill, secy. and treas.; O. E. Du Bois, mgr. Cap. stk. \$300,000. King Wilhelm, Badger, Noble Ella, gold, silver. Shaft; refractory; free; horse. O. E. Du Bois, supt.
Jintown Ry. 215.	El Paso	Cleopatra Mining Co., Colorado Springs, Colo., 17 E. Pike's Peak av. A. A. McTovey, pres.; A. J. Lawson, secy. and treas.; E. H. Crawford, mgr. Cap. stk. \$2,000,000. Cleopatra, New Discovery, silver. Shaft, tunnel; free; horse; hand developing. John W. Blades, supt.
"	"	The Missouri Pacific Mining Co., Denver, Colo., 1228 Seventeenth st. W. G. Bausemer, pres.; W. E. Perkins, secy.; C. W. Willett, treas.; L. M. Kessler, mgr. and supt. Cap. stk. \$300,000. Dakota, Idaho, Wyoming and others, silver. Shaft, tunnel; hand.
Kissellville (P. O. Osler) Ry. Sub- lette-215.	Conejos Ry.	Jack Gray Mining Co., Osler, Colo. P. Lahay, pres.; Wm. Morgan, secy.; John Munson, treas.; Wm. Jenkins, mgr. Cap. stk. \$100,000. Rough and Ready, silver, lead. Tunnel, 240 tons; refractory; hand. J. J. Mercer, supt.
Lake City Ry. 215.	Hinsdale	Capital City Mining Co., Thomas B. Hannah, pres.; Geo. P. Dunham, secy. and treas. Capital Nos. 1 and 2 and Lilly, gold, silver, lead. Tunnel, 3,350 tons; steam. J. F. Herzinger, mgr. and supt.
"	"	M. Dempsey, Cherokee, silver, gold. Shaft, tunnel; refractory; hand developing.
"	"	Golden Fleece Mining Co., Geo. W. Peuce, secy. and treas.; Henry Monell, supt. Golden Fleece, gold & silver. Tunnel; refractory; water.
"	"	Lewman & Rowan, Broker, gold, silver, copper, lead. Shaft developing.
"	"	Ute & Clay Mines, Ltd., London, Eng. Ute and Clay, silver and lead. Shaft and tunnel; steam.
"	"	Yellow Medicine Syndicate, R. E. McCormick, pres.; W. J. Elmendorf, mgr. and supt. Yellow Medicine, gold, lead. Tunnel, refractory.
Lamartine Ry. Idaho Springs 776.	Clear Creek Ry.	Ute Chief Mining Co., Denver, Colo., 355 Chib Bldg. M. L. Cox, pres.; Frank Russell, secy. and treas.; Fred. A. Cox, mgr. Cap. stk. \$500,000. Lost Treasure, American Eagle, silver. Shaft; refractory; horse. Fred. A. Cox, supt.
La Veta Ry. 215.	Huerfano	Erlod & Graham, Standard, silver. Tunnel; free hand.
"	"	G. W. Graham, Blue Ribbon, silver, gold, copper. Shaft, free.
"	"	G. W. Graham & I. Erlod, Standard, gold and silver. Shaft; free.
"	"	G. W. Graham & Co., Criterion, gold and silver. Shaft; free developing.
"	"	Ireland Bros. & Kane, Coyote, silver. Shaft; refractory; hand. Charles Ireland, supt.
"	"	Kane & Ireland, Cap. \$75,000. El Coyote, silver, lead. Shaft, tunnel, free; hand. F. W. Kane, supt.
"	"	Morse, Clifton & Hills, Pussey, Omaha, gold, silver, lead. Shaft developing.
"	"	Pine Grove Mining & Milling Co., J. H. Tudore, pres.; G. W. Kely, secy.; J. Chron, treas.; J. S. Willis, mgr. and supt. Cap. stk. \$100,000. Little Domino, gold, silver. Tunnel, free; hand developing.
"	"	Sefton & Stone, Gold, silver and iron. Tunnel; refractory and free. C. B. Stone, supt.
"	"	Silver Mountain Mining & Milling Co., W. B. Tuttle, pres.; J. M. Jones, secy. and treas.; A. H. Ireland, mgr. and supt. Cap. stk. \$500,000. Troy, Blanche and others, silver and lead. Tunnel, shaft; free; hand.
"	"	Somerset Mining & Milling Co., Denver, Colo., Room 8 Tatter Bldg. Henry A. Gilkison, pres.; Geo. J. Humbert, secy. and treas.; Thomas McEniry, mgr. Cap. stk. \$1,000,000. Somerset, gold, silver, lead. Tunnel, placer; refractory; hand. T. J. McEniry jr., supt.
Lawrence Ry. Florence 26, 215.	El Paso	Edwin Booth Gold Mining & Milling Co., Denver, Colo., Room 62 Tabor Grand Opera House. Peter McCourt, pres.; E. R. Arzersinger, secy.; C. J. Reilly, treas.; J. A. Hale, mgr. and supt. Abchela, Alta and others, gold. Shaft; free; 40 stamps.
"	"	Florence E. Mining Co., Colorado Springs, Colo., 108 N. Tejon st. F. E. Burtis, pres.; W. E. Holmes, secy.; S. Thomas G. Cook, treas.; S. M. Burtis, mgr. Cap. stk. \$250,000. Florence E., Jennie H., gold, silver. Tunnel, shaft; free; hand developing. Thomas Waddleton, supt.
"	"	Lawrence Mining & Milling Co., J. F. Neuman, pres. and mgr.; S. S. C. Gaskell, secy.; R. S. Lewis, treas. Cap. stk. \$200,000. Tombigbee, Lulu and 5 others, gold, silver. Shaft, tunnel, 6,000 tons; refractory. free, hand, horse. J. J. Pike, supt.
"	"	J. R. McKinnie, Cap. \$100,000. Granite, Black Diamond, gold, silver. Shaft, tunnel; free; hand, steam; 20 stamps developing.
"	"	Mt. Rosa Mining & Milling Co., Colorado Springs, Colo. R. K. Walker, pres. and mgr.; G. S. Wilson, secy.; A. H. Cornum, treas. Cap. stk. \$1,000,000. Mt. Rosa, gold. Placer; free; water.
"	"	National Belle Mining, Milling & Development Co., Tremont, Colo. James M. Parker, pres.; J. L. Stebbins, secy. and treas.; Samuel Strong, mgr. and supt. Cap. stk. \$300,000. White Horse, Captain and others, gold. Shaft, tunnel, placer; refractory, free; hand.
"	"	Ophir Mining Co., Colorado Springs, Colo., 113 and 115 N. Tejon st. F. F. Horn, pres.; E. F. Welles, secy.; I. K. Fical, treas.; A. K. Rutter, mgr. and supt. Cap. stk. \$700,000. Carbonate, Queen, Dead Pine, gold. Shaft, refractory, free; hand developing.
"	"	Requa Gold & Silver Mining & Milling Co., Cañon City, Colo. Dr. T. H. Craven, pres.; C. W. Banta, secy.; Abe Banta, treas.; J. M. Burress, mgr. and supt. Cap. stk. \$500,000. Trail, Big Bunter, Surprise and others, gold, silver. Shaft, placer; free; hand.
Lawson Ry. 776.	Clear Creek Ry.	American Sisters Mining Co., Denver, Colo., 44 Kiltredge Bldg. L. M. Pettitdiller, pres. and treas.; Henry Seifried, secy.; John H. Bowman, mgr. Cap. stk. \$500,000. American Sisters, silver, lead, gold. Shaft, tunnel, 1,000 tons; refractory. steam. John S. Gates, supt.
"	"	The Bellevue-Hudson Mining Co., Denver, Colo., Room 41 Kiltredge Bldg. Hugh Mackay, pres.; L. M. Pettitdiller, secy. and mgr.; William Harvey, treas. Cap. stk. \$100,000. Bellevue, silver, lead. Shaft, tunnel, 1,100 tons; refractory. steam. Jacob Widefich, supt.

## GOLD AND SILVER (CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN	AND COUNTY.	
Lawson	Clear Creek (Continued.)	J. W. Hunter, Orient, silver. Shaft, 100 tons; free; steam.
"	"	Livingston & Beaudry, Denver, Colo., 1306 Seventeenth st., Tabor and Gov. Thomas, silver, lead. Shaft, tunnel, 157 tons; refractory; steam. Edmund A. Beaudry, supt.
Leadville	Lake Ry., 26, 215, 776.	Boreel Mining Co., New York, N. Y., 1 Broadway. H. B. Henman, prest.; C. A. Cameron, secy. and treas.; S. W. Mudd, mgr. Cap. stk. \$3,000,000. Gonabrod, lead, silver. Shaft; refractory; steam.
"	"	M. Christmann et al., 328 E. Tenth st., M. Christmann, prest.; Oscar Christmann, secy. and treas.; James Kavanagh, mgr. Miners' College, gold, silver, lead. Tunnel; refractory; hand. Wm. Brecht, supt.
"	"	Clara Mining & Milling Co., Leadville, Colo., 123 W. Eighth st., C. Hood, prest.; S. W. Mudd, secy. and treas. Cap. stk. \$1,000,000. Colorado Boy, Bob Shepherd, Esmeralde, silver, lead. Shaft developing.
"	"	The Col. Sellers Mining Co., W. F. Patriek, mgr. Col. Sellers, silver, lead. Shaft, 30,000 tons; refractory; steam. S. D. Nicholson, supt.
"	"	Dunkin Mining Co., 115 E. Eighth st., Woodward Emery, prest.; William Faxson jr., secy.; James C. Elms, treas.; Warren F. Page, mgr. Cap. stk. \$3,000,000. Dunkin, gold, silver, lead, fluxing iron. Shaft, tunnel, 12,000 tons; refractory; steam. J. T. White, supt.
"	"	Evening Star Mining Co., New York, N. Y., 53 Broadway. W. B. Dickerman, prest.; Justin A. Edwards, secy.; H. K. McHarg, treas.; Ezra D. Dickerman, mgr. Cap. stk. \$500,000. Evening Star, silver, lead, iron. Shaft, 30,000 tons; steam. Perley Dodge, supt.
"	"	Fall River & Colorado Mining & Milling Co., Fall River, Mass. H. F. Laroten, prest.; Chas. Bugbee, secy. and treas. Cap. stk. \$1,000,000. Goldsmith, gold, silver. Shaft; water; 10 stamps.
"	"	First National Mining & Milling Co., Pueblo, Colo., Room 41 Grand Opera House. Col. A. W. Duggan, prest.; Aaron Sonneborn, secy. and treas.; A. W. Duggan, mgr. and supt. Cap. stk. \$1,000,000. First National, gold, silver and lead. Shaft; free and refractory; steam developing.
"	"	The Golden Eagle Mining Co., Harrison av., Quincy Block. Robt. B. Estey, prest.; C. C. Kellogg, secy. and treas. Cap. stk. \$500,000. Gold, silver. Shaft; free; steam.
"	"	Chas. H. Graham & M. Guggenheilm, Chas. L. Hill, mgr. A. V. Minnie, silver, lead, zinc, iron. Shaft, tunnel, 30,000 tons; refractory; steam. Peter Mureay, supt.
"	"	The Henriett & Maid Consolidated Mining Co., cor. Fifth and Harrison sts. D. H. Moffat, prest.; G. E. Bass Lewin, secy. and treas.; Eben Smith, mgr. Cap. stk. \$1,500,000. Gold, silver, copper, lead, iron. Shaft, 75,000 tons; refractory, free; steam, electricity. J. J. Brown, supt.
"	"	Iron Silver Mining Co., Ashley Pond, prest.; Freeman Woodruff, secy.; John Nicol, treas.; W. Arns, mgr. and supt. Cap. stk. \$10,000,000. Iron Silver, silver, lead. Shaft; refractory; steam, electricity.
"	"	La Plata Mine Co., London, Eng. J. T. Hopwood, prest.; Henry Richards, secy.; Philip Argall, mgr. Cap. stk. \$500,000. La Plata, silver, lead. Shaft, 4,500 tons; steam.
"	"	Lawrence, Hazlett & Co., Robt. H. Hazlett, mgr. Mahana, silver. Shaft, 20,000 tons; refractory; steam. Chas. Grimm, supt.
"	"	Leadville Consolidated Mining Co., New York, N. Y., 1 Broadway. Peter A. Hegeman, prest.; C. A. Cameron, secy. and treas.; S. W. Mudd, mgr. and supt. Cap. stk. \$4,000,000. Carbonate, silver, lead. Shaft, 2,000 tons; refractory; steam.
"	"	Jesse F. McDonald & Fred. G. Bulkley, Cap. \$200,000. Penrose, silver, gold. Shaft, 20,000 tons; refractory; steam; electricity.
"	"	Morning Star Consolidated Mining Co., New York, N. Y., 53 Broadway. W. B. Dickerman, prest.; Justin A. Edwards, secy.; H. K. McHarg, treas.; Ezra D. Dickerman, mgr. Cap. stk. \$1,000,000. Morning Star, silver, lead. Shaft, 7,500 tons; steam. Perley Dodge, supt.
"	"	Seneca Mining Co., Pueblo, Colo., care of Colorado Smelting Co. R. Eilers, prest.; R. D. Dwight, v.-prest.; W. H. Aldrich, secy. and treas.; S. F. Parish, mgr. and supt. Cap. stk. \$100,000. Seneca, silver, lead. Shaft; refractory; steam.
"	"	Small Hopes Consolidated Mining Co., New York, N. Y., 1 Broadway. R. C. McCormick, prest.; C. A. Cameron, secy. and treas.; S. W. Mudd, mgr. and supt. Cap. stk. \$5,000,000. Forest City, Robert Emmet, silver. Shaft, 25,000 tons; free; steam.
"	"	Star of Hope Mining Co., John P. Jones, prest.; W. V. Carr, secy. and treas.; A. V. Bohn, mgr. Cap. stk. \$2,500,000. Star of Hope, silver. Shaft developing.
"	"	Union Leasing & Mining Co., Denver, Colo., Room 6 Ingholson Bldg. F. L. Bellan, prest.; J. E. Price, secy. and treas.; Robt. B. Estey, mgr. Cap. stk. \$500,000. El Paso, Olive Branch and others, silver, lead. Shaft; steam developing.
"	"	White Cap Mining Co., I. K. Hamilton, prest.; W. C. Hamilton, secy.; A. C. Meriman, treas. Cap. stk. \$500,000. White Cap, Ocean Wave, gold, silver, lead. Shaft, 5,500 tons; refractory; steam. Jas. A. Shinn, supt.
Lenado	Pitkin Ry., Woody Station 215.	Woody & Silver Creek Mining Co., Aspen, Colo. Henry Todd, prest.; J. N. Porter, secy., treas. and mgr. Cap. stk. \$2,000,000. Eighteen claims, silver and lead. Tunnel; refractory; hand. Wm. Williams, supt.
Lincoln City	Summit Ry., Breckeuridge 776.	Clark & Reithmann, Spring, gold, copper, iron, lead. Shaft; refractory; free; steam. C. P. Clark, supt.
Magnolia	Boulder Ry., Boulder 776.	Augusta Mining Co., Boulder, Colo. Augusta, gold, silver. Shaft, 2,300 tons; refractory; horse. Wm. H. Barber, supt.
"	"	C. Stowell & W. Lusk, Cumberland, gold. Shaft; refractory; hand. C. Stowell, supt.
Mancos	Montezuma Ry., 215.	C. E. Hawkins and others, Jumbo, Wilson, Wade and others, gold, silver, copper, lead. Tunnel; refractory; hand. J. J. Wade, supt.
"	"	Saratoga Mancos Gold Mining Co., F. W. Stubbs, prest.; R. W. Miller, secy. and mgr.; E. E. Humiston, treas. Cap. stk. \$200,000. Hypolite, Golden Lake, Second Choice, gold, silver. Tunnel; refractory; hand. F. M. Brittain, supt.

GOLD AND SILVER—(CONTINUED)

LOCATION OF MINE, RAILROAD, WATER ROUTES AND SHIPPING POINT.		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN	COUNTY.	
Manhattan	Larimer	Atlantic Mining Co., Fort Collins, Colo. W. W. Sullivan, pres.; F. S. Smith, secy.; C. Rugh, treas. Cap. stk. \$25,000. Atlantic, Arkansas, gold. Tunnel; free; mill.
"	"	Bonanza King Gold & Silver Mining Co., Denver, Colo., 1122 Larimer st. Granville Malcom, pres.; Sanford Stork, secy.; D. M. Maclen, treas.; B. F. Burnett, mgr. Cap. stk. \$500,000. Gold, Tunnel; free; water.
"	"	Free Gold Mining Co., Fort Collins, Colo. T. J. Montgomery, pres. and mgr.; Edward H. Hall, secy. and treas. Free gold, gold. Tunnel (developing).
"	"	Relief Mining & Milling Co., Fort Collins, Colo. Sanford T. Hamilton, pres.; Clark Moore, secy.; A. W. Scott, treas.; A. N. Hoag, mgr. Cap. stk. \$250,000. Relief, Maggie, gold. Shaft; slope; steam.
"	"	Seven Mile Mining & Milling Co., Fort Collins, Colo. A. H. Craft, pres.; J. R. Wills, secy.; C. Rugh, treas.; B. F. Burnett, mgr. and supt. Cap. stk. \$25,000. Bahuaeda, Lulu, Madock, Nora, gold. Shaft; free; steam; mill.
Marble	Gunnison	H. W. Anderson & Co. H. W. Anderson, pres.; Evan Williams, secy.; Evan L. Jones, treas. Cap. stk. \$2,000,000. Eclipse, Prince of Wales and others, silver, lead. Shaft, tunnel; refractory. H. W. Anderson, mgr. and supt.
"	"	Beardsley & Mc Nall, Detroit, Urdine, silver, lead. Tunnel; refractory; free (developing).
"	"	Orphan Boy Mining & Reduction Co., Denver, Colo. P. O. Box 2567. E. B. Curtis, pres.; C. E. Curtis, secy.; M. A. Daniels, v.-pres. and treas.; A. M. Daniels, mgr. Cap. stk. \$1,000,000. Orphan Boy, Silver Pulse and others, silver, lead, copper. Shaft; tunnel, 300 tons; refractory; horse. A. M. Daniels, supt.
"	"	The Scandinavia Mining Co. P. J. Billstrom, pres.; J. E. Phillips, secy.; R. G. Carlisle, treas.; Chas. Billstrom, mgr. Cap. stk. \$200,000. Silver King, gold, silver, copper, lead. Shaft, tunnel; hand (developing).
"	"	Warrior Mining Co., Cinelunati, Ohio, 41 Pike's Bldg. C. W. Burke, pres.; M. D. Burke, secy. and treas.; Col. Samuel Bachtell, mgr. and supt. Cap. stk. \$300,000. Warrior Quartzite, silver, lead. Tunnel, shaft; free.
Maysville	Chaffee	North Missouri Group Mining Co. E. B. Brewington, pres., mgr. and supt.; Thos. F. Nelson, secy. and treas. Cap. stk. \$250,000. North Missouri Group, silver and lead. Shafts and tunnels, refractory.
Mineral Point	San Juan	Silver Chord Mining Co. J. W. Cooper, pres.; E. W. Gillman, secy., treas. and mgr. Cap. stk. \$50,000. Silver Chord, silver, lead. Tunnel, 500 tons, refractory; hand. Edward M. Brown, supt.
"	"	F. B. McIntyre & Co. (lesses), Union, silver, gold. Shaft, 125 tons, refractory, hand.
"	"	The San Juan Chief Mining Co., New York, N. Y., 31 Broadway. J. L. Hill, pres.; J. C. Beach, secy. and treas.; Ed. M. Brown, mgr. and supt. San Juan Chief, gold, silver. Shaft, 100 tons, refractory, steam, mill.
"	"	Tricley & Cooper, May B., silver, gold. Shaft, 20 tons, refractory; hand. J. W. Cooper, mgr. and supt.
Moffat	Saguache	Alamosa Mining & Milling Co., Alamosa, Colo. Wm. M. Wykol, pres.; Z. T. Brown, secy.; Jno. D. McNeen, mgr.; N. S. Sherard, mgr. and supt. Cap. stk. \$1,000,000. The Nettie, gold, copper. Shaft; tunnel; free, water, steam, 10 stamps (developing).
"	"	Nash & Cartney, Gold Dirt, gold. Shaft, tunnel, 6,000 tons, free, hand, arrastre, stamp mill. B. Cartney, supt.
Monarch	Chaffee	Colorado Smelting Co., Pueblo, Colo. Anton Ellers, pres.; H. C. Cooper, secy.; W. S. Garner, treas. Cap. stk. \$500,000. Madonna, silver, lead. Tunnel, 12,700 tons; refractory. A. S. Dwight, supt.
"	"	Eclipse Silver Mining Co., St. Louis, Mo., 421 Olive st. Ezra H. Linley, pres.; W. K. Spinney, secy.; E. C. Shumons, treas.; Charles H. Abbott, mgr. and supt. Cap. stk. \$100,000. Eclipse, silver, lead. Tunnel, 10,000 tons; refractory; hand.
Montezuma	Summit	The Hunkl-Dori Consolidated Silver Mining Co., Chicago, Ill., 120 Chamber of Commerce Bldg. Hon. H. A. W. Faber, pres.; Hon. W. G. Smith, v.-pres.; Sheridan Seaman, secy. Cap. stk. \$250,000. Hunkl-Dori, White's Head and others, silver, lead, copper. Tunnel; refractory. La Fayette seaman, supt.
Mt. Snydles	Ouray	Porter & Cooper, Cap. \$15,000. Mikado, Clara Belle, gold, silver. Tunnels, 235 tons; free, refractory; hand.
Naturita	Montrose	Goulding Bros. Goulding, gold. Placer; hydraulic.
Nederland	Boulder	Collins & Garfield, Cap. \$3,000. Bolivar, gold, silver. Tunnel; refractory; hand (developing)
"	"	De Lande & Collins, Cap. \$5,000. Maginis, silver. Shaft, 32 tons; refractory; horse.
"	"	Rockey Moore, Cap. \$1,000. Next Best, gold, silver. Shaft, 1,000 tons; refractory; hand.
Needleton	La Plata	Little Jim Gold and Silver Mining & Milling Co., Peabody, Kan. Col. B. Pinkney, pres.; Col. D. McKeheer, secy.; J. S. Schroeder, treas. Cap. stk. \$1,200,000. Little Jim, E. A. K. and others, gold, silver. Tunnel, shaft; free. Jas. N. Livengood, supt.
"	"	James N. Livengood. Homestake, gold, silver, copper. Tunnel; free (developing).
Nevada	Gilpin	Bennetts & Co. Barrroughs, gold, silver. Tunnel, 90 tons; free; steam. W. T. Bennetts, supt.
"	P. O. Bald Mountain	O. H. Thurlber, Gardner, Sidney B. Hawley, gold. Shaft; refractory, free; steam. Sidney B. Hawley, mgr. and supt.
Niagolds Town	San Juan	J. S. Robenson, Howardsville, Colo. Emma, Leona, silver, lead. Tunnel, 30 tons; free.
Nolan Park	Engle	Glenwood Mining Co., Glenwood Springs, Colo. G. B. Garrison, pres.; C. W. Darrow, secy.; G. H. Pesler, treas.; Ed. Korupkat, mgr. Cap. stk. \$600,000. Gold. Shaft, tunnel; free, hand (developing).
"	P. O. Fulford	B. S. Bartholf, supt.

## GOLD AND SILVER—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
North Star . . . . . Gunnison Ry. Sergeants 215.	Crymble & Co., Buena Vista, Colo. David H. and others, silver, lead. Shaft; free; steam (developing).
Ohio Creek . . . . . Gunnison (P. O. Pitkin) Ry. Ohio City 215.	May-Mazepa Consolidated Mining & Milling Co., Denver, Colo., Mining Exchange Bldg. Charles E. Taylor, pres. and mgr.; W. K. Rathvon, secy. and treas., Cap. stock, \$1,000,000. May-Mazepa, silver, lead. Shaft, 4,000 tons; refractory; free; steam. John S. Olin, supt.
Ojo . . . . . Iherfano (P. O. La Veta) Ry. 215.	Columbus Mining Co., Pittsburg, Pa., 541 Grant st. Jas. J. Flannery, pres.; T. J. Fitzpatrick, secy.; J. L. McCormick, treas.; J. M. Gardner Jr., mgr. and supt. Cap. stk. \$500,000. Venango, gold, silver. Tunnel; refractory.
Ophir . . . . . San Miguel Ry. 628.	Spanish Peaks Coffey Mining & Milling Co., New York, N. Y., Room 9, 49 Exchange pl. W. M. McCarty, pres.; F. W. Kinne, secy. and treas.; B. F. Wayne, mgr. and supt. Cap. stk. \$2,000,000. Gray Copper, silver, copper. Open; free (developing).
.. .. .	M. I. Alkire, Mocking Bird, gold. Tunnel; free; 5 stamps.
.. .. .	Caribbean Mining Co., Holyoke, Mass. Moses Newton, pres.; J. A. McKinnon, secy.; John C. Newton, treas.; Charles S. Newton, mgr. and supt. Cap. stk. \$100,000. Caribbean, gold, silver, lead. Tunnel, 2,400 tons.
.. .. .	A. J. Clark & W. S. Green, Cap. \$100,000. Suffolk and Globe, gold. Tunnels, 2,000 tons; free; water; 5 stamps. A. J. Clark, supt.
.. .. .	Deadwood Gold, Silver & Copper Mining Co., Mt. Vernon, Ohio. J. B. Graham, treas.; Thos. Clingan, mgr.; Deadwood, gold, silver, copper. Tunnel; shaft; refractory (developing). Thos. Clingan, supt.
.. .. .	Jarrett & White, American, Frenchman, silver, lead. Tunnel; refractory; hand.
.. .. .	Montezuma Mining Co. Moses Newton, pres.; Chas. S. Newton, mgr. and supt. Cap. stk. \$60,000. Silver, 100 tons.
.. .. .	Ophir Needle Mining Co., Y. O. Taylor, pres.; M. W. Turner, secy. and treas. Cap. stk. \$2,500,000. Tidal Wave, silver. Tunnel; shaft; refractory. Thomas Clingan, mgr. and supt.
.. .. .	Horatio Page, Cap. \$1,500. Little Dorret, Bleak House, silver. Tunnel; hand. J. B. Ward, supt.
.. .. .	San Miguel Gold & Silver Mining Co., New York, N. Y. Osceola, Golden Crown, gold, silver. Tunnel, 100 tons; free; hand; 5 stamps.
.. .. .	Silver Belle Mining Co., St. Louis, Mo., 100 N. Main st. E. S. Brooks, pres.; J. T. Watson Jr., secy. and treas. Gold, silver. E. E. Bassett, supt.
.. .. .	M. P. Valle, Cap. \$50,000. Star Light, silver, lead. Tunnel, 1,000 tons; refractory; hand. A. J. Clark, supt.
Ouray . . . . . Ouray Ry. 215.	American Gold Mining Co., St. Louis, Mo., 24 N. Third st. James Hopkins, pres.; Frank Carter, secy. and treas.; L. A. Dunham, mgr. Cap. stk. \$300,000. American, Nettie, gold, silver, copper. Tunnel, shaft, 1,800 tons; refractory; electricity, water. Walter H. Bunce, supt.
.. .. .	Barstow Mining & Milling Co., Titusville, Pa. M. W. Quick, pres. and mgr.; John J. Carter, secy. and treas. Cap. stk. \$1,000,000. Commodore, gold, silver. Tunnel; refractory; free; hand. Sophus Holsinger, supt.
.. .. .	Gregory & Senberg (lessees). Silver Link, silver, gold, copper. Tunnel; refractory; steam. F. O. Senberg, supt.
.. .. .	The Midnight Mining Co. Sam. W. Gregory, pres. and treas.; Geo. H. Kean, secy.; P. J. Bohngren, mgr. and supt. Cap. stk. \$300,000. Midnight, silver. Shaft; steam (developing).
.. .. .	Milwaukee Mining Co., Milwaukee, Wis., 629 Marshall st. John A. Hincey, pres.; O. D. Apple, secy.; John Johnson, treas.; William A. Hincey, mgr. and supt. Cap. stk. \$1,500,000. Milwaukee, gold. Tunnel, 15,000 tons; free; water; 10 stamps.
.. .. .	Old Dominion Mining Co., Denver, Colo., Ernest & Cramer Block. Humboldt, Sailor's Fortune, gold, silver. Shaft; refractory; steam. John McMahon, supt.
.. .. .	Simon Oliver and Wm. Carey. Monument, Connecting Link, gold, silver, lead. Tunnel, 25 tons; free.
.. .. .	Pony Express Mining Co., Colorado Springs, Colo., 14 N. Tejon st. J. T. Barkholder, pres.; L. H. Skinner, secy. and treas.; G. W. Franklin, mgr. and supt. Cap. stk. \$1,000,000. Pony Express, silver. Tunnel, 1,000 tons; refractory.
.. .. .	Rochester Consolidated Mining & Milling Co., Rochester, New York, W. W. Sprague, pres.; W. L. Perrin, secy. and treas.; Ira E. Arkerly, mgr. Cap. stk. \$1,000,000. U. S. Depository and Potosi, gold, silver, copper and lead. Tunnels, 6,000 tons; free; water; 10 stamps. George Robertson, supt.
.. .. .	Saratoga Mining Co., St. Louis, Mo., 417 Olive st. E. C. Simmons, pres.; W. K. Spinnery, secy.; G. L. Allen, treas.; L. R. Fry, mgr. Cap. stk. \$1,000,000. Saratoga, silver. Tunnel; refractory; mill. L. R. Fry, supt.
.. .. .	Slide Mining Co., C. M. Armstrong, pres.; George H. Kean, secy. Cap. stk. \$500,000. Slide, gold, silver. Tunnel, 2,500 tons; refractory. Charles Asperger, supt.
Park . . . . . Park (P. O. Alma) Ry. Lon- don Junction 776.	The Orphan Boy Hill Consolidated Mining Co., Alma, Colo. James Moynahan, pres. and mgr.; Fremont Woodruff, secy.; John M. Walker, treas. Cap. stk. \$1,000,000. Orphan Boy, Honey Comb and others, gold, silver, iron. Tunnel; refractory; compressed air (developing). James Minahan, supt.
.. .. .	Thompson & Thompson, Alma, Colo. Sunny South, gold, silver. Tunnel, 10 tons; refractory. John Thompson, supt.
Parrott . . . . . La Plata Ry. Hesperus 628 (5 m.).	J. S. D. Hopkins and others. Morovorally, gold, silver. Tunnel; shaft; refractory; hand (developing).
Pitkin . . . . . Gunnison Ry. 776.	Avoca Mining Co., Aspen, Colo. J. E. Freeman, pres. and mgr.; F. A. Shepard, secy.; H. W. Stormer, treas. Cap. stk. \$1,000,000. Avoca, silver. Shaft (developing).
.. .. .	Blaine Mining & Milling Co., Pueblo, Colo. G. T. Nash, pres.; D. W. Osgood, secy.; Charles Ritter, treas.; G. W. Griffey, mgr. and supt. Cap. stk. \$200,000. Jim Blaine, gold, silver, lead. Shaft, tunnel; free; hand.
.. .. .	Chicago Park Mining Co., Gunnison, Colo. S. L. Moyer, pres.; J. S. Lawrence, secy.; John R. Steele, treas.; Frank W. Ferry, mgr. Cap. stk. \$1,000,000. Silver, lead. Shaft (developing).

GOLD AND SILVER (CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Pitkin, . . . . . Gunnison (Continued.)	Cleopatra Silver Mining Co., Chicago, Ill., 4 Sherman st. Frank Drake, pres. and gen. mgr.; Frank W. Perry, secy.; John Cudahy, treas. Cap. stk. \$2,500,000. Cleopatra, Alabama and others, gold, silver. Shaft, free; steam. Charles Oliver, supt.
"	G. W. Griffey & Co., Jesspers, Nest Egg, silver, lead. Tunnel, shaft, 30 tons; free; hand. E. T. Davis, supt.
"	The Hindoo Mining Co., Pueblo, Colo., Central Block. Chas. B. Nicholson, pres.; Frank C. Kaye, secy. and treas.; John Livezey, mgr. Cap. stk. \$1,000,000. Little Fred, Hindoo No. 2, and Little Hindoo No. 2, gold and silver. Shaft and tunnel; refractory; hand (developing). A. F. Leseberg, supt.
"	Little Tycoon Mining Co., Burlington, Iowa, 846 Jefferson st. H. W. Cliftenden, pres.; Thomas Wilkinson, secy. and treas.; G. W. Griffey, mgr. and supt. Cap. stk. \$800,000. Little Tycoon, gold, silver, lead. Shaft, tunnel, 250 tons; horse.
"	Mono Gold & Silver Mining Co., Pittsburg, Pa. W. W. Murray, pres.; J. F. Grimes, secy.; O. E. De Costa, treas.; J. M. Gardner, mgr. and supt. Cap. stk. \$300,000. Gold, silver. Tunnel, placer; refractory; water; 10 stamps.
"	The Quartz Creek Mining & Milling Co., Chicago, Ill., 175 Dearborn st. Henry Knight, pres.; Frank W. Perry, secy.; Albert S. Wright, treas. Cap. stk. \$1,000,000. No Name, gold, silver. Shaft, slope, 10,000 tons; free; steam, electricity; mill. Charles E. Wright, supt.
"	Sacramento Consolidated Mining Co., Denver, Colo., 845 Ernest & Cramer Bldg. George C. Manly, pres.; Wm. R. Moore, secy. and treas. Cap. stk. \$1,000,000. Sacramento, Corydon and others, gold, silver. Tunnel, shaft, 300 tons; refractory; hand.
"	The Saturn Mining Co., Aspen, Colo. J. E. Freeman, pres. and mgr.; F. A. Shepard, secy.; H. W. Stormer, treas. Cap. stk. \$1,000,000. Saturn, silver. Shaft developing.
"	Silver Islet Mining & Milling Co., Chicago, Ill., 4 Sherman st. Frank Drake, pres.; Miss H. A. Dean, secy.; John Cudahy, treas. Cap. stk. \$475,130. Silver Islet, Silver Nugget and others, gold, silver. Shaft, slope, 1,000 tons; free; steam; 10 stamps. James A. Preston, supt.
"	Solitaire Mining Co., Aspen, Colo., Aspen Block, Room 12. J. E. Freeman, pres. and mgr.; F. A. Shepard, secy.; Erin S. Moore, treas. Cap. stk. \$1,000,000. Maggie F. Group, silver. Shaft and tunnel (developing). A. G. Ward, supt.
"	Statesman Mining Co., Aspen, Colo., Don C. Pollard, pres.; F. A. Shepard, secy. Cap. stk. \$1,000,000. Statesman, silver. Shaft developing.
Placerville Ry. 628.	San Miguel H. H. Hart. Cap. \$2,000. Slide, Nonpareil, gold. Shaft, drift, water, arrastra.
"	Mt. Wilson Gold & Silver Mining Co., Southport, Conn. E. C. Sherwood, pres.; O. T. Sherwood, secy. and treas. Cap. stk. \$80,000. Silver Pick, gold, silver. Tunnel, 450 tons; refractory; hand. J. F. Wameneraker, mgr. and supt.
Portland, Ry. Piedmont 215.	Ourray J. W. Growell & H. G. Burt. Anna, Blain, silver. Tunnel, hand (developing).
"	James Overman. Cap. \$45,000. Cascade, silver. Shaft, 50 tons; refractory; steam.
Poudre City (P. O. Home Ry. Fort Collins 776.	Larimer Zimmerman Bros. Cap. \$20,000. North Star, gold. Shaft, tunnel; free; water.
Red Cliff Ry. 215.	Eagle Wm. Dodsworth and others. Warriors' Mark, gold, silver. Refractory (developing).
"	Wm. A. Gay. Cap. \$25,000. Henrietta, gold, silver, lead. Tunnel and slope, free; steam.
"	Hans Harders. First National, '84, gold and silver. Refractory (developing).
"	Charles W. Lunsley. Little May, silver, lead. Shaft, refractory; horse, hand (developing).
Rico Ry. 628.	Dolores A. B. G. Mining Co., Burnsville, Colo. J. W. Burns, mgr. Alturas, Alta, A. B. G. and others, gold, silver and lead. Tunnels, 30 tons; refractory; steam. T. H. Wausenler, supt.
"	Consolidated Rico Return Mining Co., Denver, Colo., P. O. Box 1126. Julius Thompson, pres.; W. E. Ostrander, secy.; G. B. Garrison, treas.; Douglas L. V. Browne, mgr. Cap. stk. \$2,500,000. Gold, silver, lead. Tunnel, shaft; refractory; steam (developing).
"	The Grand Duke Mining Co., St. Louis, Mo., 611 N. Third st. Louis J. Holthaus, pres.; Gustavus S. Glenn, secy.; J. Sibley White, treas.; Joseph Meredith, mgr. and supt. Cap. stk. \$800,000. Grand Duke, Forest, Kureka and others, silver, gold, lead. Shaft, tunnel, 1,500 tons; refractory; electricity.
"	Haberman & Rhode. Logan, Sherman and 4 others, 12,000 tons; free; steam.
"	Iron Dollar Silver Mining Co., Pueblo, Colo. C. F. Meek, pres.; E. F. Arthur, secy.; J. J. Burns, treas.; J. E. Hubbard, mgr. and supt. Cap. stk. \$1,000,000. Iron Dollar, silver. Shaft; steam.
"	Maid of Australia Mining Co. Cap. \$100,000. Maid of Australia, silver, gold, lead, iron. Shaft; refractory; steam (developing). D. M. Evans, mgr. and supt.
"	W. W. Parshall, Syndicate, gold, silver, lead. Tunnel; value output, \$85,000.
"	W. S. Poindexter and others. Black Demon, Sunflower, Badger, silver, gold, lead. Tunnel, shaft, refractory; steam. Albert Newton, supt.
"	Rico-Aspen Consolidated Mining Co. David H. Mollat, pres.; Eben Smith, v. pres.; L. D. Peterson, secy.; A. B. Roeder, treas.; Douglas L. V. Browne, mgr. and supt. Cap. stk. \$5,000,000. Aspen, Vestal, Montezuma and others, gold, silver and lead. Shafts and tunnels, 50,000 tons; steam.
"	The Southern Tunnel Co. W. W. Parshall, pres. and treas.; A. T. Hathaway, secy.; John C. Clark, mgr. and supt. Cap. stk. \$300,000. No. 3, Hobo and others, silver, lead. Tunnel, 450 tons; refractory; hand.
"	Mrs. M. A. Sprinkle. Last Chance, silver. Shaft, tunnel (developing).
"	Swansea Gold & Silver Mining Co., Denver, Colo., 313 Mining Exchange Bldg. Charles Newman, pres. and mgr.; Wm. L. Stephens, secy. and treas. Cap. stk. \$600,000. Swansea, Newman, Chestnut, gold, silver, lead. Tunnel, 35 tons; refractory; steam. Henry Klingender, supt.
"	Uncle Ned Mining Co., Peter McConor, pres.; G. B. Garrison, secy. and treas. Henry Klingender, mgr. Cap. stk. \$1,000,000. Fifteen claims, silver and lead. Shaft and tunnel (developing). E. B. Thomas, supt.

## GOLD AND SILVER—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN	AND COUNTY.	
Rico, .....	Dolores (Continued.)	Union Carbonate Mining Co. Union Carbonate, silver, lead. Shaft, slope, 5,000 tons; steam. A. T. Hathaway, supt.
" .....	"	Wakeman & Hill. Princeton, Ethlene, silver, lead, gold. Tunnel, 1,500 tons; refractory; hand.
Ridgeway, .....	Ouray Ry. 215.	Bowls & Phillips. Cap. \$5,000. Gold, silver. Tunnel; refractory; hand (developing). J. B. Frogley, supt.
" .....	"	W. S. Tevis. Madona, Little Joe, gold, silver. Shaft; free (developing).
Robinson, .....	Summit Ry. 215, 776.	Ajax Mining Co. Frank Owens, prest.; J. F. McDonald, secy.; John McConaghy, treas. and mgr. Cap. stk. \$50,000. Ajax, gold, silver, lead. Shaft, incline, 4,000 tons; refractory; steam. C. P. Schmaaker, supt.
" .....	"	Frod, G. Bulkeley. Cap. \$150,000. Bulkeley Group, silver, gold. Slope, 2,500 tons; refractory; steam. Jesse F. McDonald, supt.
" .....	"	Champion Mining Co. Champion, silver. Shaft, slope, 150 tons; refractory; steam. J. W. Woodford, supt.
" .....	"	Continental Gold & Silver Mining Co., Rockford, Ill. J. R. Linn, prest.; C. D. Williams, secy.; H. E. Wheeler, treas. Rattler, silver. Tunnel, shaft, 1,321 tons; refractory; steam. J. W. Woodford, supt.
" .....	"	Half Moon Mining Co. John McConaghy, prest. and mgr.; D. H. Gallagher, secy.; W. M. Clark, treas. Half Moon, gold, silver, lead. Shaft, slope (developing).
" .....	"	New York Mining Co. New York, gold, silver. Shaft, slope, 5,000 tons; refractory; steam. Jesse F. McDonald, supt.
" .....	"	Robinson Consolidated Mining Co., New York, N. Y., 45 Broadway. John Jay White, prest.; F. C. Poucher, secy. and treas. Jesse F. McDonald, mgr. and supt. Cap. stk. \$10,000,000. Robinson, silver, gold. Shaft, tunnel, slope, 5,000 tons; refractory; steam.
" .....	"	Sunshine Consolidated Gold & Silver Mining Co., Des Moines, Ia. L. A. Wilkinson, prest.; Will Tome, secy.; J. M. Shuck, treas. Cap. stk. \$500,000. Sunshine, gold, silver, lead. Shaft, 10 tons; refractory; steam (developing).
" .....	"	Woodford Bros. & Co., Denver, Colo., Mining Exchange Bldg. F. C. Peck, prest.; Blybell, secy.; H. C. Frost, treas.; Woodford Bros., mgrs. Cap. stk. \$500,000. Diamond B, silver. Slope; shaft, 30 tons; refractory; steam (developing). Walter C. Smith, supt.
Rockwood, .....	La Plata Ry. 215.	John W. Morse, Durango, Colo. Red Point, silver. Shaft (developing).
Rollinsville, .....	Gilpin Ry. Black Hawk 776.	C. V. Brinkenhoff & L. W. Lansing. Cap. \$10,000. Dirigo, Alma, Mia, gold. Tunnel, shaft; refractory (developing).
" .....	"	Rollin Gold and Silver Mining & Milling Co. Cap. stk. \$5,000,000; indy. cap. \$200,000. Perigo, Gold Dirt and others, gold, silver, lead, copper. Shaft, tunnel; refractory, free; steam, water; 25 stamps.
" .....	"	Victoria Gold & Silver Mining & Milling Co., Denver, Colo., 17 Jacobson Block. Frank H. Levering, prest.; C. V. Mead, secy.; W. S. Estey, treas.; P. Peterson, mgr. and supt. Cap. stk. \$200,000. Victoria, gold. Shaft, 4,500 tons; free; steam; 15 stamps.
Rondley, .....	Chaffee Ry. 776.	Mary Murphy Mining Co., St. Louis, Mo., 463 Ehu st. W. R. Donaldson, prest.; J. W. Wallace, secy. and treas. Cap. stk. \$300,000. Mary Murphy, gold, silver, copper. Tunnel, shaft, 27,000 tons; refractory; compressed air, mill, concentrators. J. H. Seek, mgr. and supt.
Russell Gulch, .....	Gilpin Ry. 776.	Topeka Mining Co., Chicago, Ill., 410 Chamber of Commerce. Percy C. Hamilton, prest. and treas.; William Phelps, secy.; Henry P. Lowe, mgr. and supt. Cap. stk. \$1,000,000. Topeka Extension, gold. Shaft, 15,000 tons; free; refractory; steam.
Saguache, .....	Saguache Ry. Del Norte 215 (24 miles).	J. S. Sanderson. Fulton, gold, silver. Shaft, 480 tons; horse.
St. Elmo, .....	Chaffee Ry. 776.	Pat Murphy Gold Mining Co., St. Louis, Mo., 208 N. Main st. Cap. stk. \$3,000,000. Iron Chest, gold, silver. Shaft, tunnel, 15,000 tons; refractory, free; steam, water, horse; mill, concentrator. Joseph Holschneider, mgr. and supt.
" .....	"	Pawnee Mining & Milling Co. George Warren, prest.; Henry Brown, secy.; John McBride, treas. Cap. stk. \$10,000. Lady Murphy, Mollie, Pioneer, gold, silver, lead. Tunnel, 6,000 tons; free; steam, compressed air; 20 stamps. Henry Brown, supt.
" .....	"	Byron E. Shear & S. L. Johnson, Denver, Colo., 728 Sixteenth st. S. L. Johnson, mgr. Tressa C., gold, silver and copper. Shaft and tunnel, 1,000 tons; free; steam. N. S. Bullock, supt.
" .....	"	Valeourt & Blonchoreo. Cap. \$25,000. Gold Field, gold, silver. Shaft, 3,000 tons; refractory, free; horse. A. Blonchoreo, supt.
Salda, .....	Chaffee Ry. Gold Hill 776.	Victoria Mining & Milling Co., Denver, Colo. Ernest & Cramer Block, Room 804. Wm. Brooks, prest.; O. T. Avery, secy.; E. W. Waybright, treas.; R. K. Thayer, mgr. Cap. stk. \$500,000. Victoria, gold and silver. Shafts, 350 tons; refractory; steam.
Sharpshale, .....	Huerfano Ry. Pueblo (75 miles by wagon).	Blake & Litter, Silver Cliff, Colo. Cap. \$3,000. Niagara, gold, silver, lead. Tunnel, 100 tons; refractory; hand. D. C. Blake, supt.
" .....	"	McIntire Bros. & Mack. Deadwood, gold, silver, lead. Tunnel; free (developing).
Sherman, .....	Hinsdale P. O. and Ry. Lake City 215.	Black Wonder Gold & Silver Mining Co., Boston, Mass., 244 Washington st. Hon. Mr. Watterman, prest.; Mr. Stark, secy.; J. Henry Allen, treas.; E. C. Davis, mgr. Cap. stk. \$1,000,000. Black Wonder, gold, silver. Shaft, tunnel, drift; refractory (developing). Abel A. Allen, supt.
Silver Cliff, .....	Custer Ry. Cotopaxi 215.	Good Hope Mining Co., Washington, D. C., cor. Ninth and F sts. C. C. Clements, prest.; Paul R. Van Mater, secy.; Frank S. Williams, treas. Cap. stk. \$500,000. Good Hope, silver, lead. Shaft, level; free; horse; steam (developing).
" .....	"	T. W. Grasser. Augustus, silver, lead. Shaft (developing).
" .....	"	E. J. Haskell. Racie Boy, Hudson, Jay Gould, gold, silver, lead. Open pit, shaft; refractory; steam; 40 stamps.

GOLD AND SILVER (CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.			NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN	AND	COUNTY.	
Silver Cliff	.....	Custer	A. H. Henning, Aug. Koppe & E. Burkhardt. Troy, silver. Shaft; refractory; hand.
"	"	"	Samuel C. Hunsaker. Black, gold, silver. Tunnel; free; hand (developing).
"	"	"	International Mining Co., Pueblo, Colo., Rooms 122 and 123 Central Block. O. A. Derby, pres't.; R. A. Crossman, secy.; John H. Voorhees, treas.; J. W. Williams, mgr. Cap. stk. \$500,000. International, gold, silver. Shaft; free; steam. O. A. Derby, supt.
"	"	"	S. F. Jordan. Poughattan, gold, silver, lead. Refractory; hand.
"	"	"	J. R. Thomas and others. Lowellia, silver, copper. Shaft; 3 stamps.
Silver Mtn	.....	Huerfano	F. E. Collier and others, La Veta, Colo. Cap. \$30,000. Trenton, Yankee Girl and others, silver, gold. Tunnel, shaft, 250 tons; free. F. E. Collier, supt.
"	"	"	A. B. Morse & W. H. Clifford. Edith M., silver. Shaft (developing). A. B. Morse, supt.
"	"	"	Martin, Reed & Co. Cap. stk. \$25,000. Wonderful, gold, silver. Shaft, tunnel; refractory; horse, hand. Frank Martin, supt.
"	"	"	Rocky Mountain Mining & Development Co., Pueblo, Colo., 106 West Third st. H. W. Young, pres't. and mgr.; Geo. W. Gephart, secy.; A. V. Bradford, treas. Cap. stk. \$1,000,000. New York, Chicago, silver. Shaft (developing).
Silver Plume	Clear Creek	Ry. 776.	Baltimore Mining & Milling Co., Denver, Colo., 1316 Eighteenth st. John Fillius, pres't. and mgr.; William H. Emanuel, secy. and treas. Cap. stk. \$500,000. Baltimore, silver, lead. Tunnel, shaft; steam. George Meyers, supt.
"	"	"	R. Orchard, Old, George-town, Colo. Cap. \$100,000. Mendota, Fulton, silver, lead. Shaft, tunnel, 1,500 tons; free. F. G. Chapman, supt.
"	"	"	Pay Rock Silver Mines, Ltd., London, England. Thomas Hicks, pres't.; J. B. Palmer, treas. Cap. stk. \$1,000,000. Pay Rock, Silver Plume, silver. Tunnel, shaft, 1,500 tons; refractory; compressed air; concentrator. John M. S. Egan, mgr. and supt.
"	"	"	Silver Plume Consolidated Mining Co., Lincoln, Neb., 1231 O st. Robert N. Wharton, pres't.; John Gillespie, secy.; T. C. Kern, treas. Cap. stk. \$350,000. Silver Plume, silver and lead. Tunnel (developing).
Silverton	San Juan	Ry. 215.	Animas River Mining Co., Milwaukee, Wis., 4 Metropolitan Block. Cap. stk. \$500,000. Jess and Mamie, gold, silver, lead and copper. Tunnel, free, water (developing).
"	"	"	Randora Mining & Milling Co., Colorado Springs, Colo., 109 E. Kiowa st. F. L. Martin, pres't.; W. M. Harriott, secy.; C. E. Noble, treas. H. H. Daniels, mgr. and supt. Cap. stk. \$250,000. Randora, silver and gold. Tunnel, 20 tons, refractory; steam.
"	"	"	A. R. Briggs, Brooklyn, N. Y., 35 Linwood st. Briggs, gold, silver and lead. Drift, shaft, refractory; concentrator. J. E. Briggs, supt.
"	"	"	C. & I. C. Gold & Silver Mining Co., Denver, Colo., 1754 Curtis st. Edward F. Lamb, pres't. and mgr.; R. G. Hillen, secy.; F. D. Taylor, treas. Cap. stk. \$300,000. Gold, silver and lead. Shaft, tunnel, 2,000 tons; free and refractory; steam. E. F. Lamb, supt.
"	"	"	Kendall Mount Gold & Silver Mining Co., James E. Curtis, pres't.; Samuel E. Laird, secy. and treas.; Thomas H. Kane, mgr. Cap. stk. \$500,000. Titusville, gold and silver. Tunnel, 15,000 tons; refractory; water, steam; 15 stamps. W. J. Kane, supt.
"	"	"	San Juan Mining & Milling Co., New York, N. Y., 65 Fulton st. W. Shepard Estey, pres't. and treas.; Wm. O. Chapman, secy.; J. E. Briggs, mgr. and supt. Cap. stk. \$600,000. New York, gold, silver and lead. Drift, shaft, 1,000 tons; free, refractory; water; concentrator.
"	"	"	Twin Metals Mining & Milling Co., Pueblo, Colo., 226 S. Union av. E. L. Wood, pres't.; Otis Bemick, secy.; H. M. Ward, treas. and mgr. Cap. stk. \$2,500,000. Twin Metals, gold and silver. Tunnel; free and refractory; steam (developing).
South Creede, Rio Grande	.....	.....	Marguerite Mining Co., M. A. Duxstad, pres't.; Jas. McNamara, secy.; Thomas Harlines, mgr. Cap. stk. \$100,000. Marguerite, silver. Shaft, 300 tons and lead (developing).
Stunner	.....	.....	Eurydice Mining Co., Denver, Colo., cor. Seventeenth and Champ sts. Ernest C. Grammer, Block, Malcolm Anderson, pres't. and secy.; Col. H. C. Anderson, treas. Cap. stk. \$1,000,000. Eurydice, Louisiana, gold and silver. Shaft, tunnel, 1,000 tons; refract ry; steam. J. O. Dinmick, supt.
Sugar Loaf	.....	Boulder	Baldwin & Colns. Boomerang, Euclid, Jasper, gold and silver. Shaft, tunnel, 50 tons; free, refractory; hand. S. S. Baldwin, supt.
"	"	"	Beach & Pate, Silver Eagle, silver and copper. Shaft, slope; refractory; horse (developing). W. L. Beach, supt.
"	"	"	Geo. H. Chlek, Pittsburg, Kan. Cap. \$100,000. Tambourine, gold and silver. Tunnel, 500 tons; refractory; hand. Geo. H. Thompson, supt.
"	"	"	Norman Mills & W. E. Ayers. Gold Fish, North Wind, gold and silver (developing). Norman W. Mills, supt.
"	"	"	Phillips & Wood, Boulder, Colo., Phillips, Summit, New Era, gold and silver. Tunnel, shaft; refract ry (developing). G. P. Wood, supt.
Sunset	.....	Boulder	Free Coinage Mining & Milling Co., Denver, Colo., 36 Masonic Temple. A. J. Severance, pres't., treas. and mgr.; B. A. Ambler, secy. Cap. stk. \$250,000. Free Coinage, gold and silver. Tunnel, 2,400 tons; free; refractory; hand; 40 stamps. J. E. Severance, supt.
Sunshine	.....	Boulder	Exodus Mining Co., East Liverpool, Ohio, P. O. Box 628. F. H. Croxall, pres't.; Geo. B. Harvey, secy.; Chas. E. Macrum, treas.; Jas. W. Kerr, mgr. Exodus, gold and silver. Shaft, tunnel (developing).
"	"	"	Minnie Belle Mining Co., Denver, Colo., 152 Market st. C. C. Bendell, pres't.; F. W. Henningson, secy. and treas.; John Fuller, mgr. and supt. Minnie Belle, silver and gold. Shaft, 100 tons; refractory; horse.
"	"	"	C. H. Pate. Cap. \$10,000. Lucell, Excelsior, gold. Shaft, tunnel; refractory; horse, hand (developing).
"	"	"	White Crow Gold Mining Co., Colorado Springs, Colo. F. L. Martin, pres't.; W. Culver, secy.; W. Burgess, treas.; W. J. Williams, mgr. and supt. Cap. stk. \$250,000. White Crow, gold. Shaft, 300 tons; refractory; steam; concentrator.

## GOLD AND SILVER—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN	COUNTY.	
Sweet Home	Clear Creek (P. O. Dumont) Ry. Fall River 215.	F. E. Platt & Ed. Bowden, Dumont, Colo. Cap. \$10,000. Left Hand, Eagle Bird, gold. Tunnel, 100 tons; free; water; 15 stamps.
Telluride	San Miguel Ry. 628.	Etma Mining & Milling Co. J. C. Weller, prest. and treas.; L. Jones, secy.; E. N. Weller, mgr. Cap. stk. \$100,000. Etma Group, gold. Shaft; free; water; Huntington mill. E. B. Weller, supt.
"	"	Bates & McEwen. Hidden Treasure, gold, silver. Tunnel; free; hand (developing).
"	"	Belmont Consolidated Mining Co., Shanghai, China. A. J. Howe, prest.; Drysdale, Ringer & Co., secy. and treas.; J. A. R. Waters, mgr. Cap. stk. \$350,000. Belmont, Tom Boy, gold. Tunnel, 12,000 tons; free; water, electricity; mill. J. S. Higgs, supt.
"	"	Black Bear Mining Co. Andrew Werroner, prest. and mgr.; Zach Anderson, secy.; Fred Krongvist, treas. Cap. stk. \$600,000. Black Bear, White Bear, gold, silver, lead. Tunnel; hand (developing). Andrew Werroner, supt.
"	"	Bohemia Mining Co. Bohemia, gold, silver. Shaft, tunnel, 200 tons; refractory; free.
"	"	Bradley Mining Co. B. F. Lohmes, prest.; J. L. Osborne, secy. and treas.; T. J. Wilkinson, mgr. Bradley, gold and silver. Tunnel, 1,000 tons; refractory; water; mill. J. B. Mitter, supt.
"	"	La Junta Mining Co. E. E. Runkle, prest. and mgr.; E. B. Weller, secy. and treas. La Junta, gold. Tunnel; refractory; free; water; mill. E. E. Runkle, supt.
"	"	Lohmes, Miller & Osborn. Bradley, gold, silver, lead. Tunnel, 400 tons; refractory; hand. B. F. Lohmes, supt.
"	"	John H. Mitchell. Cap. \$300,000. Silver Glade, silver. Tunnel, shaft; free and refractory; hand.
"	"	Nellie Mining Co. T. A. Davis, prest. and mgr.; O. N. Davis, secy.; E. L. Davis, treas. Cap. stk. \$500,000. Nellie, Ella, gold, silver. Tunnel; free. Gus Anderson, supt.
"	"	San Miguel Consolidated Gold Mining Co. Benjamin F. Butler, prest.; Elston Hoyt, secy.; Wm. F. Reed, treas.; L. L. Nunn, mgr. Cap. stk. \$10,000,000. Gold. Shafts and tunnels; free; electricity; 150 stamps. E. H. Teats, supt.
"	"	Sheridan Consolidated Mining & Milling Co. Ltd., Shanghai, China. G. James Morrison, prest.; Drysdale, Ringer & Co., secy. and treas.; J. H. Ernest Waters, gen. mgr. Cap. stk. \$2,000,000. Sheridan, Mendota, gold, silver. Shaft, tunnel, 23,000 tons; free, refractory; steam, electricity, water; 40 stamps; concentrator. Samuel Treas, supt.
"	"	The Smuggler-Union Mining Co., Denver, Colo., 804 Boston Bldg. J. A. Porter, prest.; A. H. Fowler, secy. and treas.; N. T. Mansfield, mgr. Cap. stk. \$5,000,000. Smuggler-Union, gold and silver. Shaft, tunnel, 25,000 tons; refractory; steam; 10 stamps. Richard Treas, supt.
Thomasville	Pitkin Ry. 265.	Frying Pan Mining & Milling Co., Denver, Colo. Geo. J. Boal, prest. Cap. stk. \$300,000. Bessie, silver, lead. Shaft; refractory; steam (developing). W. E. Newberry, supt.
"	"	McKinley Mining Co., Colorado Springs, Colo., Bank Bldg. Frank O. Wood, prest. and mgr.; Frank White, secy. and treas. Cap. stk. \$300,000. McKinley and Tariff Lodes, silver. Shaft (developing).
Tin Cup	Gunnison Ry. St. Elmo 776 (9 m.).	Broken Hill Mining & Milling Co., Denver, Colo., 728 Sixteenth st. L. L. Johnson, prest.; James W. Forrest, secy. and treas. Cap. stk. \$1,000,000. Broken Hill, gold, silver. Tunnel (developing).
"	"	Forest Hill Mining & Milling Co. W. W. Wall, prest.; Laurance Winshemer, secy.; C. A. Fredericks, treas.; E. A. Ackerson, mgr. and supt. Cap. stk. \$1,000,000. St. Crispin, gold. Shaft, 5,000 tons; free; water; 60 stamps.
"	"	Gez Zee Mining Co., St. Louis, Mo., 506 Olive st. Solon N. Sapp, prest.; W. F. Hawley, secy.; L. E. Roberts, treas. Cap. stk. \$2,000,000. Gee Zee, silver, lead. Shaft; refractory; horse. James I. Perkins, supt.
"	"	Gold Cup Mining Co., Denver, Colo., Equitable Bldg. A. E. Reynolds, prest.; C. F. McKenney, secy.; A. Snelaker, mgr. Cap. stk. \$5,000,000. Gold Cup, gold, silver. Shaft; refractory; steam and compressed air.
"	"	John Hines. Maid of Erin, gold, silver. Shaft; free; hand (developing).
"	"	Lewis & McCormick. Wahl-McCormick Group, gold and manganese (developing); free.
"	"	Thomas H. Mastin & E. A. Hill. Queen of the West, silver, lead, iron. Shaft, tunnel; refractory; hand. E. A. Hill, supt.
"	"	Jerome Noakes. Big Chief, silver, lead. Tunnel, shaft, 300 tons; free; hand.
"	"	C. F. Wahl. Wahl, gold. Tunnel, 50 tons; free; hand.
Tomichi	Gunnison Ry. Sargeants 215.	Thomas W. Berry. Cap. \$5,000. Treasure Vault, Copperite, gold, silver, lead. Shaft, 5 tons; refractory; hand (developing).
"	"	Magna Charta Silver Mining & Tunnel Co., Cleveland, Ohio, 50 Euclid av. E. J. Farmer, prest. and mgr.; James Eng. Farmer, secy.; John X. Stoeckl, treas. Cap. stk. \$2,500,000. Magna Charta, gold, silver, lead and copper. Tunnel, 30,000 tons; steam, water and electricity; concentrating mill. O. B. Aikins, supt.
"	"	Ohio & Colorado Mining Co., 204 Superior st. A. Teachout, prest.; J. Nesbit Wilson, secy. and mgr.; James A. Anderson, treas. Cap. stk. \$2,500,000. Grey Copper, Little Minnie, Topeka and others, gold, silver, lead. Tunnel; refractory; steam (developing).
Trout Lake	San Miguel Ry. San Bernardo 215.	San Bernardo Silver Mines, Ltd. Percy W. Thomas, prest.; Alfred E. Wesley, secy.; Francis A. Vonillon, treas. Cap. stk. \$750,000. San Bernardo, silver, lead. Tunnel, 5,000 tons; refractory; water, electricity; concentrator. J. W. Mason, mgr. and supt.
"	"	Wm. M. Tucker, St. Louis, Mo., 519 Pine st. Clara, silver and lead. Tunnel, 51 tons; refractory; hand.
Twin Lakes	Lake Ry. Granite 26, 215, 18 miles.	J. S. Boco. Cap. \$50,000. Sherman, Cleveland, gold, silver. Tunnel, 100 tons; refractory; hand.
"	"	Cornelius Bros. Lincoln, Blaine, gold, silver, bismuth. Tunnel; refractory; hand (developing).
"	"	Warren Cutler & S. H. Leister. Cap. \$8,000. Betsy S., Solid Coin, gold, silver. Tunnel, 140 tons; refractory and free; horse. S. H. Leister, supt.



GOLD AND SILVER—(CONTINUED).

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN	AND COUNTY.	
Twin Lakes, (Continued)	.....Lake	John W. Dixon & Son, Winemaker, Little Joe, gold, silver. Tunnel, shaft; free; hand. Charles H. Houser, supt. Nine miles to railway.
"	"	Fall River & Colorado Mining & Milling Co., Fall River, Mass. H. Francis Lawton, pres.; C. A. Bugbee, secy.; Geo. T. Durfee, treas.; Ambrose M. Thomas, mgr. and supt. Cap. \$1,000,000. Thistle, Goldsmith and others, gold, silver. Shaft, tunnel, open pit; free; water; 10 stamps.
"	"	G. B. Garland & H. N. Garland. O. K., Portland, silver, lead. Tunnel; refractory (developing).
"	"	Gold Bug Mining & Milling Co., Aspen, Colo. Frank S. Rice, pres.; C. A. McBratney, secy.; Geo. Rust, treas.; Ed. C. Rice, mgr. Cap. \$750,000. Gold Bug, gold. Tunnel, slope, 1,200 tons, refractory and free; hand. Wm. P. Remine, supt.
"	"	Harlan & Co., Kearnsage, Comstock, Free Coinage, gold. Tunnel, shaft; free; water (developing).
"	"	Thos. Heneberry, Sunset, Little May, Black Venus, silver, gold, lead. Shaft, tunnel; refractory; water.
"	"	Wm. Ber. Cap. \$75,000. Mount Elber, Ontario, gold. Tunnel, shaft; refractory (developing).
"	"	John McDonald, Mountain Boy, silver. Tunnel, 50 tons; refractory; hand. Twenty miles to railway.
"	"	Mt. Kilvert Mining & Milling Co., Denver, Colo., 321 Ernest & Cramer Block. James Leonard, pres.; E. C. Gillman, secy.; A. H. Weber, treas.; C. A. McBratney, mgr. Cap. \$1,000,000. Gordon, Bengal Tiger, gold. Tunnel, 3,000 tons; free; water, steam; 10 stamps. Joseph Haatt, supt.
"	"	M. R. Mining & Milling Co., Gallegosburg, Ill. Miron Rhodes, pres.; J. H. Calkins, secy.; R. T. Davis, treas. Cap. \$10,000. Gold and silver. Five stamps.
"	"	Silverthorn Tunnel Co., Leadville, Colo., P. O. Building. Dr. L. L. Silverthorn, pres. and treas.; N. Rollins, secy.; I. R. Shaver, mgr. and supt. Cap. \$1,000,000. Yankee Girl, Emma and others. Tunnel; refractory, free; hand (developing).
"	"	Staggs, Quittance & McDermot, Confidence, Baltarat, Great Caesar, War Eagle, gold and silver. Shaft, tunnel, slope free, hand (developing). L. H. Staggs, supt.
Virginias	Ouray	Old Dominion Mining Co., Denver, Colo. J. B. Pace, pres.; J. B. Farish, mgr. Cap. \$50,000. Humboldt, Sallor's Fortune, silver. Shaft, tunnel, 1,000 tons; free; steam. John McMahon, supt.
Wagon Wheel	Rio Grande	Electric Mining & Milling Co., Denver, Colo., 169 Fremont st. Theron W. Johnson, pres.; William D. Nash, secy.; Chauncey Hale, treas.; William R. Farrington, mgr. Cap. \$250,000. Electric, gold and silver. Shaft, tunnel; hand (developing). C. R. Waters, supt.
Ward District	Boulder	Rider Haggard Mining Co., Frank E. Page, pres.; Bela I. Lorat, secy.; Joseph P. Hanna, treas.; F. W. Mallory, mgr. Cap. \$100,000. Rider Haggard, Zulu, She, He, silver. Tunnel, shaft, slope; refractory; horse, hand (developing).
Ry. Sunset	776 1/4 m.	Fred L. Ames, Boston, Mass. New Market, gold and silver. Shaft; free, steam.
"	"	Bestes Milling & Mining Co., Boulder, Colo. W. L. Bates, pres. and mgr.; O. W. Stone, secy. and treas. Cap. \$1,200,000. Baxter, gold, shaft, free; 40 stamps. L. R. Stearns, supt.
"	"	John T. Duncan, Dew Drop, gold, silver and copper. Tunnel, shaft, 300 tons, free, steam.
"	"	Edward Harrigan, Ruby, gold and silver. Shaft, tunnel, 300 tons; free, 10 stamps.
"	"	Hulings & Co., Cap. \$80,000. Columbia, gold and silver. Shaft, 1,000 tons, refractory; steam; 5 stamps. W. W. Hulings, supt.
"	"	Madelone Consolidated Mining & Milling Co., New York, N. Y., 31 Nassau st. Walter M. Smith, pres.; Charles H. Wright, secy. and treas.; E. Kenyon, mgr. and supt. Cap. \$750,000. Madelone, gold, silver and copper. Shaft, 10,000 tons; refractory, steam; 100 stamps.
"	"	R. Z. Mason, Cap. \$85,000. Park, Powhattan, Grant, gold and silver. Shaft, 800 tons, free, steam.
"	"	Puzzler Gold Mining & Milling Co., Boulder, Colo. R. A. Duncan, pres. and mgr.; Charles H. Wise, secy. and treas. Cap. \$300,000. Puzzler, gold. Shaft, tunnel, free, steam; 40 stamps. R. A. Duncan, supt.
"	"	John Seba, Celestial, gold. Shaft, free, steam (developing). J. T. Boyd, supt.
"	"	U'Gen Mining & Milling Co., Philadelphia, Pa., 608 Chestnut st. R. H. Kline, M. D., pres.; J. Quiney Hunsicker, secy.; Jos. K. Trivison, treas. Cap. \$150,000. U'Gen, gold. Shaft, 10,000 tons, free; refractory; 30 stamps. John S. Reid, supt.
"	"	H. J. White, Pennsylvania, gold. Tunnel; free.
"	"	Wirth & Hulings, Morning Star Extension, gold and silver. Shaft, 15 tons; refractory, steam. J. G. Wirth, supt.
Westville	Custer	Bull Domingo Mining & Leasing Co., Wm. M. Leut, pres.; S. Z. Dickson, secy. and mgr.; Henry H. Tompkins & Co., treas. Cap. \$100,000. Bull Domingo, silver and lead. Shaft, 3,000 tons; free; steam. W. H. Eatin, supt.
Ry. Cotopaxi	215.	
White Cross	Hinsdale	Bon Homme Mining Co., New Orleans, La., 34 and 36 St. Charles st. J. T. Azouek, pres.; John Glynn, Jr., secy.; Frank Emmett, treas.; J. F. Steinbeck, mgr. and supt. Cap. \$150,000. Bon Homme, Pelican and others, gold, silver, copper. Shaft, tunnel, refractory.
"	"	Robert Kissack, Cap. \$100,000. Bald Eagle Mine, gold, silver. Shaft, 50 tons, refractory; horse.
"	"	White Cross Mining & Milling Co., Geo. W. M. Hall, pres.; H. T. Ripley, secy. and treas.; M. T. Child, mgr. Cap. \$15,000. Illinois Boy, silver. Shaft, tunnel.
White Pine,	Garrison	F. P. Bonnell, Superior, Neb. Silver Cord, gold, silver, copper, lead. Shaft; refractory, steam (developing).
Ry. Sargents	215 1/2 m.	
"	"	Denver City Consolidated Mining Co., Pueblo, Colo., 323 Santa Fe av. C. I. Wall, pres.; Fredk. Rohrer, secy. and treas.; Ward A. Hinkley, mgr. and supt. Cap. \$300,000. Denver City, silver, gold, lead. Tunnel, shaft, 1,000 tons; steam.
"	"	Matchless Mining Co., S. Matthews, pres.; L. Ely, secy.; T. V. Whiteclaw, treas.; A. K. Porter, mgr. Cap. \$15,000. Matchless, silver, lead. Shaft; steam (developing).
"	"	Nash & Edgworth, Cap. \$50,000. Rochester, silver and lead. Tunnel, shaft, 60 tons; hand.

## GOLD AND SILVER—(CONTINUED).

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
White Pine <i>(Continued.)</i>	Gunnison	Porter & Pearce. Cap. \$10,000. Monitor, lead, silver, 200 tons; free; steam.
"	"	Diek Tullar. Lilley, silver. Shaft, drift, slope, 150 tons; steam.
Woodland Park, El Paso By. 26.	El Paso	Quaker Girl Milling & Mining Co. A. B. Hackman, pres.; Geo. I. Bentley, secy.; John Ansfield, treas.; H. D. Hackman, mgr. Cap. stk. \$1,000,000. Quaker Girl, gold, silver. Shaft; free; hand (developing).
"	"	Woodland Park Mining Co. A. B. Hackman, pres.; Geo. I. Bentley, secy.; N. W. Terrill, treas. Letta, gold, silver. Shaft; hand (developing). M. M. Baldwin, supt.

## GYPSUM.

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
Loveland	Larimer By. 776.	A. Wild. Cap. \$10,000. Gypsum. Open, pit, 6,000 tons; steam, water.
Pueblo	Pueblo By. 26, 215, 420, 776.	Pueblo Cement Plaster Co., 102 W. C. st. Geo. Holmes, pres.; J. C. Utter, secy.; Geo. F. Harpster, treas.; A. C. Daniels, mgr. Cap. stk. \$60,000. Salt Creek, gypsum. Open, pit, 20,000 tons; steam; cement mill, 20,000 tons. R. H. Randall, supt.

## IRON

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, BLAST FURNACES, ETC., AND NAME OF MINE SUPERINTENDENT.
Calumet (P. O. Salida)	Chaffee By. 215.	Colorado Coal & Iron Co., Pueblo, Colo., B. st. Edward J. Berwind, pres.; Thos. E. H. Curtis, secy. and treas.; E. M. Steck, gen. mgr. Cap. stk. \$10,000,000. Calumet Mine. Tunnel, 50,000 tons; green mag- netic; steam; 3 furnaces. T. B. Butler, supt.
Colorado City	El Paso By. 215.	The Ute Pass Paint Co. Ward Hunt, pres.; J. B. Glasser, secy.; M. J. Myers Smith, treas.; B. C. Hub- bell, mgr. Cap. stk. \$150,000. Red Ruby, red oxide. Shaft, tunnel (developing).
Jamestown	Boulder By. Boulder 776 (14 m.), Lyons 88 (10 m.).	W. B. Clemens. Argo, lead, iron. Shaft, 50 tons; refractory; horse.
Leadville	Lake By. 26, 215, 776.	Breece Mining Co., New York City, 115 Broadway. Chas. A. Rogers, pres.; Henry Bradstreet, secy. and treas.; J. H. Fletcher, mgr. and supt. Cap. stk. \$5,000,000. Ben Franklin, Wm. Penn, Philadelphia, red hematite. Shaft, open.
Orient (P. O. Villa Grove)	Saguache By. 215.	Colorado Coal & Iron Co., Pueblo, Colo., B. st. Edward J. Berwind, pres.; Thos. E. H. Curtis, secy. and treas.; E. M. Steck, gen. mgr. Cap. stk. \$10,000,000. Orient Mine. Tunnel, 50,000 tons; red hematite; steam; furnaces. T. B. Butler, supt.

## KAOLIN.

LOCATION OF MINE OR BANK, RAILWAYS, WATER ROUTES, AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE OR BANK, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, ETC., AND NAME OF SUPERINTENDENT.
New Castle	Garfield By. 25, 215.	New Castle Kaolin Mining & Manufacturing Co. P. C. Coryel, pres. and mgr.; Max L. Shayer, secy.; J. W. Ross, treas. Cap. stk. \$50,000. Kaolin Lode. Tunnel; steam. P. C. Coryel, supt.
Silver Cliff	Custer By. Cotopaxi 215.	W. G. Washington. Washington, kaolin. Open; 900 tons.

## LEAD AND ZINC

LOCATION OF MINE RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, SMELTERS, ETC., AND NAME OF MINE SUPERINTENDENT.
Robinson	Summit By. 215, 776.	Pohl & Co. Homestake, galena. Shaft, drift; steam.
Silver Cliff	Custer By. Cotopaxi 215.	Faske Bros. Susan Jane, galena, lead. Tunnel; hand (developing). August Faske, supt.

MICA.

LOCATION OF MINE,  
RAILWAYS, WATER ROUTES  
AND SHIPPING POINT.  
TOWN AND COUNTY.

NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK,  
NAME AND KIND OF PRODUCT, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND  
OF POWER USED, ETC., AND NAME OF MINE SUPERINTENDENT.

Boulder  
Ry. 776.

Mica Monarch Mining Co., Denver, Colo., 1025 Seventeenth st. W., Geo. N. Brown, pres.; C. H. Ed-  
monds, secy. and treas. Cap. stk. \$250,000. Mica Monarch, mica. Tunnel and drifts.

PLATINUM.

LOCATION OF MINE,  
RAILWAYS, WATER ROUTES  
AND SHIPPING POINT.  
TOWN AND COUNTY.

NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK,  
NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER  
USED, AND NAME OF MINE SUPERINTENDENT.

Argentium  
(P. O. White Cross Ry.  
Lake City 215.

M. E. Holland & J. H. Brown, White Cross, Colo. Dexter, platinum, tin, nickel. Tunnel, 10,000 tons.

STONE, MARBLE, GRANITE AND ONYX

LOCATION OF MINE  
OR QUARRY,  
RAILWAYS, WATER ROUTES  
AND SHIPPING POINT.  
TOWN AND COUNTY.

NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK,  
NAME OF MINE OR QUARRY, KIND OF STONE, KIND OF QUARRY, ANNUAL OUTPUT IN TONS OF  
2,000 POUNDS, KIND OF POWER USED, STONE OR MARBLE MEAS., DIMENSIONS AND  
CAPACITY, ETC., AND NAME OF MINE SUPERINTENDENT.

Alabaster City,  
(P. O. Canon City) Ry.  
215.

The Colorado Alabaster Co., Denver, Colo. H. C. Russell, pres.; John D. Brownlee, secy., treas. and mgr.  
Cap. stk. \$200,000. Parian, Ute Park, Cliff, Summit. Tunnel, open pit; hand, horse. Chas. Buchanan,  
supt.

Beaver Creek  
Ry. 215.

Thos. Kelso, Thompson, lime. Open; hand.

Boulder  
Ry. 776.

Struthers & Smith. Gen. Canon, red sandstone. Hand, horse; mill, 800 tons.

Castle Rock  
Ry. 215.

John Anderson, Denver, Colo., 1510 Seventeenth st. Cap. \$50,000. Palmer, lava building stone. Open,  
3,000 tons; hand. Chas. Westman, supt.

"

Castle Rock Stone Co., Denver, Colo., 1636 Arapahoe st. J. Thomas, pres.; S. T. Hathaway, mgr. and  
supt. Cap. stk. \$20,000. Lava stone, white, pink. 35,000 tons.

"

The Douglass Lava Co., Colorado Springs, Colo., Gazette Bldg. P. W. O'Brien, pres. and mgr.; T. J. Fisher,  
secy. and treas. Cap. stk. \$50,000. O'Brien, Palmer, lava. Open pit; slope. W. F. Sharp, supt.

De Beque,  
Ry. 215.

De Beque Mining Co., John Moore, pres. and mgr.; W. J. Moore, secy. and treas. Cap. stk. \$10,000. De  
Beque, sandstone. Steam, 40,000 tons. John Moore, supt.

Delta  
Ry. 215.

J. A. Beatty. Cap. \$3,500. Red sandstone. Open, 500 tons; horse; hand.

Fort Collins,  
Ry. 776.

The American Red Stone Co., Chicago, Ill., 1119 Chamber of Commerce. J. S. F. Batehin, pres. and mgr.,  
C. S. Johnson, secy. and treas. Cap. stk. \$150,000. Pleasant Valley, red sandstone. Slope, 25,000 tons;  
steam. E. L. Johnson, supt.

Garfield  
(P. O. Monarch Ry. 215.

Harry L. Acker, Monarch, Colo. Cap. \$30,000. Faint Hope, Napoleon III, Josephine, marble and limestone.  
Tunnel, shaft; horse, hand, 1,750 tons; limekiln, 5,000 tons.

Gunnison  
Ry. 215.

Geddis & Seeler, Denver, Colo., Seventh and Market sts. South Park, Aberdeen, granite. Steam.

"

C. T. Sills, Gunnison, Colo., cor. Virginia av. and Wisconsin st. Cap. \$5,000. White Wood, limestone.  
Slope, 3,000 tons; hand.

Lyons  
Ry. 26.

Pulliam, Dewey & Co., E. L. Pulliam, pres.; M. C. Dewey, secy.; S. Dewey, treas. Cap. stk. \$20,000.  
Fair View, lagging. Open, hand, 600 tons. E. L. Pulliam, supt.

Marble,  
Ry. 26, 215.

Evans Williams. Colored Marble, Silver Queen, slate, marble.

"

Marble City Quarry Co., Philadelphia, Pa., 931 Arch st. R. H. Kline, pres.; A. P. Douglas, secy.; S. S.  
Kline, treas.; A. J. Mitchell, mgr. Cap. stk. \$5,000,000. Marble. Open, shaft, tunnel; electricity.

Miller Creek  
(P. O. Thomasville) Ry.  
26.

The Miller Creek Land & Lime Co., Edward F. Browne, pres.; E. R. Beard, secy. and treas.; A. A. Beard,  
gen. mgr. Cap. stk. \$300,000. Miller Creek, limestone. Open, 30,000 tons; gravity tramway; lime-  
kiln, 15,000 tons. F. F. Heiner, supt.

Peac hollow  
Ry. 26.

The Peac-hollow Sandstone Co., Denver, Colo., 614 Boston Bldg. W. B. Devereux, pres.; S. M. Munby,  
mgr. Cap. stk. \$100,000. Red sandstone. Steam; mill.

Platte Canon  
Ry. 776.

M. H. Blodgett local. Limestone. Shaft, limekiln, 200 tons.

"

Carl Bruehne. Cap. \$35,000. Jefferson County, white sandstone. Open, 10,000 tons; hand.

Pueblo  
Ry. 215.

A. T. Fisher. Cap. \$10,000. Cape Horn, lime and sandstone. Open, 75,000 tons; steam; mill, limekiln,  
1,080 tons.

Ridgeway  
Ry. 215.

R. C. Carr & Co., C. C. Carr, pres.; W. Lewis, secy.; C. Batters, treas.; R. C. Carr, mgr. and supt. Cap.  
stk. \$1,000. Bluestone. Open; limekiln, 600 tons.

"

Wilcox Brothers. Cap. \$3,000. Dallas, Star Light, brown sandstone. Tunnel, 30 tons; hand.

Thomasville  
Ry. 26.

Perry A. Kallough. Cap. \$10,000. The 99, limestone. Open, 24,000 tons; hand, steam, limekiln, 9,000  
tons.

# CONNECTICUT

## COPPER

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, FURNACES, ETC., AND NAME OF MINE SUPERINTENDENT.
Bristol Ry. 513.	Hartford	Bristol Copper & Silver Mining Co., Col. Walter Cutting, pres.; E. G. Hubbel, secy., treas. and mgr. Cap. stk. \$300,000. Bristol, copper, silver and pyrites. Shaft; steam; mill.

## STONE, MARBLE, GRANITE AND ONYX

LOCATION OF MINE OR QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE OR QUARRY, KIND OF STONE, KIND OF MINE OR QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STONE OR MARBLE MILLS, LIMEKILNS AND CAPACITY, ETC., AND NAME OF MINE SUPERINTENDENT.
Branford Ry. Stony Creek 504.	New Haven	Stony Creek Red Granite Co., Samuel Babcock, pres.; Everett S. Grant, secy.; George Pierce, treas. and mgr. Cap. stk. \$150,000. Red Hill, granite. Slope; steam, horse, hand. W. W. Kiltredge, supt.
Bridgeport, Ry. 480, 504.	Fairfield	F. W. Beers, 401 Broad st. Cap. \$10,000. Old Mill. Slopes, 7,000 tons; steam. Geo. Bradley, supt.
Cromwell Ry. 431, 504.	Middlesex	Connecticut Free Stone Quarry Co., Robinson Gill, pres.; Frank W. Bliss, secy.; Oliver W. Mack, treas. and mgr. Cap. stk. \$75,000. Free Stone, brown. Open pit; steam.
"	"	New England Brown Stone Co., H. Wales Lines, pres.; E. B. Cowles, secy.; A. Chamberlain, treas. Cap. stk. \$250,000. New England, brown stone. Open pit, 150,000 tons; steam. W. F. Rainey, supt.
Danbury, Ry. 312, 513.	Fairfield	Carpenter Bros., Port Chester, N. Y. (local). Cap. \$10,000. Guess. Open pit, 20,000 tons; steam.
Fairfield Ry. 504.	Fairfield	The R. D. Pierce Jr. Co., Bridgeport, Conn., 273 Main st. D. B. Pierce jr., pres. and treas. T. B. Hastings, v.-pres.; J. J. Anderson, secy. Trap Rock, trap rock. Open pit, 30,000 tons; steam.
Glastonbury, Ry. South Manchester 513.	Hartford	H. R. Brooks, East Glastonbury, Conn. Cap. \$100,000. Nipsis, Lily Pond, gray granite. Open pit, 1,000 tons; hand.
Greenwich Ry. 187.	Fairfield	John Voorhis, New York City, N. Y., 403 E. Forty-second st. Cap. \$75,000. Greenwich Stone Quarries, granite. Open cut, 15,000 tons; horse. John Smith, supt.
Gulford Ry. 501.	New Haven	Darwin N. Benton, Sachem's Head, granite. Steam.
Leetes Island, Ry. 31, 504.	New Haven	John Beattie. Cap. \$100,000. Beattie, granite. Open pit, 18,000 tons; steam.
Middletown Ry. 504.	Middlesex	Columbia Granite Co., J. G. Murphy, pres.; A. S. A. Himmelwright, secy.; W. A. Kennan, treas. Cap. stk. \$50,000. Benvenue, granite. Open pit; steam (developing).
"	"	Whitmore Bros., N. H. Whitmore, mgr. Cap. stk. \$40,000. Maromas Quarry. Open pit, 200,000 tons; steam.
Portland, Ry. 187, 501.	Middlesex	Brainerd Quarry Co., Le Roy Brainerd, pres. and mgr.; Frank Brainerd, secy. and treas. Cap. stk. \$40,000. Brainerd, brown stone. Open pit, 45,000 tons; steam.
"	"	Middlesex Quarry Co., Murray Hill Hotel, New York. Ferdinand Gildersleeve, pres.; Chas. A. Jarvis, secy. and treas.; F. W. Russell, mgr. Cap. stk. \$500,000. Middlesex, sandstone. Open pit, 40,000 tons; steam, horse; hand; mill.
"	"	Shaler & Ball Quarry Co., John H. Hall, pres.; W. H. Edwards, secy. and treas.; Fred De Peyster, mgr. Cap. stk. \$100,000. Sandstone. Open pit, 50,000 tons; steam. Samuel B. Whitby, supt.
Roxbury (P. O. Roxbury Station) Ry. Roxbury 669.	Litchfield	E. Mower & Co. Cap. \$75,000. Mine Hill, granite. Open pit, 20,000 tons; horse. R. T. Blades, supt.
Stonington Ry. 508.	New London	Murray & Co., Westery, R. I. Cap. stk. \$5,000. West Side, granite. Open pit, 5,000 tons; steam.
Warren Ry. Cornwall Bridge 312.	Litchfield	Frank P. Bolles, New Milford, Conn. Comstock Quarry. Slope, 100 tons; hand.
Waterford Ry. 504.	New London	Davis Bros., Niantic, Conn. Winter Davis, mgr. Cap. \$15,000. Davis Granite Quarries, white granite.
Windham Ry. Willimantic 129, 513.	Windham	Edson & Calkins, Willimantic, Conn., Quarry st. Granite. Open pit, 10,000 tons; steam and hand.

# DELAWARE

## STONE, MARBLE, GRANITE AND ONYX

LOCATION OF MINE OR QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE OR QUARRY, KIND OF STONE, KIND OF MINE OR QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STONE OR MARBLE MILLS, LIMEKILNS AND CAPACITY, ETC., AND NAME OF MINE SUPERINTENDENT.
Wilmington, Ry. 42, 523, 820.	New Castle	Brandywine Granite Co., Wilmington, Del. William M. Field, pres. and treas.; Merriek Horn, secy. Cap. stk. \$90,000. Granite. 125,000 tons; steam, horse, hand. George Patterson, supt.
"	"	John H. Flanner, Wilmington, Del., 416 E. Eleventh st. Cap. \$1,500. Brandywine Quarry, granite. Open pit, 2,000 tons; horse, hand.

## FLORIDA

## KAOLIN

LOCATION OF MINE OR BANK, RAILWAYS, WATER ROUTES, AND SHIPPING POINT.	TOWNS AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE OR BANK, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, ETC., AND NAME OF SUPERINTENDENT.
Bloomfield Lake Ry., Leesburg 263 and 265.		Bloomfield Kaolin & Phosphate Mining Co., Col. Alex. Lynch, pres.; Hon. H. L. Anderson, secy.; Col. V. J. Shipman, treas.; J. S. Warner, mgr. Cap. stk. \$60,000. (Developing.)

## MINERAL PAINT

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWNS AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF PRODUCT, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, PAINT MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
Seville Ry., Campbell's Sta. 12.	Volusia	Florida Iron Mining & Manufacturing Co., Orlando, Fla., R. H. Peak, pres.; H. H. Dickson, secy. Cap. stk. \$500,000. Ferro-manganese and yellow ochre. Open.

## PHOSPHATE

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWNS AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
Achme Ry. 265, 691.	Folk	Massachusetts Phosphate Co., Portland, Me., John F. Varbell, pres.; C. F. Allen, secy. and treas.; John F. Ross, mgr. Cap. stk. \$1,000,000. Massachusetts, pebble. Open; steam; mill, 30,000 tons; James Ross, supt.
"	"	United States Phosphate Co., Boston, Mass., 504 Exchange Bldg., F. J. Hutchingson, pres.; C. Hale, secy.; Ben C. Leonard, treas.; W. S. Cogswell, mgr. United States, pebble and rock. Open and river, 15,000 tons; steam; mill, Albert F. Gartner, supt.
Albion, Ry. 263.	Levy	Albion Mining & Manufacturing Co., Gainesville, Fla., D. Camp, pres.; R. J. Camp, secy. and treas.; W. N. Camp, mgr. Cap. stk. \$300,000. Camp, rock. Open, 20,000 tons; steam.
"	"	Albion Phosphate Mining Co., Baltimore, Md., 12 St. Paul st., Angus Cameron, pres.; Henry J. Bowdoin, secy. and treas.; Malcolm Sinclair, mgr. Cap. stk. \$500,000. Albion, rock. Open; steam and horse.
"	"	Oseola Phosphate Co., New York City, N. Y., 19 Whitehall st., W. A. Kassar, pres.; G. J. Bradish, secy. and treas.; Fred. Cumberly, supt. Rock. Open pit.
"	"	Portland Phosphate & Chemical Co., Portland, Me., Josiah H. Drummond, pres.; Lorenzo Taylor, secy. and mgr. Cap. stk. \$200,000. Portland, rock. Open pit, hand. L. Taylor, supt.
Anglo P. O. and Ry. High Springs 658.	Alachua	Anglo Florida Phosphate Co., Ocala, Fla., Opera House Block, H. H. Graham, pres.; P. J. Peacher, secy.; S. M. Meek, treas.; Cap. stk. \$600,000. Anglo, rock. Open, 25,000 tons; steam; mill, 25,000 tons; H. H. Graham, supt.
Anthony Ry. 263.	Marion	The Anthony Phosphate Co., Anthony, Fla., Jos. W. Wells, pres.; Henry S. Kedney, secy., treas. and mgr. Cap. stk. \$100,000. The Anthony Mine, pebble. Open; steam; mill, 15,000 tons.
"	"	American Phosphate Co., Emory H. Miller, secy. and treas. A Lutz, mgr. American, rock. Steam; mill, 15,000 tons. T. W. Lutz, supt.
"	"	The Central Florida Phosphate Co., New York City, 120 Broadway, Delavan C. Seville, pres.; Julius Hawthorne, secy.; Reuben Leland, treas.; Prof. E. T. Cox, mgr. Cap. stk. \$250,000. Central Florida, pebble. Open, 30,000 tons; steam.
"	"	Compagnie des Phosphates de France, Paris, France, 16 Place Vendome, E. Farcy, pres.; G. Thuillier, mgr. Cap. stk. \$1,000,000. Open, 30,000 tons; steam, hand; mill, 30,000 tons.
"	"	Duncan Co., Thos. R. Baker, mgr. Duncan, pebble. Steam; mill, 4,500 tons.
"	"	Knott Bros., Cap. \$30,000. Knott, rock. Open, 7,500 tons; steam; mill, 7,500 tons. J. T. Brawley, supt.
"	"	Lindner Phosphate Co., Cap. stk. \$12,000. Lindner, rock. Open; steam (developing).
"	"	Lutz Phosphate Co., Hagerstown, Md., Lutz, rock. Open; steam; mill.
"	"	Maryland Phosphate Co., W. M. McDowell, mgr. Cap. stk. \$250,000. Maryland, rock. Open, 15,000 tons; steam; mill, 15,000 tons.
"	"	Plate Rock Phosphate Co., W. T. Adams, pres.; W. M. Ross, secy. Cap. stk. \$10,000. Plate Rock, rock. Open, 5,000 tons; steam.
"	"	The Stranathan Phosphate Co., Jacksonville, Fla., L. M. Thayer, pres. and mgr.; N. S. Pennington, secy., and treas. Cap. stk. \$100,000. Stranathan, rock. Open, 25,000 tons; steam.
Arcadia Ry. 31.	De Soto	Arcadia Phosphate Co., Savannah, Ga., 109 Bay St., Joseph Hull, pres.; H. P. Richmond, secy. and treas. Cap. stk. \$300,000. Arcadia, pebble. Dredge, 22,400 tons; steam. W. W. Clark, supt.
"	"	Charlotte Harbor Phosphate Co., Savannah, Ga., 109 Bay St., Joseph Hull, pres.; H. P. Richmond, secy. and treas. Cap. stk. \$100,000. Charlotte Harbor, pebble. Dredge, steam, 30,000 tons. F. W. Hahnberg, supt.
Archer Ry. 263.	Alachua	Seminole Hard Rock Phosphate & Land Co., Jacksonville, Fla., J. L. Davis, pres.; A. O. MacDonell, secy.; George A. Maxwell, treas. Cap. stk. \$1,250,000. Seminole, rock and pebble.

## PHOSPHATE—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN	COUNTY.	
Bartow	Polk	Bartow Phosphate Co., Charleston, S. C. W. B. Chrisolm, prest. and treas.; R. G. Chrisolm, secy.; L. R. Chazal, mgr. Cap. stk. \$250,000. Bartow. Open; steam (developing).
"	"	Homeland Mining & Land Co. W. H. Justin, prest. and treas.; W. H. Luedry, secy. Cap. stk. \$60,000. Homeland, pebble. Open, 1,500 tons; steam; mill.
"	"	The Lake Hancock Pebble Phosphate Co. R. W. Price, prest.; O. R. Price, secy.; T. M. Lybass, treas. and mgr. Cap. stk. \$100,000. Lake Hancock, pebble. Open, 30,000 tons; steam. T. M. Lybass, pebble. Open; steam, horse and hand; mill. B. H. Heyward, supt.
"	"	Land Pebble Phosphate Co., Savannah Ga. L. W. Haskell, prest., treas., mgr. Cap. stk. \$80,000. Pebble. Open; steam, horse and hand; mill. B. H. Heyward, supt.
"	"	Mastodon Pebble Phosphate Co. Jay Shrader, prest.; G. A. K. Stevens, secy. and mgr.; Warren Tyler, treas. Cap. stk. \$50,000. Lake Hancock. Dredge, 2,000 tons; steam. J. T. Wear, supt.
"	"	Moore & Tatum Phosphate Co. A. G. Moore, prest., secy. and mgr. J. H. Tatum, treas. Cap. stk. \$25,000. Moore & Tatum, pebble. Open; steam.
"	"	Saddle Creek Phosphate Co., Vicksburg, Miss. C. T. Searles, prest.; A. G. Russell jr., secy., treas.; T. M. Searles, mgr. Cap. stk. \$300,000. Saddle Creek, pebble. Steam; expert outfit to reach 30,000 tons.
Bellevue	Marion	Bellevue Mining Co., Jacksonville, Fla., 15 and 17 Tonayth st. C. B. Smith, prest. and mgr.; W. F. Cochman, secy.; D. Greenleaf, treas. Cap. stk. \$10,000. Bellevue, supt. Open, 5,000 tons; steam. H. S. McKee, supt.
Bloomfield	Lake	Lake County Phosphate & Fertilizing Co. Geo. H. Tiffany, prest.; Wm. D. Mendenhall, secy.; Dr. Warren Spencer, treas., mgr. Cap. stk. \$20,000. Bloomfield, rock. Open; steam; mill, 3,000 tons. Ambrose Spencer, supt.
Blue Spring	Marion	Stonewall Phosphate Co., Jacksonville, Fla. J. R. Tysen, prest. Bryan Tallaferra, secy., treas. Cap. stk. \$500,000. Phosphate, rock. Open pit, 25,000 tons; steam.
Bowling Green	De Soto	National Peace River Phosphate Co., Jacksonville, Fla., 26 Main st. J. W. Archibald, prest.; A. F. Perry, secy. W. J. Harkishmeier, treas.; R. N. Ellis, mgr. and supt. Cap. stk. \$100,000. Pebble, Steam; dredge; mill, 25,200 tons.
Bronson	Levy	Bronson Pebble Phosphate Mining & Land Co. J. M. Bareo, prest.; P. M. Colson, secy.; W. J. Epperson, V. prest. and treas. Cap. stk. \$150,000. Bronson, rock and pebble. Open pit.
"	"	Suwannee River Phosphate Co., Atlanta, Ga., 6 E. Alabama st. M. Harrold, prest.; W. I. Zaehry, secy.; J. H. Porter, treas. Cap. stk. \$2,000,000. Suwannee River, rock and pebble. Open. C. P. Turner, supt.
Cleveland	De Soto	Gulf Phosphate Mining & Manufacturing Co., Charleston, S. C., 2 Exchange st. E. C. Williams jr., prest.; A. J. Sidman, secy. and treas.; E. L. Roche, mgr. Cap. stk. \$240,000. Pebble, 35,000 tons; steam; dredge; mill, 45,000 tons.
Cow Creek	Alachua	The Columbian Phosphate Co., of Florida, Jacksonville, Fla., N. E. cor. Bay and Main sts. C. C. Robertson, prest.; Charles H. Smith, secy.; W. G. Toomer, treas. Cap. stk. \$500,000. Cow Creek, rock. Open pit; steam; mill, 20,000 tons.
Dade City	Pasco	T. C. Fuller, Macon, Fla. Cap. \$5,000. Dade City Mines, rock. Open pit, 1,000 tons; hand.
Delaware	Hernando	The Pasco Phosphate Co., Chicago, Ill. Monadnock Bldg. Chester B. Davis, prest.; Franklin L. Chase, secy.; Levi A. Ebel, treas.; C. M. Wead, mgr. and supt. Delaware. Open pit, 25,000 tons; horse, hand.
Dunnellon	Marion	Marion Phosphate Co., Savannah, Ga., Cotton Exchange Bldg. George J. Baldwin, prest.; Wm. W. Rogers, secy., treas. Cap. stk. \$5,000,000. Rock. Open; steam, horse, hand; mill. Josiah Flournoy, supt.
"	"	Ocala & Blue River Phosphate Co., Ocala, Fla. Chas. N. White, prest. and treas.; L. Dozier, secy.; M. W. Ellis, mgr. and supt. Cap. stk. \$3,000,000. Elliston and Verda, rock. Open, 11,300 tons; steam, horse.
Eagle Mines	Marion	Eagle Phosphate Co., Harrisburg, Pa. A. T. McCreath, prest.; Ross Wilkins, secy. and treas.; Geo. E. Potts, mgr. Cap. stk. \$2,000,000. Rock. Open, 10,000 tons, steam; mill, 15,000 tons. Jos. C. Williams, supt.
Fort Meade	Polk	Chillicoepio Phosphate Co. H. F. Crawford, prest.; F. F. Crawford, mgr. Cap. stk. \$500. Chillicoepio, Open, 1,000 tons; horse, mill, 1,500 tons.
"	"	Fort Meade Phosphate, Fertilizing, Land & Investment Co. H. B. Smith, prest.; M. R. Cooper, secy. and treas.; J. E. Robeson, mgr. Cap. stk. \$50,000. Fort Meade, pebble, Steam.
"	"	Virginia Florida Phosphate Co., Petersburg, Va., Sycamore st. Pascal Davis, prest.; L. E. Balmer, secy. and treas.; T. R. Dunn, mgr. Pebble. Open, 6,000 tons; steam.
Fort Myers	Lee	Florida Phosphate Mining, Transportation & Storage Co., Bartow, Fla. J. R. Brownell, prest.; J. S. Pence, secy.; J. H. Tatum, treas. Cap. stk. \$50,000. Pebble, Steam dredge, 40,000 tons; steam.
Fort White	Columbia	Argyle Phosphate Co. W. W. Richards, prest.; W. E. McKay, mgr. Cap. stk. \$100,000. Argyle, 1,000 tons; steam.
"	"	Columbian Phosphate Co., Jacksonville, Fla., cor. Bay and Main sts. C. C. Robertson, prest.; C. H. Smith, secy.; W. G. Toomer, treas. Cap. stk. \$700,000. Columbian, rock. Open; hand and steam.
"	"	Fort White Phosphate Co., Kansas City, Mo., 719 Walnut st. E. B. Robison, prest.; W. D. Clark, secy. and treas.; R. G. Perrin, mgr. and supt. Rock. Open, 12,000 tons; steam.
Gainesville	Alachua	Magnolia Mfg. Co. E. C. F. Saints, prest.; F. Boyar, secy.; B. W. Fontana, mgr. Cap. stk. \$50,000. Pebble, 3,000 tons; horse; mill, 5,000 tons.
"	"	Paradise Fertilizer Co. J. W. Ashby, prest.; O. J. Mout, secy., treas. and mgr. Cap. stk. \$3,500. Bone and pebble. Open; steam; mill, 6,000 tons.
Haskell	Polk	Mastodon Pebble Phosphate Co., Bartow, Fla. Dr. Jay Shrader, prest.; G. A. K. Stevens, secy. and mgr.; Warren Tyler, treas. Cap. stk. \$50,000. Mastodon, Pebble Mines. Dredge, 15,000 tons; steam; mill, 15,000 tons. J. T. Wear, supt.
Helong	Columbia	Tchetchuknee Phosphate Co., Jacksonville, Fla., Court House. M. C. Rice, prest.; J. C. Cooper, secy.; N. B. Broward, treas. and mgr. Cap. stk. \$35,000. Tchetchuknee, rock. Open; steam.

## PHOSPHATE (CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWNS	AND COUNTY	
Hernando, Ry. 283, 674.	Citrus	Globe Phosphate Mining & Manufacturing Co., Oeala, Fla., 2 R. Biggs, pres.; W. S. Turner, secy.; C. S. Young, treas. Cap. stk. \$2,400,000. Globe, lime. Open, 3,000 tons; hand, M. L. Tuttle, supt.
"	"	Ernest Vager. Leesburg, Fla. Cap. \$10,000. Climax, pebble. Open; hand.
High Springs Ry. 691.	Alachua	Anglo-Florida Phosphate Co., Oeala, Fla., 1 Opera House Block. H. H. Graham, pres. and mgr.; P. J. Peacher, secy.; G. C. Stevens, treas. Cap. stk. \$500,000. Rock. Open; steam and hand; mill, 35,000 tons. H. H. Graham, supt.
"	"	Excelsior Phosphate Co., Jacksonville, Fla. Henry M. Brooks, pres.; W. S. Prindle, secy. and treas. Cap. \$100,000. Excelsior Mine, 15,000 tons; steam.
"	"	H. F. Drifton & Co., Gainesville, Fla. C. W. Chase, mgr. Rock. Open, 20,000 tons; steam. L. O. Gold, supt.
Homeland Ry. 257.	Polk	Homeland Mining & Land Co., Cincinnati, Ohio, 180 Walnut st. W. H. Justice, pres.; W. H. Lenders, secy.; F. R. McGeheans, treas.; M. W. La Rue, mgr. Cap. stk. \$50,000. Homeland, pebble. Dredge, steam; mill, M. W. La Rue, supt.
"	"	Whitaker Phosphate Co., Kausus City, Mo., 716 Delaware st. Dr. H. C. Crowell, pres.; J. A. Moulner, secy.; Robert M. Snyder, treas.; M. S. Dowden, mgr. Cap. stk. \$50,000. Pebble mines. Open, 4,500 tons; steam; mill, kiln, 6,000 tons. Miles Morandey, supt.
Inverness Ry. 674, 691.	Citrus	Cove Bend Land & Phosphate Co., W. K. Jackson, pres. and mgr.; R. P. Moore, secy.; W. H. Meadow, treas. Cap. stk. \$200,000. Phosphate lime. Open; steam.
"	"	Gem Phosphate Co., Leesburg, Fla. M. W. Lovell, pres.; C. P. Lovell, secy. and treas. Cap. stk. \$50,000. Rock developing.
Kendrick Ry. 287.	Marion	Standard Phosphate Mining & Chemical Co., Alexandria, Va. A. H. Agnew, pres. and mgr.; M. B. Harlow, secy. and treas. Cap. stk. \$50,000. Matilda, rock. Open; steam. H. E. Anderson, supt.
La Crosse Ry. Hague 658.	Alachua	Lanellon Phosphate & Fertilizer Co., Horatio Davis, pres.; W. J. Way, secy. and treas.; Wm. Flake, mgr. and supt. Cap. stk. \$50,000. Lanellon, phosphate. Open, 3,000 tons; steam, mill, 3,000 tons.
Lake City Ry. Branford 658.	Columbia	Columbia Phosphate Co., James E. Young, pres. and treas.; A. B. Hart, secy. and mgr. Cap. stk. \$50,000. Rock. Open, 2,500 tons; hand.
"	"	Lake City Land & Timber Co., 17 Railroad st. James E. Young, pres.; A. B. Hart, secy.; J. A. Crawford, treas.; Jas. C. Getzen, mgr. Cap. stk. \$50,000. Rock. Open, 30,000 tons.
Lakeland Ry. Fort Tampa 263.	Polk	Bone Valley Phosphate Co., Boston, Mass., 209 Washington st. Orin T. Gray, pres.; C. B. Hale, secy.; L. W. Hastings, treas.; John Beatty, mgr. Cap. stk. \$250,000. Bone Valley, pebble. Open, 50,000 tons; steam; mill, 50,000 tons. F. O. Warner, supt.
Liverpool Ry. Charlotte Harbor 31.	De Soto	South Florida Phosphate Co., E. T. Woodcock, pres.; J. H. Tatum, secy.; J. S. Renee, treas. and mgr. Cap. stk. \$480,000. Peace River, pebble, rock. Open, 15,000 tons; steam; pump, mill, 15,000 tons.
Macon Ry. 283, 691.	Pasco	Ceres Phosphate Mines. Cap. \$50,000. Ceres Mines, rock. Open, 2,000 tons; steam; mill, 1,000 tons. T. C. Filler, supt.
Marvinla, Ry. 408.	Hillsboro	Pebble Phosphate Co., Jacksonville, Fla., 16 E. Bay st. John L. Marvin, pres.; Blair Burwell jr., secy.; Chas. Marvin, treas.; E. P. Tallafiero, mgr. and supt. Cap. stk. \$1,000,000. Pebble. Pump, 20,000 tons; steam; mill, 20,000 tons.
Middleburg Ry. Jacksonville 658.	Clay	Black River Phosphate Co., Jacksonville, Fla., 16 W. Bay st. D. G. Ambler, pres.; J. V. C. Stockton, secy., treas. and mgr. Cap. stk. \$200,000. Black River, pebble. Pump, shaft, 25,000 tons; steam; mill, 25,000 tons.
Myers Ry. 31.	Lee	Calosahatche Phosphate Co., Tampa, Fla. Chas. A. Green, pres.; W. D. Lewis, secy. and treas.; H. E. Stannard, mgr. Cap. \$150,000. Steam dredge. Just commenced.
Ocala Ry. 263, 265, 674.	Marion	Chicago-Florida Phosphate Co., 1 Opera House Block. C. F. Rice, pres.; Henry S. Merritt, secy.; C. B. Van Kirk, treas.; P. J. Peacher, mgr. Cap. \$3,000,000. Hard rock, phosphate. Open pit, just commenced; steam; mill, 20,000 tons. T. E. Buser, supt.
"	"	Ohio Phosphate Co., G. H. De Golyer, pres.; A. F. Herold, secy. and treas. Cap. stk. \$50,000. Ohio, rock. Open, 5,000 tons; steam.
Oriando Ry. 267, 283, 691.	Polk	Standard Pebble Phosphate Co., John H. Talbutt, pres.; J. N. Bradshaw, secy.; Natl. Peyton, treas.; R. E. Rose, mgr. and supt. Cap. stk. \$500,000. Standard, pebble. Steam.
Paradise, Ry. 658.	Alachua	Paradise Fertilizer Co., Gainesville, Fla. John W. Ashby, pres.; O. J. Moat, secy., treas. and mgr. Cap. stk. \$25,000. Phosphate bone. Open; steam; mill, 3,000 tons.
Pemberton Ry. Bonnie May Switch 691.	Hernando	M. C. Rendell & Co., Dale City, Fla. Bonnie May, pebble. Open pit, 5,000 tons; steam; mill, 5,000 tons. M. C. Rendell, supt.
Perry Ry. Madison 263.	Taylor	National Phosphate & Mining Co., McKeesport, Pa. W. A. Dunshee, pres.; I. L. Devenny, secy.; E. E. Dearborn, treas.; T. A. Congdon, mgr. and supt. Cap. stk. \$200,000. Rock. Open pit developing.
Peru Ry. Tampa 263, 691.	Hillsborough	Peruvian Phosphate Co., Tampa, Fla. Lock Box 8. W. T. Roberts, pres.; G. R. Booz, secy. and treas. Cap. stk. \$50,000. Rock and pebble.
Phosphate Ry. Tampa 263, 691.	De Soto	Jacksonville Peace River Phosphate Co., Jacksonville, Fla., cor. Bay and Main sts. Henry Robinson, pres.; A. B. Campbell, secy.; John L. Marvin, treas.; A. G. Bigelow, mgr. Cap. stk. \$1,000,000. Jacksonville Peace River, pebble. Dredge, 20,000 tons; steam.
Phosphoria Ry. 265, 691.	Polk	The Florida Phosphate Co., Ltd., London, Eng., 1 Fenchurch av. Edward Packard jr., pres.; Oscar Michael, secy.; W. S. Warner, mgr. Cap. stk. \$1,000,000. Rock. Open, 200,000 tons; steam, mill, 200,000 tons.
Plant City Ry. 263, 691.	Hillsborough	The People's Pebble Phosphate Co., Otis Grey, pres.; Francis M. Loomis, secy.; Fred S. Woolworth, treas. Cap. stk. \$850,000. Pebble. Open, 4,000 tons; steam dredge.
Rock Springs Ry. 674.	Marion	Piedmont Coal & Phosphate Co., Piedmont, W. Va. John Skaridin, pres.; W. T. Blackstone, secy.; J. S. Jamieson, treas.; Jas. M. Graham, v.-pres. and mgr. Cap. stk. \$1,000,000. Rock Springs, rock. Open, 10,000 tons; steam; mill, 20,000 tons. Edward Hiller, supt.
Rockwell Ry. Fernandina 674, 691.	Marion	Dunellon Phosphate Co., John L. Inglis, pres.; F. A. Tenzel, secy.; John F. Dunn, treas. Cap. stk. \$1,200,000. Dunellon, rock. Open; dredge, 60,000 tons; steam. Geo. A. Wells, supt.

## PHOSPHATE—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.			NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN	AND	COUNTY.	
Spartanburg Ry. 263.		Marion	Zeigler Phosphate Co., Ocala, Fla., Hafele Block. Thos. M. Crocker, prest.; Geo. W. Brown, secy.; Hugh E. Miller, treas.; C. C. Harris, mgr. Cap. stk. \$200,000. Zeigler, pebble. Open, 1,000 tons; hand. C. C. Harris, supt.
Summerfield Ry. 265.		Marion	Carney Phosphate Co. J. J. Cowan, prest.; Jos. Hirsh, secy.; P. M. Harding, treas.; R. S. Buck jr., mgr. Cap. stk. \$500,000. Carney, pebble. Open; steam, horse and hand; mill.
Tallahassee Ry. 263.		Leon	La Pierre Phosphate Co. Geo. W. Saxon, prest.; E. Dubois, secy.; Geo. Maginnis, treas.; W. L. Davids, mgr. Cap. \$50,000. Davids & Seabury Mining Co., rock. Tunnel; steam. Fred A. Seabury, supt.
Tampa Ry. 263, 694.		Hillsborough	Tampa Phosphate Co. Dr. H. T. Lykes, prest.; O. G. Sexton, secy. and treas.; Burton E. Coe, mgr. Cap. stk. \$25,000. Pebble. 10,000 tons; steam; dredge.
Welsh Ry. 263.		Marion	Cornwall Phosphate Co., Boston, Mass., 8 Deane st. John H. Welsh, mgr. Cap. \$40,000. Cornwall, rock. Open, 700 tons; hand; mill, 1,500 tons. John H. Welsh, supt.
"		"	Joseph F. Dean, Palatka, Fla., Emmett st. Cap. \$800. Cornwall, rock. Open, 700 tons; hand; mill, 3,000 tons. John H. Welsh, supt.



# GEORGIA

## COAL-BITUMINOUS

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, CORE OVENS, AND NAME OF MINE SUPERINTENDENT.
Durham . . . . . Walker (P. O. and Ry. Check- burg) E26, 280.		Chickamauga Coal & Iron Co., S. T. Piffott, pres't. and mgr.; Gordon Lee, secy. and treas. Cap. stk. \$500,000. Durham. Tunnel, 290,000 tons; horse; 230 coke ovens under construction. J. T. Harris, supt.

## GOLD AND SILVER

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
Cumming . . . . . Forsyth Ry. Buford 622.		Sawnee Mountain Mining Co., H. Estes, pres't.; Dr. John Hockenfull, treas.; J. O. James, mgr. and supt. Sawnee Mountain, gold. Placer; free.
Dahlonega . . . . . Lumpkin Ry. Gainesville 280, 622.		Phoenix Gold Mining Co., East St. Louis, Ill. Robert Bowburn, pres't.; F. E. Dickle, secy.; C. C. Kendall, treas. Cap. stk. \$500,000. Phoenix, gold. Placer.
" . . . . . "		Pride of Georgia Gold Mining Co., Weeping Water, Neb. T. K. Clark, pres't.; George Hindley, secy.; T. M. Howard, treas.; David Hunter, mgr. and supt. Pride of Georgia, gold. Shaft, open pit, refractory, free; steam; water.
" . . . . . "		Waverly Mining Co., St. Louis, Mo., Room 62 Turner Bldg. C. O. Godfrey, pres't.; G. H. Ten Brock, secy.; A. W. Train, treas. Cap. stk. \$100,000. Waverly, gold. Open pit.
New England City . . . . . DeKalb Ry. 240.		Addie-May Mining Co., Portland, Me., 38 Exchange St. Walter L. Emery, pres't.; Wm. H. Emery, secy.; E. J. Fletcher, treas. Cap. \$1,000,000. Addie-May developing.
Washington . . . . . Wilkes Ry. 280.		Thomas M. Garrett, Sons & Co. Stony Ridge, gold. Shafts; free; steam; 5 stamps. T. M. Garrett, supt.

## IRON

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, BLAST FURNACES, ETC. AND NAME OF MINE SUPERINTENDENT.
Cave Spring . . . . . Floyd		Georgia Manganese & Mining Co., J. M. Couper, pres't.; J. H. Couper, secy., treas. and mgr. Cap. stk. \$10,000. Manganese. Shaft, open pit, 2,500 tons; steam.
Cedarblow . . . . . Polk		North Georgia Mining Co., H. N. Van Deventer, secy. and treas.; W. L. Hickman, mgr. Cap. stk. \$15,000. Ledbetter, hematite. Open pit, 50,000 tons; steam. Robert McCarty, supt.
Emphson . . . . . Bartow		Brown & Jones, C. M. Jones, pres't.; M. H. V. Jones, secy. and treas.; H. A. Holland, mgr. Cap. stk. \$80,000. Cap. indiv. \$15,000. Brown, hematite. Open pit, tunnel, 30,000 tons; steam.
Etha . . . . . Polk		Etha Furnace Co., Rome, Ga., Hamilton Block, D. B. Hamilton, pres't.; Harper Hamilton, secy. and treas. Cap. stk. \$30,000. Etha Mine, hematite. 10,000 tons; steam, water, horse, hand; furnace. A. T. and J. J. Hamilton, supts.

## MICA

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF PRODUCT, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, ETC., AND NAME OF MINE SUPERINTENDENT.
Canton . . . . . Cherokee		Georgia Mica & Mineral Co., Ashtabula, Ohio. D. G. Palmer, pres't.; H. Fassett, secy. and treas. Cap. stk. \$50,000. Mica, kaolin. Shaft and tunnel; hand, horse.

## SLATE

LOCATION OF QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF QUARRY, KIND OF SLATE, KIND OF QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, MILLS, ETC., AND NAME OF QUARRY SUPERINTENDENT.
Rockmart . . . . . Polk		W. W. Jones & Co. Cap. \$10,000. Slate. Open, 6,000 tons; horse, hand. W. W. Jones, supt. and mgr.

## STONE, MARBLE, GRANITE AND ONYX

LOCATION OF MINE OR QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT.			NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE OR QUARRY, KIND OF MINE OR QUARRY, ANNUAL OUTPUT IN TONS OR 2,000 POUNDS, KIND OF POWER USED, STONE OR MARBLE MILLS, LICEKILNS AND CAPACITY, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWNS	AND	COUNTY.	
Covington Ry. 299.		Newton	H. C. & S. J. B. Freeman. Granite. Hand.
Crawford Ry. 284.		Oglethorpe	Georgia Granite Works. Cap. stk. \$5,000. Johnston, granite. Open pit, 2,500 tons; hand; mill. A. D. L. Mays, supt.
Graysville Ry. 307.		Catoosa	Graysville Mining & Manufacturing Co. Louis Hamburger, prest.; L. A. Camp, secy., treas. and mgr. Cap. stk. \$250,000. Limestone, fluxing stone. Open pit, 30,000 tons; steam; kiln, 50,000 tons. H. M. Harris, supt.
Holly Springs, Ry. 429.		Cherokee	Kenesaw Marble Co., Marietta, Ga. B. R. Legg, prest.; Geo. F. Newell, secy., treas. and mgr. Cap. stk. \$100,000. Verde Antique, marble. Open pit; steam; mill.
Lithonia, Ry. 280.		De Kalb	Jenkins & Co. Cap. stk. \$1,000. Lithonia, granite.
"		"	M. E. Maher, Atlanta, Ga., 171 Mangum st. Cap. \$75,000. Granite. 35,000 tons; steam.
"		"	Southern Granite Co., Atlanta, Ga., Kimball House. George Moertein, prest.; J. A. Eberhardt, secy., treas. and mgr. Cap. stk. \$100,000. Granite. 30,000 tons; steam, hand.
"		"	Wilson Bros. Wilson, granite. Open pit, 8,500 tons; hand.
Marble Hill, Ry. Tate 429.		Pickens	Southern Marble Co. O. W. Norecross, prest.; Z. D. Harrison, secy. and treas. Crystalline, white marble. Open pit, 6,000 tons; steam; mill. J. C. Gaines, supt.
Nelson Ry. 429.		Pickens	Blue Ridge Marble Co. Jno. W. Stoddard, prest.; Harry Dewar, secy. and treas.; Frank Dewar, mgr. Cap. stk. \$1,000,000. Georgia, marble. Mill.
Sparta Ry. 289.		Hancock	Georgia Quincy Granite Co., Macon, Ga., Exchange Bank Bldg. T. B. Artope, prest.; Jos. W. Palmer, secy. and treas.; T. E. Artope, mgr. Cap. stk. \$50,000. Granite. Slope, 10,000 tons; steam, hand; polishing mill. J. L. Mullally, supt.
Stockbridge Ry. 240.		Henry	M. E. Maher, Atlanta, Ga., 171 Mangum st. Cap. \$75,000. Granite. 40,000 tons; steam.
Stone Mountain, Ry. 280.		De Kalb	Beauchamp & Thompson. Stone Mountain, granite. Open; hand.
Tate Ry. 429.		Pickens	Georgia Marble Co. H. C. Clement, prest.; O. F. Bane, secy. and treas.; George H. Keeler, mgr. Cap. stk. \$1,500,000. Creole, Cherokee and 4 other mines, marble. 40,000 tons; steam; 2 mills.

## TALC

LOCATION OF MINE OR BANK, RAILWAYS, WATER ROUTES, AND SHIPPING POINT.			NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE OR BANK, ANNUAL OUTPUT IN TONS OR POUNDS, KIND OF POWER USED, ETC., AND NAME OF SUPERINTENDENT.
TOWNS	AND	COUNTY	
Spring Place, Ry. Dalton 249, 307.		Murray	The Cobutta Talc Co. Wm. C. Tilton, prest. and supt.; John G. Gould, secy. and treas.; Henry G. Granger, mgr. Cap. stk. \$1,000,000. Cobutta, talc. Open pit, 1,000 tons; hand, steam; mill.

# IDAHO

## COPPER

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, FURNACES, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Hope Kootenai Ry. Cabinet 529.	John Thurben, Cabinet, Idaho. Idaho King. Tunnel; hand.

## GOLD AND SILVER

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Banner Boise Ry. Boise City 776 (69 miles).	Elmira Silver Mining Co., Elmira, N. Y. L. L. Barney, pres.; N. P. Fassett, secy.; C. Prosvick, treas.; A. P. Boyler, mgr. and supt. Cap. stk. \$100,000. Banner, Crown Point, Wolverine and 5 others, silver. Shaft, tunnel, 4,000 tons, refractory; steam; 20 stamps.
Basin Cassia Ry. Mandokai 776.	Simpson & Thornton. Mary, Mattie, gold, lead, silver. Open shaft; free; hand.
Bay Hor Custer Ry. Ketchum 776 (75 miles).	Beardsley Mining Co. O. J. Salesbury, mgr. Beardsley, lead, silver. Tunnel, 2,000 tons; refractory; 10 stamps.
" " "	I. Christensen. Cap. \$50,000. Silver Brick, gold. Tunnel, shaft, 300 tons; refractory; hand.
" " "	J. W. Clarke, Clayton, Idaho. Mascot, silver, lead, copper. Shaft, tunnel, 200 tons; refractory; horse.
" " "	Etta Vee Mining Co. Geo. Shom, mgr. Cap. stk. \$12,500. Etta Vee, lead, silver. Tunnel, shaft; horse. J. D. Voss, supt.
" " "	Ramshorn Mining & Smelting Co. O. J. Salesbury, mgr. Ramshorn, silver, lead, copper. Tunnels, 3,000 tons; refractory. G. Balbidge, supt.
BelleVue Logan Ry. 776.	Modoc Chief Mining Co., Salt Lake City, Utah, 168 Main st. N. Treweek, pres.; C. T. Stevenson, secy.; W. H. Remington, treas.; J. C. Cunningham, mgr. and supt. Cap. stk. \$1,000,000. Modoc Chief, Niagara, lead, silver and gold. Shaft, tunnel; smelting; hand.
" " "	Pacific Tunnel Mining Co. D. G. Tutt, pres.; E. M. Home, secy.; John Doniphan, v.-pres.; Jas. A. Doni- pban, mgr. Cap. stk. \$1,000,000. Pacific Tunnel, silver. Tunnel; refractory.
Bonanza City Custer Ry. Ketchum 776.	Bomar & Dodge. Ruby, gold and silver. Tunnel, 200 tons; free; hand.
" " "	Montana Mining Co., Main st. Jas. Hooper, pres. and mgr.; Amos Franklin, secy.; A. & J. P. Feifer, treas. Cap. \$5,000. Montana. Tunnels and shaft; free; horse. Jas. Hooper, supt.
" " "	Albert Neubert. Blismark and others, gold. Tunnels, 4,000 tons; free; hand.*
Bonner's Ferry Kootenai P. O. Fry Ry. 293.	Boulder Creek Mining Co. Ben Morrow, pres.; T. J. Jones, secy.; H. H. Markley, treas.; Geo. Eberhart, mgr. Cap. stk. \$500,000. Jeanette, gold, silver and lead. Tunnel; free; water (developing).
" " "	Columbia Mining Co., Alma, Wis. G. M. Reinhardt, pres.; J. P. Hunner, secy. and treas. Cap. stk. \$1,000,000. Sea King and 2 others, silver, copper and gold. Tunnel. R. W. Hunner, supt.
Burke Shoshone Ry. 529, 776.	Ceur d'Alene Silver Lead Mining Co., Butte City, Mont. Joseph K. Clark, pres.; C. T. Elling, secy.; Joseph V. Long, treas.; Patrick Clark, mgr. Cap. stk. \$2,500,000. Poorman, Sheridan, silver and lead. Shaft, 60,000 tons; electricity, concentrator. Simon Healey, supt.
" " "	Ceur d'Alene Mining & Concentrating Co., Spokane, Wash. James B. Grant, pres.; John A. Finch, secy. and treas.; A. B. Campbell, v. pres. and mgr. Cap. stk. \$2,500,000. Union, gold, silver, lead. Tunnel 45,000 tons; water; refractory; concentrator. Geo. Emery, supt.
" " "	Hecla Mining Co., Wallace, Idaho. Patrick Clark, pres.; John A. Finch, secy. and treas.; A. L. Gross, mgr. Cap. stk. \$500,000. Hecla, silver and lead. Tunnel; refractory; water. A. B. Campbell, supt.
" " "	Tiger Mining Co. S. S. Glidden, pres. Cap. stk. \$500,000. Tiger, gold. Shaft, tunnel, 40,000 tons; refrac- tory; water. F. R. Culbertson, mgr. and supt.
Challis Custer Ry. Ketchum 776.	J. D. Voss, Cap. \$10,000. Naoma, gold and silver. Slope, 200 tons; free; horse.
Clark's Fork Kootenai Ry. 529.	Missoula & Last Chance Mining Co., Spokane, Wash. J. F. Vinton, pres. and mgr.; J. R. Rosmussen, secy.; E. E. Peterson, treas. Cap. stk. \$250,000. Missoula, Last Chance, silver and lead. Tunnel, shaft; water.
Clayton Custer Ry. Ketchum 776 (75 miles).	B. T. Bascom, Dickey, Idaho. Cap. \$5,000. Blacktail and 3 others, gold, silver, lead. Tunnel, shafts, open; refractory; hand.
" " "	Blue Bird & January Mining Co. E. C. Hendrick, secy.; John M. Babion, mgr. and supt. Blue Bird, January, silver, lead. Shafts, tunnels; refractory; hand.
" " "	Cinnabar Mining Co., Highland, Ill. Cap. stk. \$2,000,000. Cinnabar, gold, silver, lead. Shafts, tunnels; re- fractory, free; steam; 10 stamps. W. D. Dugdale, supt.
" " "	Clark, Thompson & Co., Sheep Mountain, Idaho. Queen of Hearts, gold, silver. Shaft, tunnels, 250 tons; refractory; horse, hand. J. W. Clark, supt.
" " "	Clayton Mercantile Co. Guy C. Bartow, pres.; W. Cox, secy. and treas.; A. J. Crook, mgr. Cap. stk. \$1,000,000. Red Bird, gold, silver. Tunnel, shaft, 5,000 tons; free; water; 100 stamps. H. M. Pease, supt.

## GOLD AND SILVER—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.			NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.	
TOWN	AND	COUNTY.		
Clayton, (Continued.)		Custer	Clayton Mining & Smelting Co.	Guy C. Bartow, prest.; A. J. Crook, mgr. Cap. stk. \$250,000. Silver, lead. Water.
"		"	Great Expectation Gold Co.	St. Louis, Mo., 506 N. Main st. Jos. T. Dugdale, prest. Cap. stk. \$30,000. Robinson Bar. Gold, placer; hydraulic.
"		"	Daniel Sheehan.	Blue Bird, silver, lead. Tunnel, shaft, 64 tons; refractory; hand.
"		"	Robinson Bar Mining Co.	East St. Louis, Ill., 119 N. Third st. Jos. T. Dugdale, prest.; John H. Woltering, secy.; Lucas Edel, treas. Cap. stk. \$1,800,000. Robinson Bar, gold. Placer; water.
"		"	Wiggins & Co.	Russell, silver, lead. Tunnel, shaft; refractory; hand.
Clear Water		Shoshone (P. O. Superior, Mont.) Ry. Iron Mountain, Mont., 529.	Chas. Larkam, Superior, Mont.	Larkam, gold. Placer, 1,500 tons; water.
Custer		Custer Ry. Ketchum 529 (100 miles).	Bollette & Mullen.	Visham, gold, silver. Shaft, tunnel, 500 tons; free; steam, hand. John Mullen, supt.
"		"	Dickens-Custer Mines, Ltd.	London, Eng. Col. Masters, prest.; G. B. Bentham, secy.; Alvah Henry Axford, mgr. and supt. Dickens, gold, silver. Tunnels, 3,000 tons; refractory; steam; 30 stamps.
"		"	David Dorsey & Edwards.	Black, gold, silver. Tunnels, stopes, 127 tons; free; hand.
"		"	Lucky Boy Gold Mining Co.	Salt Lake City, Utah, 168 Main st. N. Treweek, prest. and mgr.; C. T. Stevenson, secy.; J. Barnett, treas. Cap. stk. \$1,000,000. Lucky Boy, Anna, gold, silver. Tunnels; refractory; hand.
"		"	James A. McFadden.	Yankee Fork and Fraction, gold and silver. Tunnels and shafts, 1,200 tons; free.
"		"	Tonto Mining Co.	Tonto, gold, silver. Shaft; free; hand.
De Lamar Ry. Nampa (100 miles).		Owyhee 776 (185 miles).	Burke & Taylor; Spokane, Wash., 1225 Washington st. Deaake, supt.	Garfield, gold, silver. Shaft, tunnel; free. J. N. Deaake, supt.
"		"	De Lamar Mining & Milling Co.	T. E. Bradnober, prest.; J. W. Plummer, mgr. and supt. De Lamar, gold, silver. Tunnels, 18,000 tons; free; steam; 30 stamps.
"		"	Jones & Ready.	Alta, gold, silver. Tunnel; free; steam; 20 stamps. T. W. Jones, supt.
"		"	Ira McGary.	Cap. \$100,000. Silver Vault, gold, silver. Tunnel, 6,000 tons; refractory.
"		"	Stoddard Group Mining Co.	Gold Hill, Nev. H. M. Gorham, secy. and treas.; John D. Ludwig, mgr. and supt. Stoddard, Deadwood, Midas, gold, silver. Tunnel, shaft; free; hand.
Douglas, Ry. Bailey 776.		Logan	John & James Douglas and others.	Camos No. 2, gold. Shaft, tunnel, 8,000 tons; free; steam; 20 stamps. James Douglas, supt.
Elk City, Ry. Weiser 776.		Idaho	Elk Mining Co., Aberdeen, Wash. H. T. Tetherston, prest.; J. G. Weatherwax, secy.; R. H. Evans, treas.; W. H. Hill, v.-prest. Cap. stk. \$500,000. Gold, Placer.	
"		"	International Mining & Developing Co.	Portland, Ore., P. O. Box 758. C. I. Muhler, prest.; M. J. Reid, secy.; Jacob Haas, treas. Cap. stk. \$1,000,000. Favorite and 8 others, gold, silver. Free; steam. E. C. Spidden, supt.
"		"	Mineral Hill Mining Co.	Portland, Ore. A. F. Gartner, prest.; Wm. Church jr., secy. and treas.; D. N. Summers, mgr. and supt. Cap. stk. \$1,000,000. Mineral Hill and 3 others, gold. Tunnel; refractory; water.
"		"	Rapid River Mining Co.	Spokane, Wash., Rooms 227 and 228 Hyde Block. B. C. Van Houton, prest.; A. C. Edwards, secy.; Mrs. M. J. McCoy, treas. Cap. stk. \$1,000,000. Alliance, Victor, Union, gold. Tunnel; free; water.
Fort Lemhi, Ry. Red Rock, Mont., 776.		Lemhi	Lone Star Co.	Lone Star, gold. Tunnel; free; steam, water.
Fry		Kootenai Ry. Leonia 263.	Iowa Mining Co., Cedar Falls, Iowa. H. H. Markeley, prest.; Alfred Grundy, secy.; H. H. Piersal, treas.; E. J. Merrin, mgr. and supt. Cap. stk. \$500,000. McKinley, gold, silver, lead. Tunnel; free; hand (developing).	
Gem		Shoshone Ry. Wallace 529, 776.	Black Bear Mining Co.	W. S. Sheill, mgr. Cap. \$175,000. Black Bear, Yankee Doodle, Cape Horn and Idaho Fraction Mines, silver and lead. Tunnel, 3,400 tons; refractory; water.
"		"	Helena & Frisco Mining Co.	Helena, Mont. Anton M. Holter, prest.; A. J. Seligman, secy. and treas.; A. M. Esler, mgr. Cap. stk. \$2,500,000. Badger, silver, lead. Tunnel, shaft, 51,000 tons; refractory; steam, water; concentrator. John H. Heward, supt.
"		"	Milwaukee Mining Co.	Wallace, Idaho, Bank st. B. A. Kipp, prest.; John A. Finch, secy. and treas.; A. B. Campbell, mgr. Cap. stk. \$500,000. Gen of the Mountains, silver, lead. Tunnel, 6,500 tons; refractory; steam, water. Geo. Emery, supt.
Grangeville Boat Ry. Lewiston 776 (75 miles).		Idaho	International Mining Co.	Spokane, Wash., Room 211 Green Block. Geo. R. Ellis, prest.; Edward A. M. Esler, mgr. and treas.; W. W. Davy, mgr. and supt. Cap. stk. \$900,000. Horse Shoe Bend, gold. Placer.
Halley Ry. 776.		Alturas	Red Elephant Mining Co.	W. H. Brown, prest.; J. M. Linsley, secy.; J. R. McDonald, treas.; G. V. Bryan, mgr. Cap. stk. \$5,000,000. Silver and lead. Tunnel and shaft, 20,000 tons; refractory; steam. C. C. Chibb, supt.
Helena		Washington (P. O. Dale) Ry. Weiser 776 (95 miles).	South Peacock Mining Co.	Boston, Mass., 88 State st. Wm. L. Platt, secy. and treas.; Boston; C. F. Drake, mgr. and supt. Weiser, Idaho. Copper Key, gold, silver, copper. Shaft; horse, hand.
Hope		Kootenai Ry. 529.	Stewart, Childs & Co.	Dickerson, silver. Tunnel; refractory.
Idaho City Ry. Boise City 776.		Boise	Bella Mining Co.	Boise City, Idaho. Jos. D. Wilson, prest. and secy.; Thos. J. Wilson, treas. Cap. \$150,000. Bella, Edna, gold and silver. Shaft and tunnel; refractory; water. John C. Henry, supt.

## GOLD AND SILVER—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN	AND COUNTY.	
Idaho City, .....	Boise (Continued.)	Boise County Mining Co., Ltd. H. Zipl, pres.; J. G. Watts, secy.; A. Cunningham, treas.; A. B. Morrell, mgr. Cap. stk. \$60,000. Gold. Shaft, placer; free; steam.
Junction, .....	Lemhi	Joseph H. Faumin. Arkansas Traveler, silver, lead. Shaft, tunnel, 35 tons; refractory; hand.
"	"	Lee Bros. & Clark. Grand Exchange, silver, lead. Shaft, refractory; hand.
"	"	A. C. Waugh. American Star, silver, lead. Shaft; refractory.
Kellogg, .....	Shoshone	Old Abe & Tompkins Mining & Milling Co., Wardner, Idaho. N. S. Kellogg, pres.; Robert T. Horn, secy. and treas.; Col. I. N. Muney, mgr. and supt. Cap. stk. \$500,000. Old Abe, Tompkins, gold, copper, lead. Shaft, tunnel, 1,200 tons; hand.
"	"	Sinclair Bros. Old Abe, Tompkins and 6 others, silver, gold, lead. Tunnel, shaft; refractory; hand.
Kondrick, .....	Latah	Boulder Creek Mining Co. Zenith and 2 others, gold, silver. Tunnel; water. W. C. McNutt, supt.
"	"	A. F. McKenna. Important, gold, silver. Tunnel; water.
"	"	S. A. Moon. Sonoma, gold and silver. Tunnel; water.
Ketchum, .....	Alturas	Baltimore & Victoria Mining Co., Salt Lake City, Utah, P. O. Box 622. Thomas Marshall, pres.; J. McGregor, secy. and mgr.; T. R. Jones, treas. Cap. stk. \$1,500,000. Baltimore Group, gold, silver and lead. Tunnel, 1,500 tons; free, refractory. Nicholas-Hickey, supt.
"	"	Boulder Mining & Milling Co., Chicago, Ill. Cap. stk. \$1,000,000. Silver, lead, 200 tons, refractory. H. J. Murdoch, supt.
"	"	James T. Cochran. Argonaut, Dixon, silver and lead. Tunnel, 120 tons; refractory.
"	"	J. V. Easley. Third Party, silver, lead and antimony. Refractory.
"	"	Elkhorn Mining Co. Elkhorn, gold, silver and lead. Tunnel, shaft, 1,000 tons; refractory. I. I. Lewis, mgr. and supt.
"	"	Independence Mining Co. R. B. Warren, mgr. Independence, silver and lead. Tunnel, refractory; hand. Chas. Swanson, supt. (developing.)
"	"	Ophir Mining & Milling Co., Great Falls, Mont., care of First National Bank, T. E. Collins, pres.; R. W. Cooley, secy. and treas.; H. J. Murdoch, mgr. and supt. Cap. stk. \$1,000,000. Ophir and 5 other mines, gold, silver, lead. Tunnel, shaft, 300 tons; refractory; steam.
Kootenai, .....	Kootenai	Atlantic Mining & Milling Co. Henry A. Stade, pres.; E. M. Gillette, secy.; C. O. Morrell, treas.; E. D. Faust, mgr. and supt. Cap. stk. \$1,000,000. Atlantic, Garfield, gold, silver, lead. Shaft; refractory; horse (developing.)
Malad City, .....	Oneida	Pioneer Mining, Milling & Smelting Co. D. L. Evans, pres.; C. F. Stone, secy.; Jas. E. Jones, treas.; R. S. Willer, mgr. and supt. Cap. stk. \$1,000,000. Pioneer, gold, silver, lead. Tunnel; free; hand.
Martin, .....	Alturas	Aero Mining & Milling Co., Chicago, Ill., 175 Dearborn st., Room 70. J. H. Deegan, pres.; Charles W. Griggs, secy. and treas.; John W. Cowden, mgr. and supt. Cap. stk. \$1,000,000. Idaho, silver. Shaft, refractory; steam.
Mineral, .....	Washington	Mineral Mutual Smelting Co. C. C. Wing, pres. and mgr.; M. Duffy, secy.; Louis Sommer, treas. Cap. stk. \$15,000. Egan, Silver Belle, gold, silver. Tunnel, 10,000 tons; refractory. N. E. Speake, supt.
Millan, .....	Shoshone	Gold Hunter Mining & Smelting Co., St. Paul, Minn., 236 Robert st. Dennis Ryan, pres.; R. B. Galusha, secy.; P. T. Kavanaugh, treas.; B. A. Cox, mgr. Cap. stk. \$2,000,000. Gold Hunter, silver, lead. Tunnel, 50,000 tons; free; water; concentrator.
"	"	Horn & Ingalls. Lucky Friday, silver and lead. Refractory, hand (developing.)
"	"	Morning Mining Co., Milwaukee, Wis. Edwin Reynolds, pres.; B. T. Lenzardier, secy.; Frank J. Kipp, treas.; D. B. Hundley, mgr. and supt. Cap. stk. \$200,000. Morning, Evening, Silver King, silver, lead. Tunnel, 165,000 tons; refractory, steam, water; concentrator.
"	"	Butte Creek Mining Co. Fred Dutton, trustee. Butte Creek, gold. Placer; hydraulic. A. T. Simmons, supt.
"	"	John Commerilh (lessee), Louisville, Ky. Golden Chest, gold. Tunnel, 14,000 tons; free; steam; 10 stamps.
"	"	Mother Lode Mining Co. Mother Lode, gold. Tunnel, free, water, 5 stamps. D. H. Wilsey, mgr. and supt.
"	"	Frank Reed, Buckeye Boy, gold. Tunnel, 2,000 tons; refractory, steam; 5 stamps.
Osburn, .....	Shoshone	Cour d'Alene Nellie Mining Co., St. Paul, Minn., Room 56 German-American Bank Bldg. W. W. Braden, pres.; A. P. Batcham, secy.; H. Von der Weyer, treas. Cap. stk. \$1,000,000. Cour d'Alene, Nellie, Emma, silver. 3,000 tons; free; hand, water. I. N. Muney, mgr. and supt.
"	"	John H. Davey & Son. Argentine, silver, iron. Shaft, tunnel, 24,000 tons; refractory; steam; concentrators.
"	"	Emma Mining Co., St. Paul, Minn., 25 German-American Bank Bldg. Chas. F. Diether, pres.; Wm. Foulke, secy. and treas. Cap. stk. \$1,000,000. Emma, silver. Tunnel, 1,000 tons; free, water. I. N. Muney, supt.
"	"	George & Bradner. Kill Buck, lead, silver. Tunnel, 100 tons; free. I. T. George, supt.
"	"	Harrington & Cook. Cap. \$7,000. Capital, silver, lead. Free (developing.)
"	"	Mineral Point Mining & Lumber Co., Stillwater, Minn., Lumberman's Exchange Bldg. Samuel McChure, pres.; A. T. Lindholm, secy.; David Tozer, treas. Cap. stk. \$500,000. Mineral Point, silver. Free; hand. I. N. Muney, supt.
"	"	Silver Chord Mining Co., Chicago, Ill., Market and Jackson sts. Joseph Hiefield, pres.; Samuel J. Kline, secy. Cap. stk. \$1,500,000. Silver Chord, silver. Tunnel; refractory. Joseph Kline, supt.
"	"	Spokane & Cour d'Alene Co., Spokane, Wash., Riverside av. F. A. Cook, pres.; Gus. Seiffert, secy.; I. N. Muney, mgr. and supt. Cap. stk. \$800,000. War Eagle, Maseott and 3 others, silver, copper, lead. Tunnel; refractory.

## GOLD AND SILVER—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNEAL, OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWNS AND COUNTY.	
Pine ..... Elmore Ry. Mountain Home 776.	W. C. Picking & Co. Franklin, gold, silver. Tunnel, shaft; free, refractory; water; 10 stamps. W. C. Picking, supt.
Placerville..... Boise Ry. Boise City 776.	California Hill Co. Austin Dougherty, mgr. Cap. stk. \$6,000. California Hill, gold. Placer, deep; hydraulic.
" .....	Edwin Smith. Mountain Queen, gold, silver. Tunnel; free.
" .....	Geo. Tero and others. Belshazzar, Centennial, gold, silver. Tunnel, shaft; free; water; mill.
Quartzburg..... Boise Ry. Boise City 776 (40 miles).	Black Bear Mining Co. Anton Silver, mgr. Black Bear, gold. Shaft; free; hand.
" .....	Gold Hill Mining Co. Gold Hill, gold. Shaft; free; steam; 25 stamps.
" .....	W. M. Nesbit & Co. Cap. \$10,000. Gold. Shaft; refractory; steam. H. F. Gear, supt.
Redwing..... Alturas Ry. Ketchum 776 (50 miles).	C. J. Johnston. Solace, silver, gold. Shaft; refractory; steam.
Rocky Bar..... Elmore Ry. Mountain Home 776 (65 miles).	Elmore Gold, Ltd., London, Eng., The Avenue, 11 Bloomfield st., F. C. J. R. Armitage, prest.; C. Harrison Smith, secy. Cap. stk. \$1,500,000. Elmore, gold, silver. Shaft; free; steam; 30 stamps. Geo. A. McCormick, supt.
" .....	Jim Blaine Mining Co. Alex. Cochran, prest.; Timothy Downey, secy.; J. B. Fitzgerald, treas.; John Boyle, mgr. and supt. Cap. \$100,000. Jim Blaine, John Boyle and 5 others, gold, silver. Tunnel, 8,000 tons; free; steam; 10 stamps.
" .....	Martin & Golden. John P. Martin, prest. and supt. Arthur Golden, secy. and mgr.; George D. Golden, treas. Cap. \$100,000. Golden Bar, gold, silver. Tunnel, 6,000 tons; free; water; 10 stamps.
" .....	Ophir Mining Co., Wheeler & Hopper, 26 Broadway, New York City. Ophir, gold. Shaft; free; steam; 20 stamps.
" .....	Vishnu Gold Co., Ltd., London, Eng. Vishnu, Idaho, gold. Tunnel, shaft; free; steam; 12 stamps. G. A. McCormick, supt.
Salmon City..... Lemhi Ry. Red Rock, Mont., 776 (70 miles).	Lemhi Placer Gold Mining Co., Ltd., Denver, Colo., 43 Tabor Block, George J. Bond, prest.; L. H. Jackson, secy.; John G. Shields, treas. Cap. stk. \$5,000,000. Lemhi, gold. Placer. W. S. Patterson, mgr. and supt.
" .....	F Pratt Creek Mining Co., Hope, Adelaide, Canuck, Sam Rice and Exchange, gold, silver and lead. Tunnel; refractory; water; mill.
Sand Point..... Kootenai (P. O. Pend d'Oreille) Ry. 293.	C. S. Smith, Pend d'Oreille, Idaho. Cap. \$1,000,000. Blue Joe Group, silver and lead. Tunnels, 20,000 tons; refractory; hand.
Saw Tooth..... Alturas Ry. Ketchum 776.	Silver King Mining & Milling Co., Philadelphia, Pa., 234 S. Fourth st. Henry Lewis, prest.; W. S. Wylie, secy. Cap. stk. \$100,000. Silver King, silver, gold. Slope, 500 tons; refractory; steam; mill. Wm. Hyndman, mgr. and supt.
Sea Foam..... Custer (P. O. Challis) Ry. Ketchum 776.	Mt. King Mining Co., Challis, Idaho. Chris. Morler, prest. and mgr.; R. N. Hull, secy. and treas. Cap. \$100,000. Mt. King Mine, silver and lead. Tunnels, 330 tons; refractory; steam. A. M. Wilson, supt.
Sheep Mountain..... Custer (P. O. Dickey) Ry. Ketchum 776 (35 m.).	Shaubeau & Bascom. Cap. \$10,000. Cowpuncher, silver, lead. Open pit, tunnel; refractory; hand.
Shoup..... Lemhi (P. O. Salmon City) Ry. Red Rock 776.	Harris, Wood & Davis, Hamilton, Mont. Cap. \$50,000. Boulder Creek, gold. Placer (developing); free; water. A. E. Wood, supt.
" .....	Lemhi Mining & Milling Co., Salmon City, Idaho. Richard H. Chapman, prest.; R. P. Quarles, secy. and treas. Cap. stk. \$80,000. Burlington, gold. Tunnel, 10,000 tons; free; water; 15 stamps. J. M. Parfit, mgr. and supt.
Silver City..... Owyhee Ry. Nampa, 776 (50 m.).	P. C. Hanford and others. Cap. \$100,000. Ralph Hoyt and 3 others, gold, silver. Tunnel, shaft, 10,000 tons; free; arrastre; mill. M. F. Leeb, mgr. and supt.
" .....	Idaho and Pittsburg Mining & Milling Co., Pittsburg, Pa., 95 Fifth av. John Irwin jr., prest.; Lloyd L. Little, secy.; James McKay, treas. Cap. stk. \$2,500,000. Black Jack, gold, silver. Tunnel; free; steam; 10 stamps. Frederic Irwin, supt.
" .....	Phillips & Sullivan. Cap. \$150,000. Phillips, Sullivan, Bellast, gold, silver. Tunnel, 1,500 tons; free; steam; 5 stamps. Isaac Phillips, supt.
" .....	The Poorman Mines, Ltd., London, Eng., Leadenhall Bldgs. J. H. Botherton, prest.; D. Ovenstone, secy. and treas. Cap. stk. \$350,000. Poorman, Illinois Central and 2 others, silver and gold. Shaft, tunnel; free; steam; mill. Philip J. Lonergan, mgr. and supt.
" .....	Trade Dollar Mining & Milling Co., Pittsburg, Pa., 603 Ferguson Block. W. H. Dewey, prest.; John M. Patterson, v. prest.; Thomas B. McKaig, secy. and treas. Cap. stk. \$2,500,000. Trade Dollar, silver and gold. Tunnel, 1,000 tons; free; steam; water; 10 stamps. E. H. Dewey, supt.
Sunset Peak..... Shoshone (P. O. Wardsen) Ry. Wallace 529, 776 (10 m.).	Father Mining Co. Henry Lamb, prest.; H. Drought, secy. and treas.; John Carlson, mgr. Cap. stk. \$1,000,000. Father, silver and lead. Tunnel.
Vienna..... Alturas (P. O. Redwing) Ry. Ketchum 776.	New Vienna Mining Co., Winona, Minn. C. L. Colman, prest.; C. A. Morey, secy.; H. J. O'Neill, treas.; C. J. Johnston, mgr. Mountain King and others, gold and silver. Tunnel; refractory; steam and hand; 20 stamps. C. J. Johnston, supt.

## GOLD AND SILVER—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN	AND COUNTY.	
Wallace	Shoshone	Carbon Conte' Lead & Silver Mining Co., Portland, Ore., 31 Stark st. Nathan Elliott, pres't. and mgr.; H. C. Johnson, sec'y; Geo. L. Story, treas. Cap. stk. \$1,000,000. Toughnut and Diamond Fraction, gold, silver, lead and copper. Tunnel, 75 tons; refractory; hand. Nathan Elliott, supt.
"	"	Cour d'Alone Mining & Development Co., W. H. Fiske, pres't.; N. Wittner, sec'y; Theo. F. Jameson, treas.; Frank J. Heller, mgr. Cap. stk. \$300,000. New Haven, silver, lead. Tunnel (developing).
"	"	Granite Mining Co., Portland, Ore., V. B. Dehostmatt, pres't.; E. Dehostmatt, sec'y, and treas.; G. B. McAulay, mgr. and supt. Cap. stk. \$500,000. Granite, silver, lead. Tunnel, 1,000 tons; refractory.
"	"	Mammoth Mining Co., Mammoth, silver, lead. Tunnel, 1,000 tons; refractory, free. Richard Wilson, mgr. and supt.
"	"	New Chicago Mining Co., Geo. H. Heller, mgr. New Chicago, Cour d'Alone, silver and copper. Tunnel; free, refractory; water. John Cronie, supt.
"	"	Parrott Mining Co., Spokane, Wash., 506 Postoffice Block, Riverside av., S. G. Allen, pres't.; R. H. Greely, sec'y, and mgr.; Lee A. Azune, treas. Cap. \$100,000. Parrott, silver, lead. Tunnel; refractory; gravity.
"	"	Silver Chord Mining Co., Chicago, Ill., cor. Market and Jackson sts. Joseph Brofeld, pres't.; Samuel Kling, sec'y, and treas. Cap. stk. \$1,500,000. Silver Spray and 3 others, silver. Tunnel, Joseph Kling, supt.
"	"	Standard Mining Co., A. B. Campbell, pres't.; E. S. Kinney, sec'y; John A. Finch, treas. and mgr. Cap. stk. \$500,000. Standard, banner, lead, silver. Tunnel; refractory; steam. George Emery, supt.
"	"	O. B. Wallace, Black Cloud, lead and silver. Shaft, tunnel; hand (developing).
Wardner	Shoshone	Bunker Hill & Sullivan Mining & Concentrating Co., San Francisco, Cal., 124 Sansome st. John Hays Hammond, pres't.; E. L. Eddy, sec'y; Wm. H. Crocker, treas.; V. M. Clement, mgr. Bunker Hill, Sullivan, silver, lead. Tunnel, 150,000 tons; refractory; steam, water; concentrator. Frank Jenkins, supt.
"	"	Eureka & Crown Point Mining Co., Tacoma, Wash. George Brown, trustee; Clarence Cunningham, mgr. and supt. Eureka, Crown Point, silver, lead. Shaft; steam.
"	"	Last Chance Mining Co., Spokane, Wash., First National Bank Bldg. F. R. Moore, pres't.; H. G. Macdonald, sec'y; Charles Sweeney, mgr. Last Chance, silver, lead. Tunnel, 10,000 tons; refractory; steam, water.
"	"	Old Abe & Tompkins Mining & Milling Co., Phil. O. Bourke, pres't.; Joe Rogers, v. pres't.; B. T. Horn, sec'y; M. J. Sinclair, treas.; Charles Sinclair, mgr. Cap. stk. \$500,000. Old Abe, Tompkins, silver, copper. Tunnel, 5,000 tons; free; hand.
"	"	Sierra Nevada Mining Co., Portland, Ore., V. B. Dehostmatt, pres't.; E. Dehostmatt, sec'y, and treas.; G. B. McAulay, mgr. and supt. Cap. stk. \$1,000,000. Sierra Nevada, silver, lead. Tunnel, 13,000 tons; refractory.
"	"	Silver King Mining Co., H. A. Jones, pres't.; George Gardner, sec'y; O. L. Shankland, treas.; Wm. Merry, mgr. Cap. stk. \$1,000,000. Silver King, silver, lead. Shaft, tunnel, 12,000 tons; steam. W. T. Hales, supt.
"	"	Stenwinder Mining Co., Portland, Ore., V. B. Dehostmatt, pres't.; J. H. Smith, sec'y; E. Dehostmatt, treas.; G. D. McAulay, mgr. Cap. stk. \$500,000. Stenwinder, silver, lead. Tunnel, 3,000 tons.
"	"	G. H. Trumbull, Hope, gold and silver. Tunnel (developing); refractory.
Warren	Idaho	H. D. Esterbrook, Brickmaker, Stubtwd., gold. Placer; free; hand, water.
Ry. Weiser 776 (130) m.	"	Waterhouse & Jemmy, Weiser, Idaho. Minnehaha, gold, silver. Shaft, tunnel; free; hand.
Weiser	Washington	E. M. Barton. Cap. \$30,000. Standard, Lockwood, gold, silver, copper. Shafts, tunnels.
Ry. 776	"	

## IRON

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE OR QUARRY, KIND OF STONE, KIND OF MINE OR QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STONE OR MARBLE MILLS, LIMESTONES AND CAPACITY, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN	AND COUNTY.	
Bay Horse	Custer	Rainhorn Mining & Smelting Co., Post Boy, Rainhorn, iron, lead, copper. Tunnel, 2,000 tons.
Ry. Ketchum 776 (75) miles.	"	

## STONE, MARBLE, GRANITE AND ONYX

LOCATION OF MINE OR QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT.		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE OR QUARRY, KIND OF STONE, KIND OF MINE OR QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STONE OR MARBLE MILLS, LIMESTONES AND CAPACITY, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN	AND COUNTY.	
Pend d'Oreille	Kootenai	Cannon & Gray Lime Co., Spokane, Wash., 309 Railroad av., A. M. Cannon, pres't. and treas.; A. R. Cannon, sec'y; L. B. Merriam, mgr. and supt. Cap. stk. \$50,000. Pend d'Oreille, marble, limestone. Open pit; steam; 20,000 tons.
Ry. 529.	"	

## ILLINOIS

## COAL—BITUMINOUS

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, COKE OVENS, AND NAME OF MINE SUPERINTENDENT.
TOWNS	COUNTY.	
Aledo Ry. 135.	Mercer	P. L. Bailey. Love's. Shaft, 3,500 tons; horse.
Alexis Ry. 135.	Warren	John Simeox (local). Cap. \$5,000. Simeox. Shaft, 3,000 tons; hand.
"	"	William Cook & Son (local). Cap. \$8,000. Empire. Shaft, 400 tons; horse.
Alpha Ry. 135.	Henry	John Bland (local). Slope, 400 tons; horse.
Alsey Ry. 135.	Scott	Charles McGuire. Cap. \$100. Woodall. Tunnel, 800 tons; hand.
Alton Junction Ry. Wain 135, 170.	Madison	Stoneware Pipe Co. A. F. Foster, pres.; W. W. Stickney, secy. and mgr.; John W. Koch, treas. Cap. stk. \$100,000. Slope, 7,500 tons; horse. William Watts, supt.
Assumption Ry. 319.	Christian	Assumption Coal & Mining Co. David Lasharthy, pres.; Silas A. Shafer, secy.; D. J. Watson, treas.; P. L. Myers, mgr. and supt. Cap. stk. \$40,000. Assumption. Shaft, 50,000 tons; steam.
Astoria Ry. 135.	Fulton	Astoria Coal & Mining Co. D. M. Hettrick, pres.; S. W. McInne, secy. and mgr.; W. Scripps, treas. Cap. stk. \$10,000. Astoria. Shaft, 30,000 tons; steam. Edward Fellows, supt.
"	"	Joseph Bottenberg. Cap. \$500. Bottenberg's. Slope, 1,200 tons; horse.
Athens. Ry. 335.	Menard	Athens Mining Co., Peoria, Ill., Chamber of Commerce Bldg. H. W. Lynch, pres.; Lee Kincaid, secy. and treas.; Evermont Eddy, mgr. and supt. Shaft: steam, compressed air.
"	"	Wabash Coal Co., Quincy, Ill., 406 Main st. Fred. Wilms, pres. and mgr.; W. Wilms, secy.; S. W. Eldred, treas. Cap. stk. \$40,000. Athens. Shaft, 150,000 tons; steam. T. P. Mowitt, supt.
Atkinson Ry. 142.	Henry	James Kay (local). Cap. \$1,000. Kay's. Shaft, 20,000 tons; steam.
"	"	Mowbray & Lowes (local). Atkinson. Slope, 2,500 tons; horse. John Mowbray, supt.
"	"	Elery Riley (local). Cap. \$700. Atkinson. Shaft, 3,000 tons; steam.
Augusta Ry. 135.	Hancock	Patrick Doyle (local). Cap. \$100. Williams Creek. Slope, 250 tons; hand.
"	"	J. W. Marks (local). Cap. \$300. Idlewise. Shaft, 1,400 tons; horse.
Avon Ry. 135.	Fulton	Thomas Caldwell (local). Cap. \$200. Avon. Drift, 1,211 tons; hand.
Barelay Ry. 319.	Sangamon	George N. Black, Springfield, Ill. Cap. \$75,000. Barelay. Shaft, 120,000 tons; steam. George Strehel, supt.
Bartonville Ry. 135, 327.	Peoria	Collier Cooperative Coal Co. Joseph Van Norman, pres.; August Lacour, secy.; F. J. Collier, treas., mgr. and supt. Cap. stk. \$10,000. Collier's. Slope, 35,000 tons; steam.
"	"	E. Wolland & Sons (local). Cap. \$5,000. Wolland's. Tunnel, 7,000 tons; horse. E. S. Wolland, supt.
Belleville Ry. 402, 408, 709.	St. Clair	F. J. Brueggemann, 727 Lebanon av. Brueggemann. Shaft, 5,232 tons; steam.
"	"	Consolidated Coal Co., St. Louis, Mo., Fourth and Olive sts. Chas. Ridgley, pres.; Geo. F. Cutts, secy. and treas.; J. C. Simpson, mgr. Cap. stk. \$5,000,000. Green Mount. Shaft, 75,000 tons; steam. Kenecht. Shaft, 75,000 tons; steam. Rose Hill. Shaft, 40,000 tons; steam. Schreman. Shaft, 100,000 tons; steam. Garlside No. 4. Shaft, 75,000 tons; steam. Joseph Emery, supt. Richland. Shaft, 100,000 tons; steam. Chas. Rodenberg, supt.
"	"	Glendale Coal & Mining Co., St. Louis, Mo., 414 Market st. P. Brandenburg, pres.; A. Brandenburg, secy. and treas.; Fred. Brandenburg, mgr. Cap. stk. \$18,000. Glendale. Shaft, 100,000 tons; steam. H. Klingenberg, supt.
"	"	Highland Coal Co., 712 E. St. Christ Neff, pres.; Hermann Michaels, secy.; Philip Wagner, treas.; Henry Strothman, mgr. Cap. stk. \$3,000. Highland. Shaft, 30,000 tons; steam. Henry Strothman, supt.
"	"	Humboldt Mining Co. Wendlin Oexner, pres.; Chas. Lenz, secy. and supt.; Henry Oexner, treas. Cap. stk. \$300. Humboldt. Shaft, 18,750 tons; steam.
"	"	Klingensfus Bros. (local), 409 N. Illinois st. Cap. \$1,000. Abend No. 1. Shaft, 3,500 tons; horse. O. J. Klingensfus, supt.
"	"	J. Krantz & Trupp Co. Cap. \$3,000. Branch. Shaft, 3,000 tons; horse.
"	"	Maule Coal Co., 415 Franklin st. John Maule, pres. and treas.; Frank Maule, secy.; Robert Maule, mgr. and supt. Cap. stk. \$20,000. National, Main Guy No. 2. Slope, 68,000 tons; steam.
"	"	Louis Michaels, 206 N. Race st. Pittsburg. Shaft, 12,000 tons; steam.
"	"	Reinecke Coal Co., Madisonville, Ky. Conrad Reinecke, pres.; Lukeman Bailey, secy., treas. and mgr. Cap. stk. \$100,000. Reinecke. Shaft, 750,000 tons; steam. John Brann, supt.
"	"	Walnut Valley Coal Co., St. Louis, Mo., 1718 Clark av. Daniel Marsh, pres.; S. Marsh, secy. Walnut Valley. Shaft, 37,730 tons; steam. Al. E. Powell, supt.
"	"	West End Coal Co. Samuel Swain, pres.; William Jacques, secy.; Edward H. Painton, treas.; James Bailey, mgr. and supt. Cap. stk. \$10,000. West End. Shaft, 20,000 tons; steam.
"	"	Yoch Coal & Mining Co., 1209 West Main st. William Hambleton, pres.; Edward Westwood, secy.; Peter Schonebeck, treas.; Isaac Hewitt, mgr. and supt. Cap. stk. \$15,000. Oak Hill, shaft, 12,856 tons; steam.
Bethalto Ry. 167.	Madison	Wm. Owen. Cap. \$700. Banner. Shaft, 500 tons; horse.



## COAL—BITUMINOUS (CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, COKE OVENS, AND NAME OF MINE SUPERINTENDENT.
TOWN	AND COUNTY.	
Bethel Ry. 700.	Morgan	Henry Bosse (local). Cap. \$500. Thompson. Shaft, 500 tons; horse.
Birkner Ry. 408.	St. Clair	Avory & Randle. Avory. Shaft, 2,000 tons; steam. J. Randle, supt.
Bloomington Ry. 145, 170, 319, 563.	McLean	McLean County Coal Co., 320 N. Main st., A. E. Stevenson, pres.; L. M. Graham, secy., treas. and mgr.; Cap. stk. \$80,000. Bloomington. Shaft, 125,000 tons; hand; breaker. Thomas Radford, supt.
Blount Ry. Danville 121, 146, 784.	Vermilion	Wm. Jay Moore, 131 Walnut st. Cap. \$20,000. Inwood. Shaft, 3,000 tons; horse. James Dalby, supt.
Braceville Ry. 145.	Grundy	Braceville Coal Co., Roswell Miller, pres.; Richard Ramsay, mgr. and supt. No. 2. Shaft, 20,000 tons; steam.
Bradford Ry. 135.	Stark	W. J. Engelston. Cap. \$1,000. Black Diamond. Shaft, 800 tons; horse.
Bradwood Ry. 145, 245.	Will	Chicago, Wilmington & Vermilion Coal Co., Chicago, Ill., The Temple, Francis Bartlett, pres.; A. L. Sweet, secy. and mgr., Thos. A. Lennon, treas. N. O. & P. Shaft, 30,000 tons; steam. R. H. Zeller, supt.
"	"	Cooperative Coal Co., J. G. Kelly, pres., mgr. and supt.; J. O'Connor, secy. and treas. Cap. stk. \$5,000. Cooperative. Shaft, 4,000 tons; horse.
Breeze Ry. 238.	Clinton	Breeze Future Coal & Mining Co., Theo. Klutho, pres., Fritz Koch, secy. and treas., Hy. Hummert, mgr. and supt. Cap. stk. \$15,000. Breeze East. Shaft, 50,000 tons; steam.
"	"	Consolidated Coal Co., St. Louis, Mo., Fourth and Ohio sts., Charles Ridgely, pres., Geo. T. Utts, secy. and treas.; J. C. Simpson, mgr. Cap. stk. \$5,000,000. Breeze. Shaft, 100,000 tons; steam. Wm. Harding, supt.
Briar Bluff Ry. 135.	Henry	Briar Bluff Mining & Stock Co., A. J. Biethen, pres. and treas.; A. R. Stoddard, secy. and supt. Cap. stk. \$100,000. Briar Bluff. Slope, horse.
Brimfield Ry. 135.	Peoria	Phillip F. Fully (local). Hayward's. Shaft, 1,000 tons; horse.
Bruce Ry. 784.	Moultrie	Fairbairn & Bliss (local). Bliss. Slope, 2,000 tons; horse.
"	"	S. E. McCleary. Cap. \$15,000. McCleary. Shaft and slope, 3,000 tons; horse.
"	"	Scott Bros. Cap. \$5,000. Shaft, 1,000 tons; steam.
Bryant Ry. 135.	Fulton	Whitebreast Fuel Co., Chicago, Ill., 900 Bookery Bldg., J. C. Osgood, pres.; C. E. Phelps, secy., G. W. Tracy, treas.; T. J. Phillips, mgr. Cap. stk. \$1,200,000. Mine F. Shaft, 40,000 tons; steam. Alex. Jenkins, supt.
Bunker Hill Ry. 470.	Macoupin	Wm. Nell & Co. (local). Wm. Nell, mgr. Shaft, 1,200 tons; steam.
Cable Ry. 142.	Mercer	Coal Valley Mining Co., Rock Island, Ill., R. R. Cable, pres.; H. B. Sudlow, secy., treas. and mgr. Cap. stk. \$24,000. Cable. Shaft, slope, 200,000 tons; steam. Robert Lutz, supt.
"	"	Mrs. C. B. Hill, Box 47 (local). Hill. Slope; steam. T. B. Ellis, supt.
"	"	Chas. Peterson. Cap. \$20,000. Peterson's. Shaft, 8,000 tons; steam.
Cambridge Ry. 635.	Henry	Wielom Bros. Cap. stk. \$3,000. Indv. cap. \$1,500. No. 2. Shaft, 1,700 tons; steam. Chas. Wielom, supt.
Campbell Hill Ry. 463.	Jackson	Daniel Dawson. Dawson's. Slope, 300 tons; hand.
Canton Ry. 135, 702.	Fulton	Frank Alward (local). Cap. \$3,500. Alward's. Shaft, 2,000 tons; steam. Geo. Tompkins, supt.
"	"	David Auld. Cap. \$150. Slope, 480 tons.
"	"	Bennett & Lofly (lessees). Churchill. Shaft, 258 tons; horse. Geo. Lofly, supt.
"	"	Canton Coal Co., 116 Chestnut st., J. B. Allen, pres., treas. and mgr.; J. N. Cole, secy. Cap. stk. \$16,500. West Canton. Shaft, 4,500 tons; steam. Timothy Knight, supt.
"	"	A. W. Heald & Son. Cap. \$20,000. Canton Old Shaft. Shaft, 40,000 tons; steam. Thomas Simmons, supt.
"	"	L. L. Jones (local). Black Jack. Slope, 500 tons; horse.
"	"	Will Whitman, 285 Fulton pl. Cap. \$100. Buckheart. Slope; horse.
Cantrill Ry. 335.	Sangamon	Cantrill Cooperative Coal Co., John Griffin, pres., Michael Megher, secy.; John Barron, treas.; J. D. Mehl, mgr. Cap. stk. \$22,000. Shaft, 5,000 tons; steam. John McCleary, supt.
Carbondale Ry. 280, 319, 700.	Jackson	R. J. Mason (local). Slope, hand.
"	"	Charles A. Ray (local). Carbon Hill. Tunnel, 1,150 tons; horse and hand.
Carbon Hill Ry. 28, 135.	Grundy	Star Coal Co., Streator, Ill., W. H. Holcomb, pres. and mgr.; C. H. Rathbun, secy.; I. W. Perry, treas.; Cap. stk. \$1,200,000. Carbon Hill, Nos. 1 and 2. Shafts, 130,000 tons; steam. John D. Kelly, supt.
Cartersville Ry. 709.	Williamson	St. Louis & Big Muddy Coal Co., E. C. Davies, pres.; Chas. M. Heplburn, secy.; J. E. Metgettigan, treas.; Sam. F. Brush, mgr. Cap. stk. \$300,000. Dawos. Shaft, 300,000 tons; steam. Peter Jeffrey, supt.
"	"	Young & Perznoia (local). Cap. \$200. Young's. Slope, 4,000 tons; horse.
Catlin Ry. 784.	Vermilion	Hardy Harris. Cap. \$2,000. Hall's. Shaft, 2,000 tons; horse.
"	"	Arthur Jones. Catlin. Shaft, 1,000 tons; horse.
"	"	Thomas Thomas (local). Cap. \$75. Slope, 800 tons; horse.

## COAL-BITUMINOUS (CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, CORE OVENS, AND NAME OF MINE SUPERINTENDENT.	
TOWN	COUNTY.		
Centralia	Marion	Centralia Mining & Manufacturing Co. S. M. Warner, pres.; H. M. Warner, secy.; Ferdinand Kohl, treas.; Peter Forsyth, mgr. and supt. Cap. stk. \$25,000. Shaft, 125,000 tons; steam.	
Chandlerville	Cass	William Shore (local). Open pit; horse.	
Chatham	Sangamon	Girard Coal Co. Girard, Ill. A. J. Armstrong, pres.; A. K. Young, secy. and treas.; B. G. Smith, mgr. Chatham. Open pit, 15,000 tons; steam.	
"	"	Lick Creek Coal Co. C. C. Armstrong, pres.; Thos. Kinaker, secy.; A. K. Young, treas. Cap. stk. \$30,000. Chatham. Shaft, 100,000 tons; steam.	
Chenoa	McLean	Davies Coal Co. E. M. Pike, pres.; Chas. Nickel, secy., mgr. and supt.; R. G. Jordan, treas. Cap. stk. \$15,000. Chenoa. Shaft, 15,000 tons; steam.	
Clarke City	Kankakee	Gardner-Wilmington Coal Co. J. C. Lutz, pres., treas. and mgr.; J. F. Covey, secy. and supt. Cap. stk. \$200,000. Clarke City. Shaft, 93,000 tons; steam.	
Clyde	Macoupin (P.O. Hornsby) Ry. 170.	Consolidated Coal Co., St. Louis, Mo., Fourth and Olive sts. Charles Ridgely, pres.; Geo. T. Cutts, secy. and treas.; J. C. Simpson, mgr. Cap. stk. \$5,000,000. Clyde. Shaft, 125,000 tons; steam. John Rolfo, supt.	
Coal City	Grundy	Big Four Wilmington Coal Co., Chicago, Ill., 138 Jackson st. O. D. Berchecker, pres.; H. N. Taylor, secy. and mgr. Cap. stk. \$100,000. Big Four. Shaft, 80,000 tons; steam. Wm. Harkes, supt.	
Coal Valley	Rock Island	Banner Coal Co., Rock Island, Ill., Moline av. J. H. Wilson, pres. and supt. J. Pryce, mgr. Banner. Shaft, 80,000 tons; horse.	
"	"	Bardsley & Lee (local). Unkl Dori. Slope, 630 tons; hand. Thomas Lees, supt.	
Colchester	McDonough	B. Egerton. Cap. \$15,000. Shaft, 13,000 tons; steam. W. E. Stanton, supt.	
"	"	J. Heppenstall (local). Box 246. Cap. \$3,000. Heppenstall. Slope, 1,500 tons; horse.	
"	"	Ed Hilliard. Cap. \$1,200. Tunnel, 500 tons; hand.	
"	"	Michael Humes. Tunnel, 1,000 tons; hand.	
"	"	Wm. T. Jefferson (local). Cap. \$200. Tunnel and slope, 800 tons; hand.	
"	"	Thomas Kipling (local). Cap. \$2,000. Kipling. Slope, 2,000 tons; hand.	
"	"	J. Myers. Cap. \$150. Slope, 1,200 tons; hand.	
"	"	Quincy Coal Co., Quincy, Ill. H. S. Osborn, pres.; H. C. Osborn, secy. and treas.; C. C. Osborn, mgr. Cap. stk. \$2,500. Nos. 33 and 34. Shafts, 30,000 tons; steam. Thos. Terrill, supt.	
"	"	William Robinson & Son (local). Cap. \$300. Shaft, 20 tons; horse.	
"	"	L. H. Vest. Vest's. Shaft, 2,000 tons; horse.	
"	"	W. D. Williams (local). Williams. Tunnel, 400 tons; hand.	
Colfax	McLean	Colfax Coal & Mining Co. C. G. Ritchie, pres. and mgr.; D. T. Douglass, secy.; M. L. Douglass, treas. Cap. stk. \$10,000. Colfax. Shaft, 82,000 tons; steam. John Alexander, supt.	
Collinsville	Madison	Consolidated Coal Co., St. Louis, Mo., Fourth and Olive sts. Chas. Ridgely, pres.; Geo. T. Cutts, secy. and treas.; J. C. Simpson, mgr. Cap. stk. \$5,000,000. Abbey No. 3. Shaft, 185,000 tons; steam. Wm. Fletcher, supt. Heintz Bluh. Shaft, 185,000 tons; steam. Wm. Fletcher, supt.	
"	"	Consolidated Coal Co., St. Louis, Mo., Fourth and Olive sts. Chas. Ridgely, pres.; Geo. T. Cutts, secy. and treas.; J. C. Simpson, mgr. Cap. stk. \$5,000,000. Abbey No. 4. Shaft, 150,000 tons; steam. Wm. Fletcher, supt.	
Copley	Knox P.O. and Ry. Oneida 135.	Owen Conley. Conley's. Slope, 800 tons; horse. A. M. Rosenberg, supt.	
"	"	James McGovern. Patrick McGovern, mgr. Cap. \$1,000. McGovern's. Shaft, 50,000 tons; horse.	
"	"	Charles Morgan (local). Cap. \$300. Morgan's. Slope, 600 tons; horse.	
Coutterville	Randolph	Coutterville Mining Co. James M. Jones, pres., mgr. and supt.; J. Q. A. Nisbet, secy. and treas. Coutterville. Shaft, 20,000 tons; steam.	
Cowley	Knox P.O. and Ry. Appleton 26.	William Fish (local). Slope, 80 tons; hand.	
Crab Orchard	Williamson	Ann Edwards (local). Open, pit, 1,700 tons; hand.	
"	"	E. E. Ensinger (local). Ensinger. Slope, 1,200 tons; horse.	
Cuba	Fulton	Cuba Union Coal Co. Cuba. Shaft, 45,000 tons; steam. J. McLaws, supt.	
"	"	Eagle Mining Co., Galesburg, Ill., 14 Sumner st. S. H. Bateman, mgr. and supt. Cap. \$20,000. Eagle. Slope, 25,000 tons; hand.	
"	"	Wm. Nicholson & Sons. Star. Tunnel, 624 tons; horse. Wm. Nicholson, supt.	
"	"	Wm. Rutherford & Co. Wm. Rutherford, pres.; H. J. Efnor, secy. and treas. Cap. stk. \$10,000. Shaft; steam. J. G. Wilson, supt.	
Cutter	Perry	Solomon Maynard. Cap. \$3,000. Maynard's. Shaft, 480 tons; horse.	
Danville	Vermilion	Consolidated Coal Co., St. Louis, Mo., Fourth and Olive sts. Chas. Ridgely, pres.; Geo. T. Cutts, secy. and treas.; J. C. Simpson, mgr. Cap. stk. \$5,000,000. Danville No. 3. Shaft, 100,000 tons; steam. Danville No. 4. Shaft, 200,000 tons; steam. A. C. Daniels, supt.	
"	"	T. D. Frazee & Son (local). Cap. \$10,000. Eureka. Slope, 3,000 tons; horse. D. L. Frazier, supt.	
"	"	Wm. L. Le Warn, cor. Kimbler and Chandler. Cap. \$3,000. Moor Bank. Slope, 3,000 tons; horse.	

## COAL BITUMINOUS—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, COKE OVENS, AND NAME OF MINE SUPERINTENDENT.
TOWNS	AND COUNTY.	
Danville	Vermillion (Continued.)	John A. Lewis (local). Cap. \$5,000. Fairchild's. Tunnel, 1,500 tons; horse.
"	"	Elsha Lloyd. Cap. \$2,000. Star. Shaft, 4,000 tons; horse.
"	"	J. E. Lloyd. Cap. \$4,000. Lloyd's. Slope, 4,800 tons; horse. E. D. Lloyd, supt.
"	"	Mauck Bros. (local). Cap. \$5,000. Daisy. Shaft, 3,500 tons; horse.
"	"	Ray & Bolton, 102 Lincoln st. (local). Slope, 4,000 tons; horse. Wm. Ray, supt.
"	"	Wm. Kelly, Danville, Ill., 410 Buchanan st. Wagner. Tunnel, slope, 4,847 tons; horse. Ed Kelly, supt.
"	"	Shepherd & Son (local). Cap. \$4,000. Shepherd's. Slopes, 2,000 tons; horse. W. A. Shepherd, supt.
"	"	Strausbury & Watkins (local). Cap. \$10,000. Watkins' Glen. Tunnel, slope, 5,000 tons; horse. Wm. Watkins, supt.
"	"	C. D. Williams. Cap. \$5,250. Slope, 6,000 tons; horse.
Dawson Ry. 784.	Stangamon	Wabash Coal Co., Quincy, Ill., 406 Main st. Fred Wilms, pres. and mgr.; W. Wilms, secy.; S. W. Eldred, treas. Cap. stk. \$30,000. Dawson. Shafts, 15,000 tons; steam. T. P. Mowitt, supt.
Decatur Ry. 319, 323, 371, 749, 784.	Marion	Decatur Coal Co., foot of E. Main st. H. W. Hill, pres.; O. B. Gorin, secy. and treas.; W. C. Armstrong, mgr. and supt. Cap. stk. \$100,000. Decatur. Shaft, 100,000 tons; steam.
De Soto Ry. 319.	Jackson	Big Muddy Coal & Coke Co., Casper Kochler, pres.; Daniel Steele, secy. and supt.; G. H. C. Bodeker, treas. Cap. stk. \$15,000. Nos. 1 and 2. Shafts, 33,420 tons; steam.
Diamond Ry. Braidwood 145, 245.	Grundy	Wilmington Coal Mining & Manufacturing Co., Chicago, Ill., The Temple, cor. Monroe and La Salle sts., Town 527. H. H. J. Jewell, pres.; D. S. Gray, secy.; James Dalzell, treas.; H. G. Forlyee, mgr. Cap. stk. \$150,000. Diamond. Shaft, 150,000 tons; steam. David Skinner, supt.
Duncan's Mills Ry. Lowelltown 235, 275.	Fulton	Sulder & Hender (local). Tunnel, 300 tons; hand.
Dunfermline Ry. 135.	Fulton	Whitebreast Fuel Co., Chicago, Ill., 940 Rookery Bldg. J. C. Osgood, pres.; C. E. Phelps, secy.; G. W. Traer, treas.; T. J. Phillips, mgr. Cap. stk. \$1,300,000. Mine C. Shaft, 171,068 tons; steam. Alex. Jenkins, supt.
"	"	Whitebreast Fuel Co., Chicago, Ill., 940 Rookery Bldg. J. C. Osgood, pres.; C. E. Phelps, secy.; G. W. Traer, treas.; T. J. Phillips, mgr. Cap. stk. \$1,300,000. Mine D. Shaft, 75,000 tons; steam. Alex. Jenkins, supt.
Du Quoin Ry. 319, 700.	Perry	Du Quoin Coal Mining Co. C. McKinley, pres.; J. M. Browning, secy. Browning. Shaft, 100,000 tons; steam. Joseph Brookshaw, supt.
"	"	Egyptian Mining Co. W. T. Maolin, pres.; C. H. Hatfield, secy. and supt.; L. S. Smith, treas. Cap. stk. \$5,000. Egyptian. Shaft, 300,000 tons; steam.
"	"	Excelsior Coal Mining Co. Thos. Wilson, pres.; G. F. Blakeslee, secy. and treas.; N. A. Rice, mgr. and supt. Cap. stk. \$1,500. Excelsior. Shaft, 100,000 tons; steam.
"	"	Greenwood Coal Co. Wm. Greenwood, mgr. Greenwood. Shaft, 45,000 tons. J. W. Greenwood, supt.
"	"	Horn's Coalery Co. Henry Horn, pres. Horn's Coalery. Shaft, 120,000 tons; steam. Frank Horn, supt.
"	"	Jupiter Mining Co., Division st. Jas. J. Sylvester, pres.; W. W. Sylvester, secy. and treas.; S. B. Eaton, mgr. and supt. Cap. stk. \$50,000. Jupiter. Shaft, 124,000 tons; steam.
"	"	Perry County Coal Mining Co. Don Onstott, pres.; Wm. Goddard, secy., treas. and supt.; Walter Williams, mgr. Cap. stk. \$7,500. Perry county. Shaft; steam.
"	"	Superior Coal Mining Co., St. Louis, Mo., 24 Laclede Bldg. Peter Nicholson, pres.; A. M. Clark, mgr. Superior. Shaft, 30,000 tons; steam. Jas. Thornton, supt.
East Peoria Ry. 378, 702.	Tazewell	Edwards & Colver, Peoria, Ill., 113 N. Jefferson av. (local). Cap. stk. \$4,000. East Peoria. Slope, 8,000 tons; steam. Wm. Reynolds, supt.
Edinburg Ry. 538.	Christian	Edinburg Coal Mining Co. Basil Greenwood, pres.; Geo. P. Harrington, secy. and treas.; David J. Lloyd, mgr. and supt. Cap. stk. \$50,000. Greenwood. 50,000 tons; steam, electricity and compressed air.
Edwards Ry. 135.	Peoria	Howarth & Taylor Bros. Cap. \$15,000. Slope, 50,000 tons; steam; breaker. James Taylor, supt.
"	"	Kramm Bros. Peoria, Ill., 429 Woolner Bldg. Cap. \$10,000. Drift, 80,000 tons; steam; breaker. D. Kienbusch, supt.
Edwardsville, Ry. 784.	Madison	Madison Coal Co., St. Louis, Mo., 417 Loerst st. Wm. E. Guy, pres. and treas.; Jas. L. Blair, secy.; J. D. Crabb, mgr. Cap. stk. \$800,000. Edwardsville. Shafts, 350,000 tons; steam.
Eldorado Ry. Brooklyn Mine 408.	Saline	Eldorado Coal Co. J. H. Musgrave, mgr. Brooklyn. Slope, 5,000 tons; steam.
Elmira Ry. Neposset 135.	Stark	Chas. Gillet. Shaft, 60 tons.
Elmwood Ry. 135.	Peoria	John A. Endris (local). Endris. Shaft, 20,000 tons; horse.
Equality Ry. 408.	Gallatin	Equality Coal Co., R. Temple, pres., treas. and mgr.; J. J. Castle, secy. Cap. stk. \$150,000. Shaft, 30,000 tons; steam; 25 coke ovens, capacity 5,000 tons. Ira W. Jerrolds, supt.
Essex Ry. 170, 784.	Kankakee	Thomas Treasure & Sons. John T. Treasure, secy. Cap. \$5,000. Treasure's. Shaft, 3,000 tons; horse.
Ewing Ry. Benton 709.	Franklin	W. A. King (local). King's. Open pit, 200 tons; hand.
Exeter Ry. 784.	Scott	Jas. P. Morris. Slope, 400 tons.
Fairbury Ry. 702, 784.	Livingston	Walton Bros. Central. Shaft, 1,800 tons; steam. Isaac Kerr, supt.

## COAL—BITUMINOUS—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, CORE OVENS, AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Fairview..... Fulton Ry. 275.	Samuel Parr (local). Coal Creek. Open pit, 320 tons; hand.
"..... "	Theodore Punyca (local). Cap. \$1,000. Punyca. Tunnel, 3,000 tons; hand.
Farmington..... Fulton Ry. Middle Grove 135.	Claire Coal Co., Chicago Ill., 413 Phenix Bldg. J. S. Morton, pres.; H. N. Taylor, secy. and mgr.; J. F. Stone, treas. Cap. stk. \$25,000. No. 2. Shaft, 80,000 tons; steam. Wm. Cruickshanks, supt.
Flatt..... Fulton Ry. 26, 135.	F. R. Greene, Galesburg, Ill., 23 Main st. Cap. \$40,000. Flatt. Slope and shaft, 83,019 tons; horse and steam. C. R. Casson, supt.
Flint..... Hamilton Ry. McLeansboro 408.	J. C. Harper (local). Cap. \$1,900. Knight's Prairie. Open pit, 280 tons; hand.
Fosterburg..... Madison Ry. Dorsey 170.	Wm. H. Fichema (local). Slope, 325 tons; hand.
"..... "	B. F. Lucking (local). Charles H. Lucking, mgr. Cap. \$400. Lucking's. Shaft, 600 tons; horse.
Frelonh..... Williamson Ry. 702.	Crystal Plate Glass Co., St. Louis, Mo., 404 Market st. E. A. Hitchcock, pres.; Edmund T. Allen, secy.; Chas. W. Barnes, treas.; H. Willson, mgr. and supt. Cap. stk. \$1,500,000. Frelonia. Shaft, 100,000 tons; steam.
"..... "	Scarbro & Griffin (local). Cap. stk. \$1,000. Sprague. Shaft, 2,000 tons; horse.
Freeburg..... St. Clair Ry. 702.	Chas. Becker. Cap. \$5,000. Freeburg. Shaft, 15,000 tons; steam. Frank Nold, supt.
"..... "	Randle Coal Co. Philip Conrath, pres.; Peter Herman jr., secy., treas. and mgr. Cap. stk. \$10,000. Randle. Shaft, 50,000 tons; steam. Wm. Randle, supt.
"..... "	St. Clair Coal Co., St. Louis, Mo., 311 Olive st., Crittenden McKinley, pres.; E. B. Huff jr., secy.; W. S. Scott, treas. and mgr. Cap. stk. \$25,000. St. Clair. Shaft, 60,000 tons; steam. Anton Danzer, supt.
Galesburg..... Knox Ry. 26, 135, 275.	Galesburg Pressed Brick & Tile Co., 23 Main st. J. C. Stewart, pres.; J. H. Calkins, secy. and treas. Cap. stk. \$50,000. Shaft, 7,886 tons; steam. Peter Dolan, supt.
"..... "	Mrs. P. Milan (local). Cap. \$4,000. Soperville. Shaft, 40 tons; horse.
"..... "	Ross S. Woodward (local). Soperville. Shaft, 2,600 tons; horse and water. John Ross, supt.
Galva..... Henry Ry. 135, 142.	Gray Eagle Coal Co. Wm. J. Reed, pres.; Squire Anderson, secy.; O. L. Peterson, treas. and mgr. Cap. stk. \$4,800. Gray Eagle. Shaft, 20,000 tons; steam. J. A. Bengtson, supt.
"..... "	Phillip Murphy (local). Shaft, 120 tons; horse.
"..... "	James H. Murray. Cap. \$1,200. Murray's. Shaft, 3,500 tons; steam.
Gardner..... Grundy Ry. 281, 345.	Gardner-Wilmington Coal Co. J. C. Lutz, pres. treas. and mgr.; J. F. Covey, secy. and supt. Cap. stk. \$200,000. Gardner. Shaft, 50,000 tons. Steam.
Georgetown..... Vermillion Ry. 135.	J. B. Clifton. Open. pit, 300 tons.
Gilchrist..... Mercer Ry. Viola 135.	Empire Coal Co. Edward H. Thayer, pres.; Chas. F. Allen, secy.; H. M. Gilchrist, treas. and mgr. Cap. stk. \$60,000. Shaft, 88,800 tons; steam. Chas. Shuler, supt.
Gillespie..... Macoupin Ry. 170.	Consolidated Coal Co., St. Louis, Mo., Fourth and Olive sts. Chas. Ridgely, pres.; Geo. T. Cutts, secy. and treas.; J. C. Simpson, mgr. Cap. stk. \$5,000,000. Gillespie. Shaft, 150,000 tons; steam. John Rollo, supt.
Girard..... Macoupin Ry. 145, 335.	Girard Coal Co. C. C. Armstrong, pres.; A. K. Young, secy., treas. and mgr. Cap. stk. \$75,000. Girard. Shaft, 200,000 tons; steam and compressed air. Hiram M. Young, supt.
Glenburn..... Vermillion Ry. Oakwood 145, 170.	Glenburn Coal Co. C. M. Swallow, pres.; W. J. Callum, secy.; W. W. Whitte, treas. Cap. stk. \$100,000. Glenburn. Shaft, 100,000 tons; steam. Chas. Swann, supt.
Glen Carbon..... Madison Ry. 355, 703.	Madison Coal Co. St. Louis, Mo., 415 Locust st. Wm. E. Gray, pres. and treas.; Jas. L. Blair, secy.; J. D. Crabb, mgr. Cap. stk. \$300,000. Glen Carbon Nos. 1, 2 and 3. Shaft, 600,000 tons; steam and compressed air. H. Lesler, supt.
Grape Creek..... Vermillion Ry. 146.	J. W. Blue. Tunnel, 7,500 tons; horse.
"..... "	A. M. Bushong. Cap. \$5,000. Bushong. Tunnel, 5,000 tons.
"..... "	Grape Creek Coal Co. J. B. Brown, pres.; A. N. Sullivan, secy. and treas.; Joseph Fairhall, mgr. Cap. stk. \$500,000. Nos. 4 and 5. Shaft and slope, 210,000 tons; steam. Geo. Foster, supt.
"..... "	Kellyville Coal Co., Danville, Ill., 19 E. Main st., Room 1. W. J. Callum, pres.; W. L. Runyan, secy.; M. Kelly, treas. and mgr. Cap. stk. \$500,000. Shafts, 250,000 tons; steam. James Doughty, supt.
"..... "	Lucas & Raine, W. Raine, pres., mgr. and supt. J. Lucas, secy. and treas. Cap. stk. \$1,000. Valley. Drift, 2,000 tons; steam.
"..... "	L. J. Mozier & Co. L. J. Mozier, pres.; C. J. Mozier, secy.; Jas. McDowell, mgr. and supt. Cap. stk. \$10,000. Grape Creek. Slope and open pit, 50,000 tons; horse.
"..... "	Pawnee Coal Co., Chicago, Ill., No. 935 Rookery. Bernard Hinwood, pres. and mgr.; R. W. McKay, secy. and treas. Cap. stk. \$25,000. Pawnee. Shaft, steam. W. W. Keefer, supt. (developing).
"..... "	Protective Cooperative Mining Co. Joseph Hays, pres. and treas.; David Owens, secy.; John Shaw, mgr. and supt. Cap. stk. \$3,750. Cooperative. Shaft, 16,000 tons; horse.
"..... "	Spellman Coal Co. Thos. I. Spellman, pres.; S. J. Spellman, secy. and treas.; Wm. Tenney, mgr. Cap. stk. \$20,000. Drift, 50,000 tons; horse, steam. James Price, supt.
Greenview..... Menard Ry. 145.	Menard Coal Co. S. T. Hurst, pres.; J. A. Petrie, secy. and mgr.; E. D. Taylor, treas. Cap. stk. \$40,000. Menard Nos. 1 and 2. Shaft, 112,000 tons; steam. J. A. Bracken, supt.
Griffin..... Mercer Ry. New Windsor 145.	Griffin Bros. (local). Cap. \$10,000. Shaft, horse.
Groveland..... Tazewell Ry. 26.	J. T. Maco, Pekin, Ill. (local). Cap. \$300. Union. Shaft, 20,000 tons; horse.

## COAL—BITUMINOUS (CONTINUED)

LOCATION OF MINE, ALWAYS, WATER ROUTES AND SHIPPING POINT.		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, COKE OVENS, AND NAME OF MINE SUPERINTENDENT.
TOWNS	AND COUNTY.	
Greenville	Tazewell	Jacob Schmidt (local). Cap. \$2,000. East Peoria. Shaft, 3,654 tons; horse.
"	"	Geo. Wieland (local). Cap. \$300. Shaft, 1,200 tons; horse.
Grubb Ry. 709.	Jackson	A. C. Crain (local). Crain's. Slope, 100 tons; horse.
Hampton Ry. 144.	Rock Island	Groth Bros. Porter's. Slope, 925 tons; hand.
"	"	Northern Mining & Railway Co. Samuel Heagy, pres.; Morris S. Heagy, secy. and treas. Cap. \$tk. 224,000. Shaft, 6,338 tons; steam. Robert Pickett, supt.
Harmony Station Not a P. O. Ry. 402.	St. Clair	Crown Coal Co., St. Louis, Mo., foot of Carr st., J. T. Taylor, pres., mgr. and supt., Bart S. Adams, secy. and treas. Cap. \$tk. \$20,000. Crown. Shaft, 85,500 tons; steam.
Harris. P. O. and Ry. Bushnell 135, 762.	Fulton	Robert Orr (local). Orr's. Slope, 100 tons; hand.
Harrisburg Ry. 170.	Saline	Davenport & Co. Wm. N. White, secy. and treas., John Davenport, mgr. and supt. Black Hawk. Shaft, 15,000 tons; steam.
"	"	Howell & McCroary. Cap. \$15,000. Clifton. Slope, 700 tons; horse. W. H. Howell, supt.
Hawley Ry. Galva 135, 635.	Henry	John Rochford. Cap. \$200. Round Grove. Shaft, horse.
"	"	Smith & Hodsall (local). Round Grove. Slope, 1,500 tons; steam. S. Hodsall, supt.
Hillery Ry. 170.	Vernillion	Z. T. Casteel. Cap. \$2,000. Holden. Shaft, 1,000 tons; horse.
Hillsboro Ry. 170.	Montgomery	Hillsboro Coal Co. G. W. Paisley, pres.; W. A. Finney, secy. and mgr. Cap. \$tk. \$80,000. Shaft, 50,000 tons; steam. Wm. Korkum, supt.
Holls P. O. and Ry. Orchard Mines 762.	Peoria	German Coal Co. Henry Graber, pres. and mgr., John Baekes, secy., Fred Boehen, treas. Cap. \$tk. \$30,000. Bonaires. Slope, 13,000 tons; horse.
"	"	James Reagan. Cap. \$3,000. Lamarsh Creek No. 1. Open pit, 50,000 tons; horse.
"	"	Adam Sholl, Peoria, Ill., Woolmer Bldg., Room 333. Cap. \$200,000. Sholl's Nos. 1 and 2. Slope and shaft, 124,000 tons; steam. Joseph Sholl, supt.
Hunriek Ry. 763.	Vernillion	J. W. Jones (local). Open pit, 775 tons; horse.
Industry Ry. Macomb 135.	McDonough	John McEntire (local). Tunnel, 120 tons; hand.
"	"	Jack Wilson (local). Jones. Slope, 500 tons.
Ipsava Ry. 135.	Fulton	C. & R. Roddis. Cap. \$1,000. Ipsava. Tunnel, 2,000 tons; Robert Rodd's, supt.
Jubilee Ry. Edwards 135.	Peoria	Samuel Mosley. Jubilee. Tunnel, 75 tons; hand.
Kangley Ry. 26, 135, 145, 784.	La Salle	Star Coal Co., Strejtor, Ill. W. H. Holcomb, pres. and mgr., C. H. Rathbone, secy., J. W. Perry, treas. Cap. \$tk. \$1,200,000. Kangley Nos. 1 and 2. Shaft, 333,000 tons; steam. John D. Roberts, supt.
Kewanee Ry. 145.	Henry	Thomas Carter (local). Cap. \$200. Shaft, 420 tons; horse.
"	"	Reinold Kempin (local). Slope, 1,142 tons; horse.
"	"	Kewanee Coal Co. E. F. Baker, pres.; J. C. Williams, secy., A. M. Howell, treas.; A. W. Errett, mgr. Cap. \$tk. \$25,000. Shaft, 50,000 tons; steam. J. J. Fleming, supt.
"	"	Thomas Lester (local). Slope, horse.
"	"	Tibbitts & McMullen (local). Shaft, 64,000 tons; steam. Philip Henry, supt.
Kiesapoo Ry. Edwards 135.	Peoria	John Jordan (local). Banner. Slope, 800 tons; horse.
Kimmudly Ry. 319.	Marion	W. S. Matthews (local). Kimmudly. Steam.
Knoxville Ry. 135.	Knox	T. C. Dadds (local). Box 183. Shaft, 1,800 tons; horse.
"	"	Samuel Hopper & Son (local). Cap. \$tk. \$15,000. Tunnel, 600 tons; hand. Samuel Hopper, supt.
Laol Ry. 135.	Bureau	Whitcomb Fuel Co., Chicago, Ill., 940 Rookery Bldg., J. C. Osgood, pres., C. E. Phelps, secy., G. W. Tracy, treas., T. J. Phillips, mgr. Cap. \$tk. \$1,000,000. Mine B. Shaft, 11,257 tons; steam. Adam Fletcher, supt.
Lambs Creek, P. O. and Ry. Orchard Mines 762.	Peoria	D. B. Roberts. Cap. \$3,000. Roberts. Slope, 250 tons; horse.
La Salle Ry. 135, 142, 319.	La Salle	Illinois Valley Coal Co. J. F. Joy, pres.; F. O. Wyatt, secy. and mgr., H. S. Hazen, treas. Cap. \$tk. \$65,000. No. 1. Shaft, 125,000 tons; steam. G. W. Wyatt, supt.
"	"	La Salle County Carbon Coal Co. J. F. Joy, pres.; F. O. Wyatt, secy. and mgr., H. S. Hazen, treas. Cap. \$tk. \$200,000. La Salle and Rockwell. 450,000 tons; steam. G. M. Wyatt, supt.
"	"	Mathiessen & Hezeler Zinc Co. E. C. Hezeler, pres.; F. W. Matthiessen, secy. Shaft, 75,000 tons; steam. John Heinz, supt.
"	"	Oglesby Coal Co. T. T. Bend, pres., treas. and mgr., E. T. Bend, secy. Shaft, 3,000 tons; steam. Edw. Jones, supt.

## COAL—BITUMINOUS—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, COKE OVENS, AND NAME OF MINE SUPERINTENDENT.
TOWN	AND COUNTY	
La Salle	La Salle <i>(Continued.)</i>	Union Coal Co., James W. Dunham, prest.; A. J. O'Connor, secy.; John Stuart, treas.; N. W. Dunham, mgt. Cap. stk. \$30,000. No. 1. Shaft, 125,000 tons; steam. B. M. Herberington, supt.
Ledford	Saline Ry. 170.	James C. Heenan. Cap. \$500. Ledford. Slope and open pit, 481 tons; horse.
Lewistown	Fulton Ry. 135, 275.	Isaac Bath (local). Bath. Slope, 1,200 tons; horse.
"	"	Jerome Williams (local). Cap. \$100. Athy. Tunnel, 4,000 tons; hand.
Limestone	Peoria P. O. and Ry. Peoria 327, 762.	John Linnick (local). Cap. \$1,000. Green Valley. Shaft, 6,000 tons; steam. Geo. Freezer, supt.
"	"	James Sleam (local). Cap. \$400. Sleam's. Slope, 10,000 tons; hand.
Lincoln	Logan Ry. 145, 319, 571.	Citizens' Coal Mining Co., A. Mayfield, prest.; P. Casey, secy.; P. Oelamp, treas. Cap. stk. \$60,000. Citizens'. Shaft, 100,000 tons; steam. F. F. Holmes, supt.
"	"	Lincoln Coal Co., Cap. \$300,000. Nos. 1 and 2. Shaft, 90,000 tons; steam. Frank Trover, supt.
Litchfield	Montgomery Ry. 170, 353, 784.	Litchfield Coal Co., 6 State st., Isaac Kirby, prest.; D. Davis jr., secy., treas. and supt.; Joseph Richardson, mgr. Cap. stk. \$10,000. Litchfield. Shaft; steam.
Loceyville	Bureau Ry. 142.	Chicago, Wilmington & Vermillion Coal Co., Chicago, Ill., The Temple, cor. Monroe and La Salle sts., Francis Barlett, prest.; A. L. Sweet, secy. and mgr.; Thos. A. Lemman, treas. Open pit, 50,000 tons; steam. James Cherry, supt.
Loding	Rock Island Ry. 135, 141, 142.	Donald & Jamieson (local). Cap. \$2,000. Shaft, 4,000 tons; steam. E. G. Jamieson, supt.
"	"	John H. Loding (local). Cap. \$2,000. Loding. Slope, 4,000 tons; steam.
Lombardville	Stark Ry. 135.	A. W. Higbee (local). Cap. \$1,000. Lombardville. Shaft, 150 tons; horse.
Maple's Mill	Fulton Ry. 320, 335.	J. W. Lamb. Lamb. Slope, 600 tons; hand.
Marietta	Fulton Ry. 762.	J. A. Anderson & Sons (local). Slope, 300 tons.
Marion	Williamson Ry. 709.	William P. Allen (local), Box No. 188. Slope, 7,500 tons; hand.
"	"	William Tippett (local). Cap. \$500. Slope, 750 tons; horse.
Marissa	St. Clair Ry. 402.	Consolidated Coal Co., St. Louis, Mo., Fourth and Olive sts., Charles Ridgely, prest.; Geo. T. Cutts, secy. and treas.; J. C. Simpson, mgr. Cap. stk. \$5,000,000. White Oak. Shaft, 100,000 tons; steam. Chas. Rodenberg, supt.
Milan	Rock Island Ry. 635.	William Parker (local). Cap. \$1,000. Shaft, 2,500 tons; hand and horse.
"	"	Fred. Von Ach (local). Cap. \$150. Von Ach. Shaft, 125 tons; horse.
Millersburg	Mercer Ry. Alledo 135.	Parker & Morris (local). Slope, 68 tons; hand.
Millstadt	St. Clair Ry. 463.	Millstadt Coal & Mining Co., Wm. Preusser, prest.; Charles Jacobus, secy.; Joseph Marxer, treas.; Thos. Sutton, mgr. and supt. Cap. stk. \$5,000. Shaft, 17,000 tons; steam.
Mineral	Bureau Ry. 142.	W. H. Forrest. Cap. stk. \$10,000. Indian Hill. Shaft, 5,000 tons; horse.
Milponk	Woodford Ry. 26, 319.	Estate of Miner T. Ames, Chicago, Ill., 145 La Salle st., Mrs. Irene C. Ames, administratrix. Cap. \$165,000. Chicago and Milponk. Shaft, 100,000 tons; steam. D. S. Richards, supt.
Mission Fields	Vermillion Ry. Oakwood 170.	John Woodard. Shaft, 2,000 tons; horse.
Monica	Peoria Ry. 26, 135.	Charles Berry & Sons (local). Charles Berry, mgr. Cap. \$800. Guyer. Shaft, 600 tons; horse. William Berry, supt.
"	"	Wesley Dalrymple. Cap. \$5,000. Black Diamond. Shaft, 7,500 tons; horse.
Monmouth	Warren Ry. 135, 327.	William Packard (local). Slope, 640 tons; hand.
Monterey	Fulton Ry. Canton 135, 762.	Robert Williams (local). Slope, 7 tons; hand.
Moro	Madison Ry. 170.	Herman Kabel (local). Cap. \$500. Shaft, 1,200 tons; horse.
Morris	Grundy Ry. 142.	Heather & Wood (local). Cap. \$2,000. No. 4. Shaft, 5,000 tons; horse. Wm. Wood, supt.
"	"	T. L. Thurston (local). Shaft, 1,500 tons; horse.
"	"	A. F. Watson (local). Shaft, 600 tons; horse.
Mt. Olive	Macoupin Ry. 335, 784.	Consolidated Coal Co., St. Louis, Mo., Fourth and Olivestrs., Chas. Ridgely, prest.; Geo. T. Cutts, secy. and treas.; J. C. Simpson, mgr. Cap. stk. \$5,000,000. Mt. Olive No. 8. Shaft, 205,000 tons; steam. Jos. C. Hebenstreit, supt.
"	"	Mount Olive Coal Co., G. E. Taintor, prest.; G. D. L'Huillier, secy.; A. J. Moorehead, asst. treas. and mgr. Cap. stk. \$1,000,000. No. 1. Shaft, 150,000 tons; steam. Joseph Hann, supt.
Moweacqua	Shelby Ry. 319.	Moweacqua Coal Mining & Manufacturing Co., J. E. Gregory, prest.; A. J. Combs, secy.; V. Snyder jr., treas.; Chas. J. White, mgr. and supt. Cap. stk. \$25,000. Moweacqua. Shaft; steam.
Muddy Valley	Jackson Ry. 319.	Muddy Valley Mining & Manufacturing Co., N. C. Wright, prest. Muddy Valley. Shaft, 150,000 tons; steam. John Forester, supt.

## COAL—BITUMINOUS (CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, CORE OVENS, AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Murphysboro, Jackson Ry. 293, 319, 458, 463.	Gartside Coal Co., St. Louis, Mo., 714 Pine st. C. E. Gartside, pres't., treas. and mgr.; Alexander Hamilton, secy. Cap. st'k. \$200,000. Nos. 1, 3, 4. Shafts, 120,000 tons; steam and compressed air. Frank Hartman, supt.
" " "	New Kentucky Coal Co., Chicago, Ill., 215 Dearborn st. P. D. Whitehead, pres't.; Thos. J. Whitehead, secy. and treas. Cap. st'k. \$100,000. New Kentucky, 300,000 tons; steam.
" " "	Edgar E. Poole, Cap. \$2,000. Poole, Shaft, 1,500 tons; steam.
" " "	St. Louis Ore & Steel Co., St. Louis, Mo., Granite Bldg., E. A. Hildebeck, pres't.; O. L. Garrison, secy. and treas. Shafts Nos. 4 and 5, Harrison. Shafts, 400,000 tons; steam. J. D. Peters, supt.
" " "	D. P. Willis (local). Cap. \$12,000. Willis, Shaft, 12,000 tons; steam. Thos. W. Gill, supt.
Murrayville, Morgan Ry. 145.	F. Wagstaff (local). Wagstaff, Open pit, 120 tons; horse.
Newcastle, Saline Ry. 170.	Davenport & Co., Harrisburg, Ill. John Davenport, pres't.; W. N. White, secy. and treas. W. Hallsopp, mgr. Cap. st'k. \$9,000. Newcastle, Shaft, 30,000 tons; steam. W. R. Williams, supt.
Newtown, Livingston P. O. Streator.	L. A. Muntz & Sons (local). Cap. st'k. \$200,000. Muntz, Tunnel, 100 tons; horse.
Niantle, Macon Ry. 784.	Niantle Coal Co. Henry Shlandeman, pres't.; Albert Barnes, secy., treas. and mgr. Cap. st'k. \$25,000. Shaft, 100,000 tons; steam. Richard Henley, supt.
Nilwood, Macon Ry. 145.	Nilwood Carbon Coal Co. H. Cooper, pres't.; F. W. Cooper, secy. and treas. C. Cooper, mgr. and supt. Cap. st'k. \$15,000. Shaft, 100,000 tons; steam.
Norris, Fulton Ry. 135.	D. H. Williams, Cap. \$35,000. Norris, Shaft, 60,000 tons; steam. W. J. Spencer, supt.
North Alton, Madison Ry. 145, 170, 708.	Nathan Syddall, Cap. \$600. Shaft, 3,744 tons; horse. Nathan Syddall, supt.
Oakwood, Vermilion Ry. 146, 170.	Consolidated Coal Co., St. Louis, Mo., cor. Fourth and Olive sts. Chas. Ridgeley, pres't.; Geo. T. Catts, secy. and treas.; J. C. Simpson, mgr. Cap. st'k. \$5,000,000. Mission Field Strippings, Open pit, 150,000 tons; steam. A. C. Daniel, supt.
" " "	Middle Fork Coal Co. George W. Abdill, pres't.; Michael France, secy. Cap. st'k. \$100,000. France, Shaft, 150,000 tons; steam. Alfred Blake, supt.
Odin, Marlon Ry. 319, 598.	Odin Coal Co. N. B. Morrison, pres't.; F. D. Secor, secy., mgr. and supt. Ira W. Lane, treas. Cap. st'k. \$25,000. Odin, Shaft, 100,000 tons; steam.
O'Fallon, St. Clair Ry. 538.	Wm. Crowson & Sons, St. Louis, Mo., 702 N. Seventh st. Wm. Crowson sr., pres't.; Fred Crowson jr., secy.; Elihu Crowson, treas. and supt.; Wm. Crowson jr., mgr. Cap. st'k. \$25,000. Darrow, Shaft, 50,000 tons; steam.
Okawville, Washington Ry. 408.	F. W. Stricker (local). Cap. \$5,000. White Smoke, Shaft, 1,000 tons; steam. Mike Batthasar, supt.
Ora, Jackson Ry. 463.	Wm. Campbell (local). Cap. \$2,500. Campbell's, Slope, 750 tons; horse.
" " "	Henry Ditzler, Cap. \$500. Enterprise, Slope, 500 tons; horse.
Orchard Mines, Peoria Ry. 762.	J. L. Petri (local). Pekin, Ill. Slope, 80 tons; hand.
" " "	James Green (local). Cap. \$500. Green, Slope, 1,200 tons; horse.
Otter Creek, La Salle P. O. and Ry. Streator 26, 145, 784.	N. Plumb (lessee). Cap. \$25,000. Otter Creek, Shaft, 40,000 tons; steam.
Otto, Fulton Ry. 749.	Isaac Hendee, Cap. \$200 (local). Turkey Branch, Tunnel, 435 tons; hand.
Pana, Christian Ry. 170, 319, 538.	Penwell Coal Mining Co. Geo. N. Penwell, pres't., treas. and mgr.; L. Scheldsbach, secy. Cap. st'k. \$50,000. Penwell Colliery, Shaft, 150,000 tons; steam. John Lee Dixon, supt.
" " "	Springside Coal Mining Co. D. J. Overholt, pres't. and treas.; Lewis Overholt, secy. Cap. st'k. \$50,000. Shaft, 200,000 tons; steam. John Duddy, supt.
Pekin, Tazewell Ry. 371.	Frank Lowery, Cap. \$10,000. Hawley, Shaft, 25,000 tons; steam.
" " "	J. T. Mace (local). Cap. \$900. Union, Shaft, 2,500 tons; horse.
Peoria, Peoria Ry. 135, 142, 170, 335, 378, 571, 572, 749, 762.	Richard Cody, Martin st. Cap. \$6,500. Shaft, 4,800 tons; steam and horse.
" " "	Wm. P. Grant, 720 S. Adams st. Cap. \$2,000. White Oak, Green Oak, Slope; steam.
" " "	Peter Grant & Son, 113 Depot st. John R. Grant, mgr. Cap. \$25,000. Excelsior, Shaft, 25,000 tons; steam. Geo. Waugh sr., supt.
" " "	Ed. Little Mining Co., 225 South Adams st. E. Little, pres't. and mgr.; W. E. Canty, secy. and treas. Cap. st'k. \$5,000. Little, Shaft, 40,000 tons; steam. T. A. Elhrett, supt.
" " "	Millard & Wolschlag, 2005 S. Adams st. Jas. Millard, mgr. Cap. st'k. \$10,000. Millard's, Tunnel, 30,000 tons; steam. Stephen Wolschlag, supt.
" " "	Royster Bros., 521 S. Washington st. Empire, Shaft, 30,000 tons; steam, compressed air. Moses Royster, supt.
" " "	F. P. Schmidt & Sons (local) 140 S. Adams st. Slope, 7,500 tons.
Percy, Randolph Ry. 463.	Wm. Goulby & Son, No. 1 and No. 2. Shafts, 22,082 tons; steam. Wm. H. Goulby, supt.
Peru, La Salle Ry. 135, 142.	Estate of Jas. Cahill, Cap. st'k. \$40,000. Cahill, Shaft, 101,000 tons; steam. Cornelius J. Cahill, supt.

## COAL—BITUMINOUS—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.			NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF FUEL USED, COAL BREAKERS, WASHERS, COKE OVENS, AND NAME OF MINE SUPERINTENDENT.	
TOWN	AND	COUNTY.		
Pinckneyville	.....	Perry	G. W. Brown, Cap. \$25,000. Open pit, 25,000 tons; steam. Thos. M. Brown, supt.	
"	"	Ry. 319, 709, 408, 786.		
"	"	"	Foust, Turner & Malone, Main st. Schulz's. Shaft, 3,000 tons; steam. C. Foust, supt.	
"	"	"	Wood Bros. Shaft, 1,500 tons, horse.	
Pleasant Plns., Sangamon			Springfield & Pleasant Plains Coal Co. James M. Graham, secy.; M. Connelly, treas.; John McLean, mgr. and supt. Cap. stk. \$80,000. Pleasant Plains. Shaft, 8,487 tons; steam.	
Ry. Frederick 135, 320.				
Pleasant View	...	Schnuyler	Henry & Walter Croxton. John S. Vance, mgr. Vance's. Tunnel, 25,360 tons; hand.	
Ry. 338.				
"	"	"	Pleasant View Coal Co. Thos. Allen, prest.; Geo. Spillers, secy. and supt. Cap. stk. \$5,000. Pleasant View. Shaft, 4,000 tons; horse.	
Pottstown	...	Peoria	Howarth & Taylor Bros. Cap. \$15,000. Young's and Red Bud. Drifts, 25,000 tons; horse. James Taylor, supt.	
Ry. 135.				
"	"	"	Isaac Wantling & Son, Peoria, Ill., 611 Fourth st. Cap. \$40,000. Drift, tunnel, slope, 50,000 tons; steam; breaker. T. J. Wantling, supt.	
Prairie City	...	McDonough	A. Hartford. Slope, 800 tons; hand.	
Ry. 135.				
Pre-sumption	...	Mercer	Thomas D. Peter Docherty (local). Shaft, 2,500 tons; horse.	
Ry. 635.				
Reading	...	Livingston	M. J. Barackmaw & Son, 301 Main st. Cap. \$40,000. Shaft, 34,000 tons; steam.	
Ry. 26.				
"	"	"	Lukins & Cavanaugh. Cap. \$25,000. No. 2. Shaft, 35,000 tons; steam. Jas. Haddick, supt.	
Rentchler	...	St. Clair	Wm. Ogden & Bro. Cap. \$5,000. Enterprise. Shaft, 10,000 tons; steam. Henry Beble, supt.	
Ry. 408.				
Ridgely	...	Sangamon	Springfield Cooperative Coal Co. John H. Scheidner, prest., mgr. and supt.; Mrs. F. Scheidner, secy.; M. Connelly, treas. Cap. stk. \$50,000. Shaft, 40,000 tons; steam.	
Ry. 385.				
"	"	"	Wilmingon & Springfield Coal Co. Wm. Ridgely, prest.; Edward Ridgely, secy. and treas.; George C. Simpson, mgr. Cap. stk. \$60,000. Nutt. Shafts, 100,000 tons; steam. Wm. T. Golden, supt.	
Ridge Prairie	...	St. Clair	Consolidated Coal Co., St. Louis, Mo., Fourth and Olive sts. Chas. Ridgely, prest.; George T. Cutts, secy. and treas.; J. C. Simpson, mgr. Cap. stk. \$50,000,000. Mentor. Shaft, 150,000 tons; steam. William Harding, supt.	
Ry. 538.				
"	"	"	Consolidated Coal Co., St. Louis, Mo., Fourth and Olive sts. Charles Ridgely, prest.; George T. Cutts, secy. and treas.; J. C. Simpson, mgr. Cap. stk. \$5,000,000. Alma. Shaft, 100,000 tons; steam.	
Riverton	...	Sangamon	Riverton Coal Co. R. W. Jess, prest. and treas.; W. B. Jess, secy. Cap. stk. \$40,000. Shaft, 300,000 tons; steam. J. A. Agee, supt.	
Ry. 784.				
Roanoke	...	Woodford	Roanoke Mining Co. Peter Belsley, prest. and mgr.; Benjamin Belsley, secy.; Z. R. Trainer, treas. Cap. stk. \$25,000. Shaft, 46,000 tons; steam. John Gray, supt.	
Ry. 26.				
Rockbridge	...	Greene	Trill Bros. (local). Slope, 1,000 tons; horse, hand.	
Ry. 135.				
Rockland Grove	...	Mercer	T. C. Peterson (local). Parker's Run. Slope, 800 tons; horse and hand.	
P. O. and Ry. New Windsor 135.				
Roodhouse	...	Greene	Victor Coal Mining Co. Ellis Briggs, prest.; Geo. E. Briggs, secy. and treas.; J. F. Coblough, mgr. and supt. Cap. stk. \$10,000. Victor. Shaft; steam.	
Ry. 145.				
Rosborough	...	Randolph	Rosborough Coal & Manufacturing Co., Sparta, Ill. R. H. Rosborough, prest. and mgr.; D. P. Barker, secy. Rosborough. Shaft; steam. Charles Adams, supt.	
Ry. 463.				
Rushville	...	Schnuyler	John & Perry Hodge. McKee. Slope, 2,000 tons; hand.	
Ry. 135.				
"	"	"	John Kerr. Cap. \$6,000. Kerr's. Shaft, 10,016 tons; steam. D. Koosa, supt.	
Rutland	...	La Salle	Rutland Coal Co. E. Hake, prest.; Wm. G. Sutton, secy.; Wm. Malcolm, mgr. and supt. Cap. stk. \$200,000. Rutland. Shaft, 90,000 tons; steam.	
Ry. 319.				
St. Clair	...	St. Clair	York Coal & Mining Co., Belleville, Ill., 208 Silver st. Wm. Haddock, prest.; John R. Faletto, secy.; Peter Schomerlock, treas.; Isaac Jewett, mgr. and supt. Cap. stk. \$15,000. Oak Hill. Shaft, 300,000 tons; steam.	
P. O. and Ry. Belleville 401.				
Saint David	...	Fulton	White-breast Fuel Co., Chicago, Ill., 940 Bankers Bldg. J. C. O'Connell, prest.; C. E. Phelps, secy.; G. W. Truett, treas.; T. J. Phillips, mgr. Cap. stk. \$1,300,000. Mine E. Shaft, 40,000 tons; steam. Alex. Jenkins, supt.	
Ry. 145.				
"	"	"	D. H. Williams. Cap. \$40,000. St. David. Shaft, 40,000 tons; steam. W. J. Spencer, supt.	
John	...	Perry	Illinois Central Coal & Salt Co., Cairo, Ill. T. W. Halliday, prest.; M. C. Wright, secy.; S. M. Neely, mgr. Cap. stk. \$5,000. Paradise. Slope, 120,000 tons; steam.	
Ry. 319.				
Salem	...	Marion	Salem Coal Co. Erasmus Hall, prest.; John W. Larimer, secy.; Frank Schwartz, treas.; Albert R. Allmon, mgr. and supt. Cap. stk. \$7,500. Salem. Shaft, 3,000 tons; steam.	
Ry. 538.				
Saline Mines	...	Gallatin	Andrew Reid (local). Saline. Slope, 200 tons; hand. Robert Reid, supt.	
Ry. Shawneetown 408, 538.				
Sandoval	...	Marion	Sandoval Coal & Mining Co. Jas. S. Martin, prest.; J. L. Middleton, secy.; Chas. Reinhart, treas.; William Giles, mgr. and supt. Cap. stk. \$25,000. Sandoval No. 1. Shaft, 100,000 tons; steam.	
Ry. 319, 538.				
Sangamon	...	Sangamon	Illinois Fuel Co., Chicago, Ill., 720 Phenix Bldg. Benj. Ives, v.-prest. and mgr. Cap. stk. \$150,000. Sangamon No. 3. Shaft, 100,000 tons; steam.	
(Not a P. O.) Ry. 319.				



## COAL—BITUMINOUS (CONTINUED)

LOCATION OF MINE, RAILWAY, WATER ROUTES AND SHIPPING POINT.			NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, COKE OVENS, AND NAME OF MINE SUPERINTENDENT.
TOWN	AND	COUNTY.	
Saratoga	Grundy	Alex Bell (local). Cap. \$500. Shaft, 600 tons; horse.	
P. O. and Ry.	Morris		
142.			
Sato	Jackson	Sato Coal & Mining Co., Isom Chesney, pres., A. F. Kramer, secy. and supt., G. W. Phillips, treas. and	
Ry. Bryden	Junction	mgr. Cap. stk. \$6,000. Sato. Shaft, 240,000 tons; steam.	
324.			
Seneca	LaSalle	Standard Coal Co. Cap. stk. \$100,000. Shaft; steam. George McCleary, supt.	
Ry. 142.			
Sheffield	Bureau	Hodgett Bros. (local). Cap. \$2,000. Slope, 20 tons; horse.	
Ry. 142.			
"	"	H. W. Lloyd (local). Cap. \$4,000. Lloyd's. Slope, 3,000 tons; horse.	
"	"	Sheffield Mining Co., F. H. Griggs, pres.; A. W. Bryden, secy., treas. and mgr. Cap. stk. \$50,000. Slope,	
"	"	20,000 tons; horse.	
Shelbyville	Shelby	M. Brophy. Cap. \$1,200. Brophy. Shaft, 3,000 tons; horse.	
Ry. 170.			
"	"	J. Richardson. Cap. \$30,000. Richardson. Shaft, 105 tons; horse.	
"	"		
Sibley	Bureau	George Heathcock (local). Cap. \$5,000. Coal Hollow. Shaft, 2,500 tons; horse.	
P. O. and Ry. Prince-			
ton 135.			
Smithton	St. Clair	Johnson & Son (local). Cap. \$500. High Prairie. Slope, horse, steam. Ben. Johnson, supt.	
Ry. Belleville 402, 408,			
700.			
Sopryville	Knox	Essex & Son. Cap. stk. \$6,000. Lone Orphan. Shaft, 2,000 tons; horse. Geo. W. Essex, supt.	
P. O. Galesburg Ry.			
26, 135.			
Sorento	Bond	Sorento Prospecting & Mining Co., Taylor Williams, pres.; J. B. Denny, secy. and treas.; D. H. Weil-	
Ry. 335, 763.		mins, mgr. Cap. stk. \$30,000. Shaft, 75,000 tons; steam. D. Beveridge, supt.	
South America	Saline	W. V. Rush. Rush. Open pit, 5,000 tons; hand.	
Ry. Carriers Mills 170.			
Sparks Hill	Hardin	B. F. Hall (local). Hill's. Tunnel, 50 tons; hand.	
Ry. Shawneetown 408,			
538.			
Spartan	Marshall	Cumming & Co., Jas. P. Cumming, pres.; Geo. P. Cumming, secy. A. B. Cumming, treas. and supt.	
Ry. 142.		Spartan. Shaft, 20,000 tons; steam.	
Spartan	Randolph	George Stanway (local). Stanway. Slope, 888 tons; hand.	
Ry. 463.			
"	"	Valley & Gulf Coal Co., Hugh Murray, pres., treas. and supt., A. A. Brown, secy. Thos. Henderson,	
"	"	mgr. Cap. stk. \$25,000. Eden. Shaft, 60,000 tons; steam.	
Springfield	Sangamon	Black Diamond Coal & Tile Co., J. W. Moore, pres. and mgr.; Robert Solomon, secy. and treas. Cap.	
Ry. 135, 115, 319, 538,		stk. \$15,000. Shaft, 60,000 tons; steam.	
784.			
"	"	Clear Lake Cooperative Coal Co., Seventh st., Wm. Wilkin, pres., Eben Howells, secy., Thos. W. Smith,	
"	"	treas.; John Garrity, mgr. and supt. Cap. stk. \$30,000. Clear Lake, shaft, 150,000 tons; steam (level	
"	"	opening).	
"	"	Mrs. Chas. R. Hurst, Chas. H. Hurst, mgr. Cap. \$100,000. Shaft, 60,000 tons; hand. Thos. Taylor, supt.	
"	"	Sangamon Coal Co., F. E. Tracy, pres. and treas.; I. R. Fisher, secy. Cap. stk. \$80,000. Sangamon.	
"	"	Shaft, 100,000 tons; steam. John Vose, supt.	
"	"	Springfield Coal Mining & Tile Co., 101 E. Jefferson st., Joseph Trutter, pres. and treas.; Thos. R. Gray,	
"	"	secy., mgr. and supt. Cap. stk. \$30,000. Springfield. Shaft, 50,000 tons; steam.	
"	"	Springfield Junction Coal Co., 314 S. Fifth st., Harris Hickox, pres. and mgr.; Thomas Edwards, secy.,	
"	"	Lee Hickox, treas. and supt. Cap. stk. \$15,000. Shaft, 45,000 tons; steam.	
"	"	Woodside Coal Co., Edwards Brown, pres., Wm. H. Staley, secy. and mgr.; Stuart Brown, treas. Cap.	
"	"	stk. \$30,000. Woodside. Shaft, 75,000 tons; steam. Andrew Reed, supt.	
Spring Valley	Bureau	Spring Valley Coal Co., M. H. Taylor, secy. and treas.; S. M. Dalzell, mgr. Cap. stk. \$2,500,000. Nos. 1, 2,	
Ry. 135, 143, 150.		3 and 4. Shaft, 650,000 tons; steam. J. B. Stone, supt.	
Stamton	Macoupin	Consolidated Coal Co., St. Louis, Mo., Fourth and Olive sts., Chas. Ridgely, pres.; Geo. T. Cuts, secy. and	
Ry. 335, 754.		treas.; J. C. Simpson, mgr. Cap. stk. \$5,000,000. Stamton No. 7. Shaft, 125,000 tons; steam. Stam-	
"	"	ton No. 6. Shaft, 300,000 tons; steam. Joseph P. Heben-treit, supt.	
Stone Fort	Saline	H. P. Sittig (local). Cap. \$300. Sittig. Tunnel, 3,000 tons; hand.	
Ry. 170.			
"	"	P. B. Stagner (local). Johnson. Tunnel, slope, 300 tons; hand.	
"	"	Stone Fort Mineral Co., J. W. Ross, pres.; D. W. Choisser, secy. and mgr.; B. D. Grace, treas. Cap. stk.	
"	"	\$1,000. Stone Fort.	
Streator	LaSalle	John S. Baer & Co. Shaft, 25,000 tons. John Marshall, supt.	
Ry. 26, 135, 145, 754.			
"	"	Chicago, Wilmington & Vermillion Coal Co., Chicago, Ill., 175 Dearborn st., Room 39. Francis Bartlett,	
"	"	pres.; A. J. Sweet & secy. and mgr.; Thos. A. Lennon, treas. No. 2. Shaft, 125,000 tons; steam. No.	
"	"	3. Shaft, 250,000 tons; steam, electricity. E. D. Fletcher, supt.	
"	"	Coal Run Coal Co., Opera House Block, N. Plumb (Essex). Cap. \$1,000. Opera. Shaft, 7,000 tons; steam.	
"	"	Richard Evans. Shaft, 60,000 tons; steam.	

## COAL—BITUMINOUS—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, COKE OVENS, AND NAME OF MINE SUPERINTENDENT.
TOWN	AND COUNTY.	
Streator	La Salle (Continued)	Wm. Howe & Co., Rooms 4 and 5 Schlitz Bldg. Wm. Howe, prest. and mgr.; H. H. Charlton, secy. and treas. No. 1. Shaft, 10,000 tons; steam. E. Hutton, supt.
"	"	Wm. Lawton. Slope, 1,500 tons; horse.
"	"	Milms & Sons (local). Cap. \$500. Tunnel, 1,000 tons; horse.
"	"	Price & Jones, 306 Sumner st. Shaft, 10,000 tons.
"	"	Sammel Simpkin, 301 Main st. Cap. \$7,000. Shaft, 30,000 tons; steam.
Summum	Fulton Ry. Astoria 135.	Solomon Shaffer (local). Slope, 150 tons.
Sunfield	Perry Ry. Du Quoin 319.	Sun Coal & Coke Co. J. D. Buchan, prest.; A. M. Revelle, secy.; Wm. Jackson, treas.; Robert Diek, mgr. and supt. Cap. stk. \$6,000. Sun. Shaft, 40,000 tons; steam.
Swan	Warren (P. O. and Ry. Youngs- town) 135.	Thomas Lee & Son (local). Cap. \$150. Shaft, 700 tons; horse.
"	"	Henry Smith. Cap. \$5,000. Slope, 5,000 tons.
Sweet Water	Menard Ry. Greenview 145.	William Parkin (local). Cap. \$7,000. Farmer's. Shaft, 2,000 tons; horse.
Tallula	Menard Ry. 145.	Tallula Coal Mining Co. James Hutton, prest., mgr. and supt.; W. L. Robertson, secy.; Thomas Hutton, treas. Cap. stk. \$20,000. Shaft, 26,000 tons; steam.
Taylorville	Christian Ry. 538, 784.	Taylorville Coal Co. R. Wilkinson, prest.; D. D. Shumway, secy. and mgr.; A. G. Barnes, treas. Cap. stk. \$50,000. No. 1 and No. 2. Shaft, 175,000 tons; steam. S. Ainsworth, supt.
Tilden	Randolph Ry. 709.	Tilden Coal Co. R. K. Torrens, prest., treas. and supt.; J. S. Lindsey, secy.; M. M. Cathcart, mgr. Cap. stk. \$10,000. Tilden. Shaft, 15,000 tons; steam.
Toulon	Stark Ry. 635.	Aaron Newton (local). Drift, 320 tons; hand.
"	"	Henry Newton (local). Spoon River. Tunnel, drift, 100 tons.
Trenton	Clinton Ry. 538.	Consolidated Coal Co., St. Louis, Mo., Fourth and Olive sts. Chas. Ridgely, prest.; Geo. T. Cutts, secy. and treas.; J. C. Simpson, mgr. Cap. stk. \$5,000,000. Trenton. Shaft, 100,000 tons; steam. Wm. Harding, supt.
Troy	Madison Ry. 563.	Consolidated Coal Co., St. Louis, Mo., Fourth and Olive sts. Chas. Ridgely, prest.; Geo. T. Cutts, secy. and treas.; J. C. Simpson, mgr. Cap. stk. \$5,000,000. Troy. Shaft, 100,000 tons; steam. Brookside. Shaft, 60,000 tons; steam. Wm. Fletcher, supt.
Vermont	Fulton Ry. 135.	Jackson Davis (local). Cap. \$150. Shaft, 950 tons; horse.
"	"	James Rose. Cap. \$500. Rose's. Shaft, 3,000 tons; horse.
Viola	Merceer Ry. 135.	G. W. Martin (local). Cap. \$7,000. Pope Creek. Shaft, 3,000 tons; horse.
Virden	Macoupin Ry. 145, 335.	Virden Coal Co. C. A. Starne, prest.; Wm. Graham, secy., treas., mgr. and supt. Cap. stk. \$40,000. Virden. Shaft, 100,000 tons; steam.
Virginia	Cass Ry. 335.	Virginia Coal Co. Andrew Morton, prest.; Samuel W. Bailey, secy. and treas.; Robert Morton, mgr. and supt. Cap. stk. \$10,000. Virginia. Shaft, 12,000 tons; steam.
Wataga	Knox Ry. 135.	Geo. E. Boostrom (local). Boostrom. Shaft; hand.
"	"	H. & J. Taylor. Shaft; hand.
"	"	Wataga Brick, Tile & Coal Co. W. S. Dewey, prest.; Charles Fester, secy.; H. P. Wood, treas.; H. Taylor, mgr. and supt. Cap. stk. \$25,000. Wataga. Shaft, 5,000 tons; horse.
"	"	Wataga Coal Mining Co. Hamilton Taylor, prest. and supt.; C. G. Bangston, mgr. Wataga. Shaft, 400,000 tons; horse and hand.
Wenona	Marshall Ry. 145, 319.	Wenona Coal Co. A. S. Sherwood, prest.; W. E. Monser, secy. and treas.; E. L. Monser, mgr. and supt. Cap. stk. \$15,000. Wenona No. 1. Shaft, 60,000 tons; steam.
Wesley	Tazewell Ry. 372.	E. Little, Peoria, Ill., 825 S. Adams. Little. Shaft, 60,000 tons; steam. W. Small, supt.
West Jersey	Stark Ry. Toulon 635.	John Catton (local). Tunnel, 800 tons; hand.
Westville	Vernilion Ry. 146, 170.	Kellyville Coal Co., Danville, Ill., 19 E. Main st. W. J. Calhoun, prest.; W. L. Runyan, secy.; M. Kelly, treas. and mgr. Cap. stk. \$200,000. Shifts, 200,000 tons; steam. James Doughty, supt.
"	"	Pawnee Coal Co., Chicago, Ill., 935 Rookery Bldg. B. Hinrod, prest. and mgr.; P. W. McKay, secy. and treas. Cap. stk. \$25,000. Pawnee. Shaft; steam. W. W. Keeler, supt.
Wilderman	St. Clair (P. O. Belleville) Ry. 709	T. & H. Mining Co., St. Louis, Mo., 311 Olive st. Crittenden McKinley, prest.; E. B. Hull Jr., secy.; W. S. Scott, treas. and mgr. Cap. stk. \$3,000. Wilderman. Shaft, 70,000 tons; steam. Anton Danzer, supt.
Winchester	Scott Ry. 135.	W. H. Bates & Co. Shaft, 13,000 tons; steam. W. H. Bates, supt.
Wolcott	Peoria Ry. Reed City 702.	Illinois Coal & Coke Co., Peoria, Ill., 118 N. Adams. J. P. Cook, prest.; Wm. Jaek, secy.; H. C. Carriek, treas.; Jas. Stirtat, mgr. Reed Mines No. 2. Slope, 300,000 tons; steam and electricity. John Q. Ferguson, supt.
Worden	Madison Ry. 784.	Consolidated Coal Co., St. Louis, Mo., Fourth and Olive sts. Chas. Ridgely, prest.; Geo. T. Cutts, secy. and treas.; J. C. Simpson, mgr. Cap. stk. \$5,000,000. Worden, No. 12. Shaft, 25,000 tons; steam. Jos. P. Hebenstreit, supt.
Wyoming	Stark Ry. 635, 135.	Peter Herberger (local). Slope; hand.

## COAL—BITUMINOUS—(CONTINUED)

LOCATION OF MINE, OR BANK, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, COKE OVENS, AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Yates City, Ky. 135.	Knob Frank Chrisman (local). Cap. \$10,000. Chrisman. Shaft, 1,200 tons; steam.
Yonkersville, Ky. 135.	Warren Mrs. Susan Romine (local). Slope, 200 tons; horse.
"	" Thos. Wearmouth (local). Wearmouth. Drift, 3,000 tons; hand.

## FIRE CLAY

LOCATION OF MINE OR BANK, RAILWAYS, WATER ROUTES, AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE OR BANK, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, ETC., AND NAME OF SUPERINTENDENT.
TOWN AND COUNTY.	
Bardolph, Ky. 135.	McDonough Bardolph Fire Clay Works. C. J. Chandler, pres., J. E. Chandler, secy. Cap. stk. \$60,000. Shaft and open pit; steam.
Pulaski, Ky. 319.	Pulaski Southern Illinois Fire Clay Co. Geo. B. Johnston, pres., Edgar S. Low, secy. and treas., J. W. Hunsaker, mgr. Cap. stk. \$300,000. Fire clay. Open pit; hand.

## LEAD AND ZINC

LOCATION OF MINE OR QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, SMELTERS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Roschier, Ky. 533.	Hertlin Argyle Fluor-spar & Lead Mining Co., Washington, D. C., 141 F St. Argyle. Fluor-spar, lead, 6,000 tons; steam.
"	" Illinois Fluor-spar & Lead Co., Chicago, Ill., 57 Board of Trade Bldg. Geo. G. Mullins, pres., D. F. Cameron, secy., C. T. Trigg, treas. and mgr. Cap. stk. \$300,000. Illinois. Fluor-spar, lead. Shafts, drifts, W. H. Mullins, supt.

## SALT

LOCATION OF MINE OR WELL, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF PRODUCT, KIND OF MINE OR WELL, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Saint John, Ky. 319.	Petty Illinois Central Coal & Salt Co., Cairo, Ill., Ohio levee. T. W. Halliday, pres., M. C. Wright, secy., S. M. Neely, mgr. Cap. stk. \$5,000. Packing salt. Wells, steam.

## STONE, MARBLE, GRANITE AND ONYX

LOCATION OF MINE OR QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE OR QUARRY, KIND OF STONE, KIND OF MINE OR QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STONE OR MARBLE MILLS, LIMESTONES AND CAPACITY, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Aurora, Ky. 135.	Kane C. Riddle & Co., Broadway and Washington st. Cap. \$30,000. Aurora, limestone. Electricity; mill. Dell Cooley, supt.
Boskydell, Ky. 319.	Jackson Carbondale Brown Stone Co., Chicago, Ill., 578 S. Morgan st. John Rawle, pres. and treas.; V. C. Backus, v.-pres.; M. B. Madden, secy. Carbondale. Open; steam, mill. Jas. J. Jones, supt.
Grafton, Ky. 458, 708.	Jersey Grafton Quarry Co., St. Louis, Mo., No. 415 Locust st., Room 704. James Black, pres.; John S. Roper, secy. and treas. Cap. stk. \$30,000. Grafton, limestone, magnesite. Open pit, 10,000 tons; steam, horse, hand. Chas. Brainerd, supt.
Joliet, Ky. 26, 142, 143, 245.	Will Kirkpatrick, Howk & Massey, Geo. Massey, pres., A. J. Howk, secy. and treas.; J. O. Kirkpatrick, mgr. and supt. Cap. stk. \$1,200. Limestone. Steam, mill.
Lemont, Ky. 26.	Cook Phoenix Stone Co., Chicago, Ill., 35 Lawrence st. John W. Gill, pres. and treas.; August Baumann, secy.; Martin Delaney, mgr. and supt. Cap. stk. \$50,000. Phoenix. Open pit, 60,000 tons; steam.
Lockport, Ky. 26, 135, 142, 143, 245.	Will Sanger, Moody & Steel Stone Co., Joliet, Ill., H. A. Sanger, pres.; C. C. Moody, secy.; Sanger Steel, treas. Cap. stk. \$80,000. Sanger, limestone, magnesite, steam.
Millington, Ky. 135.	Kendall American Silica Sand Co., Cleveland, Ohio, Society for Savings Bldg. Levi H. Malone, pres.; F. M. Alenburt, secy.; H. W. Grabbert, treas. Cap. stk. \$50,000. American, silica, sand. Open pit, 120,000 tons; steam; mill. R. F. Fwing, supt.
Peoria, Ky. 135, 142, 170, 335, 378, 572, 749, 762.	Peoria I. Mantz & Son, 334 Woodner Bldg. (local). Swords, limestone. Open pit, 10,000 tons; steam. Ed. Lan-ling, supt.
Thobes, Ky. 458, 463.	Alexander Southern Illinois Lithograph Stone Co., Pulaski, Ill. Geo. B. Johnston, pres., Edgar S. Low, secy. and treas.; J. W. Hunsaker, mgr. Cap. stk. \$300,000. Lithograph stone. Open pit; steam (developing).

SEE ALSO SUPPLEMENTARY LIST

# INDIANA

## COAL—BITUMINOUS

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, COKE OVENS, AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Allfordsville, . . . . . Daviess Ry. Loogootee 538.	J. A. McCard (local). Shaft; horse.
" " " " "	Seales & Huff (local). Sugar Creek. Shaft, open pit; horse and hand.
Asherville, . . . . . Clay Ry. 563.	Block Coal Co., Brazil, Ind. No. 9. Shaft, open pit; steam. H. Payne, supt.
Ayrshire, . . . . . Pike Ry. 402.	David Ingle, Oakland City, Ind. Cap. \$50,000. Ayrshire. Slope, shaft, 30,000 tons; steam; breaker, washer, 54 coke ovens. John Jennings, supt.
Bicknell, . . . . . Knox Ry. 563.	Bicknell Coal Co., Geo. W. Fuller, pres.; J. M. Freeman, secy. and treas. Cap. stk. \$10,000. Bicknell. Shaft; steam. R. M. Freeman, supt.
Blackburn Station, . . . . . Pike Ry. 256.	F. B. Posey, Evansville, Ind., 41 and 43 B. M. A. Bldg. Cap. \$10,000. Blackburn. Slope, 20,000 tons; steam; washer, 9 coke ovens, capacity 1,000 tons. J. D. Jarvis, supt.
" " " " "	Posey Cooperative Mining Co., Emanuel Parr, pres.; Eugene O'Brien, secy. and treas.; Geo. Ferris, mgr. Cap. stk. \$20,000. Blackburn. Slope, 150,000 tons; steam; 9 coke ovens.
Boonville, . . . . . Warrick Ry. 402.	Lauder Woolley Coal Co., Evansville, Ind. E. P. Huston, pres.; W. H. Merithin, secy. and treas. Cap. \$30,000. Lauder, Woolley. Slope, 48,000 tons; steam. Robert Lauder, supt.
" " " " "	W. W. Reynolds (local). Cap. \$600. Reynolds. Shaft, 1,400 tons; horse.
" " " " "	E. Whitmer (local). Whitmer. Shaft, 500 tons; horse.
Brazil, . . . . . Clay Ry. 146, 256, 563, 748.	Brazil Block Coal Co., Chicago, Ill. Gartschire No. 1. Shaft, 60,000 tons; steam. Jas. McCloud, supt.
" " " " "	Brazil Block Coal Exchange, Chicago, Ill., The Bookery. K. R. Brockenbrough, pres. and treas.; Charles R. Abbott, secy. Cap. stk. \$50,000. Morris. Shaft, 50,000 tons; steam. John Erzingr, supt.
" " " " "	Centennial Coal Co., C. B. Reddie & Son. Cap. \$6,000. Centennial. Shaft; steam (developing).
" " " " "	Crawford Coal Co., Terre Haute, Ind., 710 N. Second st. A. J. Crawford, pres.; J. P. Crawford, secy. and treas. Cap. stk. \$15,000. Crawford Nos. 2, 3 and 4. Shaft, 100,000 tons; steam. W. W. Rishoe, mgr. and supt.
" " " " "	Jackson Coal & Mining Co., M. A. Johnson, pres.; D. W. Minshall, secy.; M. H. Johnson, mgr. Cap. stk. \$20,000. Nickel Plate. Shaft, 60,000 tons; steam. W. S. Houston, supt.
" " " " "	Nickel Plate Coal & Mining Co., M. A. Johnson, pres.; W. S. Houston, secy.; M. H. Johnson, mgr. Cap. stk. \$50,000. Chicago. Shaft, 60,000 tons; steam.
" " " " "	Otter Creek Coal Co., Daniel Corkery, pres.; A. H. Zimmerman, secy.; W. H. Zimmerman, treas. and gen. mgr. Cap. stk. \$30,000. Nellie. Shaft, 75,000 tons; steam. John Missett, supt.
" " " " "	Schrepferman Coal Co., C. Schrepferman, pres. and treas.; N. Schrepferman, secy., mgr. and supt. Cap. stk. \$30,000. Birch Creek. Shaft, 175 tons; steam; breaker.
" " " " "	John Triplett. Slope, 15,000 tons.
Cannelburg, . . . . . Daviess Ry. Clarks 538.	Mutual Mining Co., Daniel Davis, pres.; James Nolan, secy.; Martin Cahill, treas., mgr. and supt. Cap. stk. \$5,000; indiv. cap. \$6,000. Mutual. Shaft, 17,500 tons; steam.
Carbon, . . . . . Clay Ry. 170.	Eureka Block Coal Co., Chicago, Ill., 1335 State st. A. H. Woodruff, pres.; John Brownlee, secy. and supt.; M. W. Brownlee, treas.; Edward Wilton, mgr. Cap. stk. \$100,000. Banner. Shaft, 60,000 tons; steam.
Carbondale, . . . . . Warren Ry. Williamsport 784.	John T. Carlson (local). Cap. \$3,000. Carlson. Slope, 665 tons; hand.
Carlisle, . . . . . Sullivan Ry. 256.	Carlisle Coal Co., Geo. Ward, pres.; Geo. Phipps, secy.; M. Zoster, mgr. Cap. stk. \$10,000. Carlisle. Shaft; steam.
Centre Point, . . . . . Clay Ry. Brazil 146, 170, 404.	Weaver, Getz & Co., Chicago, Ill., 217 Dearborn st. Louise. Shaft, 175,000 tons; steam. Church Hill. Shaft, 200,000 tons; steam. Chas. W. Moss, supt.
" " " " "	Williams & Givens, John L. Williams, pres., mgr. and supt.; Alfred Connert, secy.; R. Givens, treas. Cap. \$2,000. Vandalia. Shaft, 24,000 tons; steam.
Clay City, . . . . . Clay Ry. 256.	Chicago & Indiana Block Coal Co., Terre Haute, Ind., 223 Ohio st. J. Smith Talley, pres. and mgr.; Leslie D. Thomas, secy.; Demas Denning, treas. Cap. stk. \$200,000. Harrison. Shaft, 60,000 tons; steam; compressed air. Thomas Faulds, supt.
" " " " "	Diamond Block Coal Co., Chicago, Ill., 159 La Salle st. John Andrew, pres.; Charles F. Keeler, secy., treas. and mgr. Cap. stk. \$60,000. Diamond. Shaft, 150,000 tons; steam. Peter Andrew, supt.
Clinton, . . . . . Vermillion Ry. 146.	Hazel Creek Coal Co., T. C. Keller, pres.; N. G. Wright, secy.; N. C. Anderson, treas., mgr. and supt. Cap. stk. \$30,000. Hazel Creek, Fern Hill. Slope, shaft, 200,000 tons.
" " " " "	Norton Creek Coal Mining Co., Milwaukee, Wis. H. M. Benjamin, pres.; H. S. Klein, secy.; C. W. Moody, treas. and mgr. Cap. stk. \$50,000. Norton Creek, Clinton No. 3. Shaft, slope, drift, 200,000 tons; steam. Charles F. Walker, supt.
" " " " "	Thompson Hill Mining Co., C. M. Daggett, pres. Charles H. Merrill, treas. and supt. Cap. stk. \$50,000. Thompson Hill. Slope, 24,000 tons; steam.
Coal Bluff, . . . . . Vigo Ry. 146, 170.	Coal Bluff Mining Co., Terre Haute, Ind., 225 Ohio st. J. Smith Talley, pres.; James W. Landrum, secy.; L. D. Thomas, treas.; R. W. Rippetoe, mgr. and supt. Cap. stk. \$6,500. Herebuds and Star. Shafts, 75,000 tons; steam.
" " " " "	Otter Creek Mining Co., Cap. \$15,000. Otter Creek. Slope, 35,000 tons; horse. Isaac Debo, supt.
Coal City, . . . . . Owen Ry. 256, 784.	Eagle Creek Mining Co., J. F. Hyatt, pres. and treas.; J. E. Conley, secy. Cap. \$30,000. Eagle Creek. Shaft, 12,520 tons; steam. Josiah Wells, mgr. and supt.

## COAL, BITUMINOUS (CONTINUED).

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, COKE OVENS, AND NAME OF MINE SUPERINTENDENT.
TOWN	COUNTY.	
Coal City (Continued.)	Owen	J. F. Hyatt. Cap. \$10,000. Eagle Creek. Shaft, 15,000 tons; steam. Josiah Wells, supt.
Coal Creek Ry. 258, 784.	Fountain	Samuel Belemy (local). Slope, 150 tons; horse.
"	"	Randolph & McKinney. Cap. \$40,000. Syndicate. Slope, 4,800 tons; steam.
Dale Ry. 402.	Spencer	L. N. Mason (local). Cap. \$500. Mason. Shaft, 103 tons; hand.
"	"	J. R. Thorp (local). Flinthill. Slope, 800 tons; hand.
De Forest Ry. 402.	Warrick	D. A. De Forest and others. De Forest. Shaft, 10,000 tons; steam. Wm. Baum, supt.
Denmark Ry. Clay City 256.	Owen	Lancaster Block Coal Co., Terre Haute, Ind., 321 Wabash av. John Andrew, pres.; Robert Andrew, secy. and treas.; James Andrew, mgr. Cap. stk. \$150,000. Lancaster. Shaft, 50,000 tons; steam. James F. Andrew, supt.
Dugger Ry. 563.	Sullivan	Dugger Cooperative Mining Co., Arthur Davison, pres.; Cairy Littlejohn, secy. and treas. Cap. stk. \$10,000. Shaft (developing). J. E. Griffith, supt.
Epsom Ry. Plainville 146.	Davless	Andrew McCall (local). Shaft, horse, steam.
"	"	John Payne (local). Faith's. Slope; hand.
Evansville Ry. 356, 402, 408, 536.	Vanderburg	Diamond Coal Mining Co., 283 Upper Fourth st., Louis Koester, pres., treas. and mgr.; E. W. Sumpers, secy. Cap. stk. \$12,000. Diamond. Shaft, 36,000 tons; steam. Geo. Bonenberger, supt.
"	"	Evansville Cooperative Mining Co., V. M. C. A. Bldg. Wm. M. Madden, pres., Sam'l Quinn, secy. and supt. Cap. stk. \$20,000. Cooperative. Shaft, 80,000 tons; steam.
"	"	First Avenue Coal Mining Co., 323 Upper Third st., C. C. Thomas, pres. and mgr.; R. H. Kellogg, secy. and treas. Cap. stk. \$25,000. First Avenue. Shaft, 32,000 tons; steam. William Douds, supt.
"	"	John Ingle & Co., 210 Upper Second st., Geo. S. Ingle, mgr. Cap. \$75,000. Ingleside. Shaft, 75,000 tons; steam. Joseph Gibson, supt.
"	"	Sunnyside Coal & Coke Co., 127 Upper Third st., D. J. Mackey, pres.; E. P. Huston, secy. and treas.; John E. Woolley, mgr. Cap. stk. \$100,000. Sunnyside. Shaft, 66,721 tons; steam. Jabez Woolley sr., supt.
Farmersburg Ry. 256.	Sullivan	Farmersburg Coal & Mining Co., Sullivan, Ind., Blackford Condit, pres. and treas., Noah Crawford, secy., mgr. and supt. Cap. stk. \$17,800. Farmersburg. Shaft, 22,000 tons; steam.
Fair- worth Ry. Lynton 322.	Sullivan	Hancock & Conkel. Cap. \$15,000. Bunker Hill. Shaft, 38,150 tons; steam. W. H. Conkel, supt.
Fountain Ry. 146, 170.	Vigo	Coal Bluff Mining Co., Terre Haute, Ind., No. 525 Ohio st., J. Smith Talley, pres., James W. Landrum, secy.; L. D. Thomas, treas.; R. W. Rippeytoe, mgr. and supt. Cap. stk. \$6,500. Edgar and Diamond. Shafts, 75,000 tons; steam.
"	"	Ed. Davis. Cap. \$1,000. Peacock. Slope, 30,000 tons; horse.
"	"	Western Indiana Coal Co., Terre Haute, Ind., 523 Ohio st., J. Smith Talley, pres.; Wm. E. Eppert, secy., treas. and mgr. Cap. stk. \$25,000. Shaft, steam (developing). Jacob Lewis, supt.
Grant Crossing (P. O. name Burnett) Ry. 146, 170.	Vigo	McCullough & Kitzing Co., Staunton, Ind., C. J. McCullough, pres. and secy.; Geo. J. Kitzing, treas. and mgr. Cap. stk. \$15,000. Lone Star. Slope, 30,000 tons; horse. James Smith, supt.
Hymera Ry. 146, 256.	Sullivan	Old Pittsburg Coal Co., Chicago, Ill., 411 and 413 Tacoma Bldg. James N. Buchanan, pres. and treas.; De Witt C. Butts, secy. Cap. stk. \$750,000. Harrison. Shaft, 175,000 tons; electricity. W. I. Mordock, supt.
"	"	M. Stark. Cap. \$2,000. Little Pittsburg. Shaft, 18,000 tons; horse.
Jasper Ry. 402, 710.	Dubois	Eckert, Magner and others. Cap. \$10,000. Slope, 4,000 tons; horse.
"	"	Wm. Haller, Haller. Slope, 150 tons; hand.
Knightsville Ry. Brazil 146, 543.	Clay	D. H. Davis Coal Co., D. H. Davis, pres.; Charles E. Matson, secy. and treas. Cap. stk. \$20,000. World's Fair. Shaft, 100,000 tons; steam. Joseph Murby, supt.
"	"	Zeller & Sigler Coal & Mining Co., Wm. M. Zeller, pres., mgr. and supt.; F. M. Sigler, secy.; C. M. Zeller, treas. Cap. stk. \$100,000. Columbia, Diamond, Vanlalla. Shaft, 100,000 tons; steam.
Lincoln City Ry. 402.	Spencer	Henry Schafer. Cap. \$4,500. Schafer. Shaft, 12,000 tons; steam. Geo. B. Bullock, mgr. and supt.
Linton Ry. 322, 584.	Greene	Island Coal Co., Indianapolis, Ind., 84 E. Market st., A. M. Ogde, pres.; W. W. Hubbard, secy. and treas.; E. H. Scott, v. pres. Cap. stk. \$100,000. Island 4 Ry. Nos. 1, 2, 3. Shaft, 500,000 tons; compressed air. John Hewitt, supt.
"	"	Island Valley Coal & Mining Co., Wm. H. Walton, pres. and supt.; Hiram Turay, secy.; Wm. H. Griffin, treas. Cap. stk. \$60,000. Island Valley. Shaft, steam (developing).
"	"	Summit Coal Co., Bloomfield, Ind., F. M. Dugger, pres. and mgr.; J. C. Gilliland, secy.; H. T. Neal, treas. Cap. stk. \$50,000. Summit. Shaft, 37,507 tons; steam. John Larkey, supt.
Little's Ry. 256.	Pike	S. W. Little, Evansville, Ind., 329 Upper Third st., Cap. \$50,000. Little's. Shaft, 100,000 tons; steam; electricity.
Lxford (P. O. and Ry. Clinton 146.	Parke	New Kentucky Coal Co., Chicago, Ill., 215 Dearborn st., P. D. Whitehead, pres.; M. H. Walker, v. pres.; Thos. J. Whitehead, secy. and treas. Cap. stk. \$100,000. Lxford. Shaft, 100,000 tons; steam.
Lytton (P. O. Cass)	Sullivan	Lytton Coal & Coke Co., Sullivan, Ind., W. H. Alley, pres.; P. H. Blue, secy.; M. B. Wilson, treas.; G. C. Richards, mgr. Lytton. Shaft, 30,000 tons; steam. B. D. Johnson, supt.
Macksville Ry. 718.	Vigo	Peter Krackenberg (local). W. H. Larimer, mgr. Cap. \$4,000. Larimer. Shaft, 5,800 tons; steam. James Hoekens, supt.

## COAL—BITUMINOUS—(CONTINUED)

LOCATION OF MINE, RAILWAY, WATER ROUTES AND SHIPPING POINT.			NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, COKE OVENS, AND NAME OF MINE SUPERINTENDENT.
TOWN	AND	COUNTY.	
Mineral City	Greene	Levi D. Burcham. Cap. \$100. Burcham. Tunnel, 600 tons; hand.	
"	"	M. Hillebrand. Cap. \$100. Hillebrand. Slope, pit, 100 tons; hand.	
"	"	J. M. Vest. Cushman. Tunnel, 200 tons; hand.	
Newburg	Warrick	John Archbold, Evansville, Ind., cor. Bland av. and Walnut st. Star. Shaft, 24,000 tons; steam. George Archbold Jr., supt.	
"	"	P. Ehrlich & Co., Indianapolis, Ind. Peter Ehrlich, prest.; Christ Ehrlich, treas. and supt. Cap. stk. \$75,000. Newburg. Shaft, 60,000 tons; steam; breaker.	
"	"	Gartshire Coal & Mining Co. Isaac McIntosh, receiver. Newburg No. 2. Shaft, 140,000 tons; steam.	
New Pittsburg	Sullivan	New Pittsburg Coal & Coke Co., Chicago, Ill., 129 Dearborn st. D. M. Cummings, prest.; John K. Siefert, secy. treas. and genl. mgr. Cap. stk. \$300,000. Phoenix. Shaft, 150,000 tons; steam, compressed air; washer, 40 ovens, capacity 12,000 tons. John P. Gilmore, supt.	
Oakland City	Gibson	Oakland City Coal Co., John S. Jeter, prest.; John D. Kell, secy. and treas.; Wm. Cockrum, mgr. Cap. stk. \$4,000. Oakland City. Shaft; steam. James Dewey, supt.	
Perth	Clay	Coal Bluff Mining Co., Terre Haute, Ind., 325 Ohio st. J. Smith Talley, prest.; Jas. W. Landrum, secy.; L. D. Thomas, treas.; R. W. Rippe toe, mgr. and supt. Cap. stk. \$65,500. Anchor. Shafts, 7,500 tons; steam.	
"	"	Hoosier Coal Co., Chicago, Ill., 935 Rookery Bldg. Bernard Himrod, prest. and mgr.; A. S. Bertolet, secy. and treas. Cap. stk. \$20,000. Hoosier. Shaft, 50,000 tons; steam. W. W. Keeler, supt.	
Petersburg	Pike	Read & Myer, cor. Walnut and Seventh sts. John Read, prest., treas., mgr. and supt.; John Myers, secy. Cap. \$1,500. Jenny Posey. Shaft, 30,000 tons; horse.	
Pratt	Clay	Coal Bluff Mining Co., Terre Haute, Ind., 525 Ohio st. J. Smith Talley, prest.; Jas. W. Landrum, secy.; L. D. Thomas, treas.; R. W. Rippe toe, mgr. and supt. Cap. stk. \$65,500. Pratt. Shafts, 75,000 tons; steam.	
Riley	Vigo	E. J. Gillespie. Cap. \$2,000. Forest Hill. Shaft; steam.	
Shelburn	Sullivan	Currys-ville Coal Co. G. I. Grammer, prest.; I. H. Woolley, secy., treas. and supt. Cap. stk. \$50,000. Currys-ville. Shaft, 50,000 tons; steam, compressed air.	
"	"	Richmond & Halberstadt (local). McNally. Shaft; horse.	
"	"	Shelburn Coal Co. Geo. C. Richards, prest., mgr. and supt.; H. E. Bell, secy. and treas. Cap. stk. \$50,000. Shelburn. Shaft, 26,490 tons; steam.	
Silverwood	Fountain	Shipman Coal Mining & Manufacturing Co., Detroit, Mich., No. 74 Griswold st. O. W. Shipman, prest.; W. C. Maybury, secy.; Francis F. Palms, treas.; J. N. Dexter, mgr. and supt. Cap. stk. \$100,000. Shipman. Shaft; steam (developing).	
Stanton	Clay	Earlich Co., Turner, Ind. Cap. \$25,000. Newbury. Shaft, 40,000 tons; steam. Christian Earlich, supt.	
"	"	John Kempf (local). Cap. \$100. Tunnel, 400 tons; hand.	
"	"	Joseph Somers. Cap. \$10,000. Jumbo, San Pedro. Shaft, open pit, 30,000 tons; steam.	
"	"	Joseph Whallon (local). Cap. \$700. Black Hills. Open pit, 500 tons; horse, hand.	
Troy	Perry	Bergenoeth Bros. Cap. \$10,000. Troy. Shaft, 10,000 tons; steam. Samuel Priest, supt.	
Vincennes	Knox	Vincennes Coal Co. John Freeman, prest., mgr. and supt.; C. G. McFord, secy. and treas. Cap. stk. \$40,000. Shaft; steam (developing).	
Washington	Daviess	Cable & Co. Cap. \$50,000. M. Valley, Nos. 4, 6, 7. Shaft, 140,000 tons; steam. Joseph Small, supt.	
Williamsport	Warrick	John Carlson, Carbondale, Ind. (local). Carlson. Slope, 400 tons; hand.	
Winslow	Pike	Phelps Bros. (local). Phelps. Open pit, hand.	
"	"	William Shaw (local). Shaw. Slope, 200 tons; horse.	
"	"	D. G. Smith (local). Hollow. Slope, 8 tons; hand.	
Worthington	Greene	A. M. Bucher (local). Bucher. Slope, 300 tons; hand.	
"	"	David S. Fulke (local). Slope, 300 tons; hand.	
"	"	George Heinemann (local). Heinemann. Slope, 20,000 tons; hand.	

## IRON

LOCATION OF MINE, RAILWAY, WATER ROUTES AND SHIPPING POINT.			NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, BLAST FURNACES, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN	AND	COUNTY.	
Bloomfield	Greene	Bloomfield Iron Ore Co. F. M. Duggler, prest.; John A. Pate, secy.; L. H. Jones, treas. Cap. stk. \$20,000. Red Hematite. Open pit; hand.	

## KAOLIN

LOCATION OF MINE OR BANK, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE OR BANK, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, ETC., AND NAME OF SUPERINTENDENT.
	Lawrence	
Huber Ry. 538.		Kaolin Mining Co., Chicago, Ill., 807 Chamber of Commerce. P. C. Hamilton, pres. and treas.; Henry P. Lowe, v.-pres.; F. H. Hendrick, secy.; John M. Parllow, mgr. Cap. stk. \$1,000,000. White Pearl, kaolin. Tunnel, 9,000 tons; horse steam. Geo. D. Moos, supt.

## LEAD AND ZINC

LOCATION OF MINE OR QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, SMELTERS, ETC., AND NAME OF MINE SUPERINTENDENT.
	Cartoll	
Delphi Ry. 404, 784.		Delphi Mineral Mining Co. Samuel L. Milroy, pres.; Waldo W. Williams, secy.; James G. Blythe, treas.; Hiram Kerlin, v.-pres. Cap. stk. \$3,000. Lead and zinc developing.

## STONE, MARBLE, GRANITE AND ONYX

LOCATION OF MINE OR QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE OR QUARRY, KIND OF STONE, KIND OF MINE OR QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STONE OR MARBLE MILLS, LIMESTONES AND CAPACITY, ETC., AND NAME OF MINE SUPERINTENDENT.
	Lawrence	
Bedford Ry. 256, 404, 538.		Aene Bedford Stone Co., Chicago, Ill., 576 S. Morgan st. John Rawle, pres. and mgr.; T. C. Deiner, secy. and treas. Cap. stk. \$100,000. Sandstone. Steam, mill. J. J. Jones, supt.
"	"	Bedford Steam Stone Works. D. V. Johnson, pres., mgr. and supt.; E. B. Thornton, secy. and treas. Cap. stk. \$10,000. Bedford, limestone. Open pit, 10,000 tons; steam; mill.
"	"	Bedford Stone Co., Indianapolis, Ind., 42 Thorpe Block. J. W. Chipman, pres.; E. H. Hall, secy. and treas. Cap. stk. \$150,000. Oolitic limestone. Shaft, open pit, 40,000 tons; steam; mill. H. H. Walls, supt.
"	"	Bedford Stone Quarries Co. C. D. Hank, pres.; W. C. Winstandley, secy. and treas.; S. B. Vorrs, mgr. Cap. stk. \$1,000,000. Oolitic limestone. Open pit, 100,000 tons; steam; mill. J. E. Evans, supt.
"	"	Bodenschatz Bedford Stone Co., Chicago, Ill., 1110 The Hookery. N. A. Bodenschatz, pres.; E. H. Brown, secy.; J. G. Bodenschatz, treas. Cap. stk. \$30,000. Bodenschatz, oolitic limestone. Open pit, 4,500 tons; steam; mill. A. M. Brown, supt.
"	"	Chicago & Bedford Stone Co. James Kimbaird, pres.; J. F. Thornton, secy. T. V. Thornton, mgr. Cap. stk. \$10,000. Blue Hole, oolitic limestone. Open pit, 15,000 tons; steam. W. O. Troy, supt.
"	"	Columbia Lithographic Stone & Cement Co., Chicago, Ill., 69 Dearborn st., Suite 30. Joseph H. Hooper, pres.; E. I. Sullin, secy. and treas. Cap. stk. \$200,000. Columbia, lithographic stone. Open; steam.
"	"	Cramer & Norton Stone Co. Cap. \$10,000. Oolitic limestone. Steam.
"	"	Dark Hollow Oolitic Stone Co. M. A. Blatz, pres.; E. B. Thornton, secy., treas., mgr. and supt. Cap. stk. \$50,000. Limestone. Open pit, 12,000 tons; steam.
"	"	Dark Hollow Quarry Co., Louisville, Ky., Fifth and Market sts. Charles R. Peaslee, pres.; Wm. Helmcke, secy.; Wm. R. Johnson, treas. Cap. stk. \$200,000. Dark Hollow, oolitic limestone. Open pit, 60,000 tons; steam, mill. Clinton S. Norton, supt.
"	"	Hallowell Stone Co. John R. Doyle, mgr. Limestone. Steam; mill.
"	"	Indiana Stone Co. J. W. Newland, pres.; Gus C. Davis, secy. and mgr.; M. N. Messick, treas. Cap. stk. \$145,000. Indiana, limestone. Open pit, 100,000 tons; steam, mill.
"	"	Peerless Stone Co. W. C. Winstandley, pres.; J. O. Finks, secy.; Bedford Bank, treas.; Lycurgus Dalton, mgr. Cap. stk. \$100,000. Peerless, oolitic limestone. Open pit, 18,000 tons; steam; mill. Robert McKinley, supt.
"	"	Perry, Matthews & Baskirk. William N. Matthews, mgr. Cap. \$75,000. Oolitic limestone. Open pit, 36,000 tons; steam. John Torphy, supt.
"	"	Salem Bedford Stone Co., Louisville, Ky., 421 Main st. R. A. Rohlfson, pres.; John L. Wheat, secy.; John A. Carter, treas.; Dexter Belknap, mgr. Cap. stk. \$200,000. Bedford, oolitic limestone. Open pit, 2,000 tons; steam; mill. Wm. Roberts, supt.
"	"	West Bedford Stone Co. Albert Luedtke, pres.; Frank Knohl, secy. and treas. Cap. stk. \$25,000. West Bedford, oolitic stone. Open pit; steam. Peter Fillion, supt.
Bloomington, Ry. 170, 404, 533.	Monroe	Bloomington Oolitic Limestone Co. William Smart, pres.; James B. Mulky, secy.; James B. Clark, treas.; John W. Shoemaker, mgr. Cap. stk. \$20,000. Bloomington, limestone. Open pit, 4,000 tons; steam; mill.
"	"	Hunter Stone Co., First National Bank Bldg. W. F. Rogers, pres. and mgr.; J. H. Louden, secy.; W. N. Showers, treas. Cap. stk. \$200,000. Hunter, oolitic limestone. Open pit, 15,000 tons; steam; mill. H. Henley, supt.
"	"	Monroe County Oolitic Stone Co. R. F. Adams, Jr., pres.; W. H. Adams, secy. and mgr.; R. F. Adams Jr., treas. Cap. stk. \$100,000. Limestone. Open pit, 10,000 tons; steam.
"	"	North Bedford Stone Co. W. H. McKnight, pres.; B. A. McGee, secy., mgr. and supt.; M. J. Carnahan, treas. Cap. stk. \$150,000. North Bedford, oolitic limestone. Mill.
Charlestown, Ry. 538.	Clark	Indiana Cement Co., Jeffersonville, Ind., 149 Spring st. Ward H. Watson, pres.; Thomas B. Rader, secy.; John D. Sharp, treas.; Isaac N. Haymaker, mgr. Cap. stk. \$50,000. Stone. Open pit; steam, cement mill, 100,000 bris. Lemuel Long, supt.
Clay City, Ry. 256.	Clay	Beryl Griffith. Cap. \$3,000. Clay City Pottery, potters' clay. Open pit, steam.

## STONE, MARBLE, GRANITE AND ONYX (CONTINUED)

LOCATION OF MINE OR QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE OR QUARRY, KIND OF STONE, KIND OF MINE OR QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STONE OR MARBLE MILLS, LIMEKILNS AND CAPACITY, ETC., AND NAME OF MINE SUPERINTENDENT.
Clear Creek..... Monroe Ry. 404.	Bloomington-Bedford Stone Co., Chicago, Ill., Room 67 Major Block, 14 <sup>th</sup> La Salle st., John A. Henry, pres.; Wm. C. Shaw, secy. and treas. Cap. stk. \$300,000. Bedford, stone, 1,800 tons; steam mill; Robert Emery, supt.
Ellettsville..... Monroe Ry. 494.	Matthews Bros., Fred Matthews, mgr. Cap. stk. \$50,000. Matthews, limestone. Open pit, 30,000 tons; steam, horse, hand; mill.
..... " .. "	Perry Bros. Cap. \$30,000. Perry, oolitic limestone. Open pit, 20,000 tons; steam and horse; 2 mills.
Eugene..... Vermillion Ry. 146, 763.	Vermillion Sandstone Co., Danville, Ill. E. C. Hodges, pres.; A. W. Heiny, secy.; S. J. McKee, treas. Cap. stk. \$100,000. Sandstone, Mill.
French Lick..... Orange Ry. 404.	The Pike Mfg. Co., Pike Station, N. H. E. B. Pike, pres. and mgr.; F. M. Tucker, secy. and treas. Cap. stk. \$70,000. Pike, fine and coarse sandstone.
..... " .. "	H. E. Wells & Co., Cap. stk. \$20,000. Moore, Hindostan stone. Open pit, 40 tons; horse, hand; mill.
Georgia..... Lawrence Ry. Mitchell 404, 538.	J. A. Chailiaux & Bros. Cap. \$5,000. Hindostan oil stone. Open pit, 50 tons; mill.
..... " .. " Ry. Orleans 404.	The Pike Mfg. Co., Pike Station, N. H. E. B. Pike, pres. and mgr.; F. M. Tucker, secy. and treas. Cap. stk. \$70,000. Pike, fine and coarse sandstone.
Greensburg.....Decatur Ry. 167, 170.	Greensburg Limestone Co., H. H. Woolsey, pres.; S. B. Eward, secy. and treas. Cap. stk. \$18,735. Greensburg, limestone. Open pit, 100,000 tons; steam and horse.
Harper.....Decatur Ry. Sardinia Crossing 170, 256.	Boicourt & Son, John Boicourt, pres.; C. F. Boicourt, secy. Cap. stk. \$2,000. Boicourt, limestone. Open pit; hand; steam.
Holton..... Ripley Ry. 538.	Eli Cox. Indiana, lime and flagging stone. Open pit, 6,000 tons; hand.
Huron..... Lawrence Ry. 538.	John J. Kirk. Cap. \$1,500. Steve Jones, Hindostan oil stone or water stone. Open pit, 10 tons; steam; mill.
..... " .. "	The Pike Mfg. Co., Pike Station, N. H. E. B. Pike, pres. and mgr.; F. M. Tucker, secy. and treas. Cap. stk. \$70,000. Pike, fine and coarse sandstone.
Laurel..... Franklin Ry. 170.	M. E. Seerest. Cap. \$20,000. Laurel, limestone. Open pit, 100,000 tons; horse.
Mansfield..... Parke Ry. Carbon 170.	Parke County Brown Stone Co., Chicago, Ill., 21 Kialto Bldg. Parke County, brown and red sandstone. Open pit, 12,000 tons; steam, horse, hand. O. R. Reynolds, supt.
Markle..... Huntington Ry. 503.	F. A. Brickley. Cap. \$2,000. Brickley, limestone. Open pit, 4,000 tons. F. A. Brickley, supt.
Mitchell.....Lawrence Ry. 404, 538.	Big Four Lime Co., E. P. Eversole, pres. and treas.; J. D. Moore, pres. and mgr. Cap. \$4,000. Limestone, 3,000 tons; hand; kiln, 10,000 tons.
North Bedford..... Monroe (P. O., Bloomington) Ry. 563.	Big Creek Stone Co., Bloomington, Ind. Geo. W. Ballenbacher, pres. and mgr.; R. C. Greeves, secy. and treas. Cap. stk. \$100,000. Big Creek, oolitic limestone. Open pit, 6,000 tons; steam; stonemill. W. H. Cox, supt.
Osgood..... Ripley Ry. 538.	A. B. Ashman Co., Cincinnati, Ohio, S. W. cor. Ninth and John sts. A. B. Ashman, pres.; George Ashman, secy.; Alfred L. Ashman, treas. and supt. Cap. stk. \$100,000. Osgood, limestone. Open pit, 10,000 tons; steam.
Paoli..... Orange Ry. 170, 404.	T. N. Braxtar & Sons, oil stones. Open pit.
..... " .. "	John Jones, Braxton, sandstone. Open pit, 500 tons; hand.
..... " .. "	Wm. F. Osborn. Cap. \$2,500. Hindostan and sand stone. Open pit, 145 tons; hand, horse.
..... " .. "	The Pike Mfg. Co., Pike Station, N. H. E. B. Pike, pres. and mgr.; F. M. Tucker, secy. and treas. Cap. stk. \$70,000. Pike, fine and coarse sandstone.
River Side..... Fountain Ry. Independence 784.	Guyer, Burchby & Co. Cap. \$18,000. Riverside, sandstone. Open pit, 10,000 tons; horse. R. H. Guyer, supt.
Romona..... Owen Ry. 503.	Oolitic Quarry Co., Spencer, Ind. Charles Lilly, pres.; C. H. Miller, secy. and treas. Oolitic limestone.
..... " .. "	Oolitic Stone & Lime Co., Ira H. Pauley, pres. and mgr.; D. W. Jones, secy. and treas. Cap. stk. \$15,000. Oolitic limestone, 10,000 tons; steam; mill; limekiln, 3,000 tons. G. A. Beunart, supt.
..... " .. "	Pauley & Whitley. Cap. \$10,000. Owen, oolitic limestone. Open pit, 10,000 tons; steam; stonemill; limekiln, 1,500 tons. I. H. Pauley, supt.
..... " .. "	Ramona Oolitic Stone Co., Indianapolis, Ind., 15 Ingalls Block. H. Bates, pres.; H. Bates jr., secy. and treas.; Walter Kessler, mgr. Cap. stk. \$30,000. Mill Creek, oolitic limestone. Open pit, 30,000 tons; steam; mill.
Salem..... Washington Ry. 404.	Salem Bedford Stone Co., Louisville, Ky., 421 Main st. R. A. Robinson, pres.; John L. Wheat, secy.; John A. Carter, treas.; Dexter Belknap, mgr. Cap. stk. \$200,000. Salem, limestone. Open pit, 2,000 tons; steam; mill, 5 kilns. Wm. Roberts, supt.
Smithville..... Monroe Ry. Clear Creek 404.	Oolitic Stone Co., Bedford, Ind. Cap. stk. \$100,000. Limestone. Open pit, 25,000 tons; steam. John Chambers, supt.
..... " .. "	Thomlinson Stone Co., Chicago, Ill., Room 44, 189 La Salle st. John Thomlinson sr., pres.; John Thomlinson jr., secy. and mgr. Cap. stk. \$100,000. Thomlinson, oolitic limestone, 25,000 tons; steam; mill. Harry Tell, supt.
Spencer..... Owen Ry. 536.	Spencer Lime & Rubble Quarry Co., O. T. Dickerson, pres.; T. H. Boswell, secy. and treas.; Tom Robinson, mgr. Cap. stk. \$5,000. Spencer, rubble, riprap, 7,500 tons; steam; mill.
Stinesville..... Monroe Ry. North Bedford 564.	Big Creek Stone Co., Bloomington, Ind. G. W. Ballenbacher, pres. and mgr.; R. C. Greeves, secy. and treas. Cap. stk. \$100,000. Big Creek, oolitic limestone. Open pit, 10,000 tons; steam; mill. W. H. Cox, supt.



## STONE, MARBLE, GRANITE AND ONYX—(CONTINUED)

LOCATION OF MINE OR QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE OR QUARRY, KIND OF STONE, KIND OF MINE OR QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STONE OR MARBLE MILLS, LIMEKILNS AND CAPACITY, ETC., AND NAME OF MINE SUPERINTENDENT.
Town and County.	
Stinesville ..... Monroe (Continued.)	North Bedford Stone Co., Bloomington, Ind. W. H. McKnight, pres.; B. A. McGee, secy. and mgr.; M. J. Carnahan, Treas. Cap. stk. \$150,000. North Bedford, dolitic limestone. Steam; mill. Isaac Pressnell, supt.
" " " "	Stinesville & Bloomington Stone Co. J. S. Williams, pres., treas. and mgr. Louis N. Williams, secy. Cap. stk. \$100,000. Dolitic limestone. Open pit, 12,500 tons; steam; mill.
Turner ..... Clay Ry. Newburg 563.	H. M. Pierce. Cap. \$2,000. Pierce, sandstone. Open pit, 2,500 tons; horse, hand.
West Baden ..... Orange Ry. 404.	Z. A. Lynch. Cap. \$500. Mt. Orle, Hindostan oil stone. Open pit, 12 tons; horse; mill.
Westport ..... Decatur Ry. 256.	Boicourt & Dowden. Z. Boicourt, pres.; Etta Boicourt, secy.; M. Dowden, treas. Boicourt, limestone. Open pit; hand.
Williamsport ..... Warren Ry. 784.	Williamsport Sandstone Co. John Gregory, pres.; B. R. Gregory, secy. and treas. Cap. stk. \$50,000. Williamsport, sandstone. Open pit, 60,000 tons; steam. Benjamin R. Gregory, mgr. and supt.

SEE ALSO SUPPLEMENTARY LIST

## INDIAN TERRITORY

### COAL BITUMINOUS

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, COKE OVENS, AND NAME OF MINE SUPERINTENDENT.
Town and County.	
Ardmore ..... Chickasaw Ry. 26.	White Ash Coal & Mining Co., Dallas, Tex. W. A. Bright, pres.; L. O. Robertson, secy.; James M. Steere, treas., W. A. Dennis, mgr. Cap. stk. \$100,000. White Ash. Slope, steam. Frank Cooley, supt. (developing).
Coalgate ..... Choctaw Ry. 214.	South-Western Coal & Improvement Co. Wm. Bond, pres.; Charles G. Hedge, secy. and treas.; Thomas Fleming, mgr. Cap. stk. \$400,000. Shaft, slope, pit, 230,65 tons. steam. Ed. Henderson, supt.
Hartshorne ..... Choctaw Ry. 459, 729.	Choctaw Coal & Railway Co., Philadelphia, Pa., 238 S. Third street. Charles Hartshorne, pres.; Frank T. Pattison, secy.; W. C. Alderson, treas. Cap. stk. \$1,500,000. Hartshorne, Alderson. Shaft, slope, open pit, 300,000 tons. steam. Edwin Ludlow, supt.
Leligh ..... Choctaw Ry. 459.	Atoka Coal & Mining Co., St. Louis, Mo., Sixth and Locust sts. Edwin Gould, pres.; D. S. H. Smith, secy. and treas.; R. M. McDowell, v. pres. and gen. mgr. Cap. stk. \$500,000. Atoka. Shafts, 300,000 tons; steam. Wm. Cameron, supt.
McAlester ..... Choctaw Ry. 459.	Osage Coal & Mining Co., St. Louis, Mo., Sixth and Locust sts. Edwin Gould, pres.; D. S. H. Smith, secy. and treas.; R. M. McDowell, v. pres. and gen. mgr. Cap. stk. \$500,000. Osage Nos. 9, 10, 12. Slope, shaft, 400,000 tons; steam; 50 coke ovens, capacity 12,000 tons. Wm. Cameron, supt.
Scullyville ..... Choctaw (P. O. Jenison, Ark.) Ry. 729.	National Coal & Mining Co., Dallas, Tex., 406 North Texas National Bank Bldg. H. L. S. Kniffle, pres.; Charles J. Miles, secy. and treas. Cap. stk. \$2,000,000. Wallsburg, Choctaw. Tunnel, open pit. Steam (developing).

### GOLD AND SILVER

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
Town and County.	
Ardmore ..... Chickasaw Ry. Wynnewood 26.	Silver Queen Mining Co. R. Stewart Dennee, pres.; C. M. Campbell, secy.; S. Zuekerhann, treas. and mgr. Cap. stk. \$200,000. Silver Queen, silver, gold, copper. Shaft; steam, hand. Henry J. Brennan, supt.

SEE ALSO SUPPLEMENTARY LIST

## IOWA

## COAL—BITUMINOUS

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, COKE OVENS, AND NAME OF MINE SUPERINTENDENT.
TOWN	COUNTY.	
Albia	Monroe	Enterprise Coal Co. O. Brown, mgr. Cap. \$30,000. Enterprise. Shaft; steam. T. J. Lewis, supt.
Ry. 147.		
"	"	Iowa & Wisconsin Coal Co. J. D. McMillan, pres.; Cecil R. Anderson, secy.; R. Dewhurst, treas.; J. H. White, mgr. and supt. Cap. stk. \$40,000. Jack Oak. Shaft, 75,000 tons; steam.
Ry. Tytoine 135, 327.		
Angus	Boone	Angus Coal Co. S. Sheppard, secy. and treas.; J. Ramsay, mgr. Cap. stk. \$10,000. Angus. Shaft, 200,000 tons.
Ry. 142, 156.		
"	"	Craig Coal Co., Ft. Dodge, Iowa. A. F. Guthrie, pres.; W. Walton, secy. Cap. stk. \$100,000. Shaft, 35,000 tons; steam. J. Dawson, mgr. and supt.
"	"	
Avery	Monroe	Lone Hollow Mining Co. John F. Cook, prest. Cap. \$15,000. Lone Hollow. Slope, 8,000 tons; horse. G. C. Cook, supt.
Ry. 135.		
"	"	Smoky Hollow Coal Mine. John Z. Evans, propr. Cap. \$57,000. Smoky Hollow. Slope, 105,000 tons; steam. F. Hynes, supt.
"	"	
Bayard	Guthrie	Doolittle, Elwood & Doody (local). Cap. \$1,500. Standard. Drift, 107 tons; horse.
Ry. 141.		
Beacon	Mahaska	Beacon Coal Co. S. Phillips, prest., treas. and mgr.; S. Phillips Jr., secy. Slope, 30,000 tons; steam.
Ry. 142.		
"	"	Garfield Coal Co., Oskaloosa, Iowa. R. Ramsay, prest.; B. Wightman, secy. and treas. Cap. stk. \$30,000. Slope, drift; steam. J. H. Ramsay, supt.
"	"	Oskaloosa Coal & Mining Co., Oskaloosa, Iowa. E. H. Gibbs, prest., W. A. Seever, treas. Cap. stk. \$100,000. Shaft, 200,000 tons; steam. John Ramsay, supt.
"	"	
Belknap	Davis	Warren J. Graham (local). Soap Creek. Slope; horse.
Ry. 142, 786.		
Blakesburg	Wapello	Phillips Fuel Co., Ottumwa, Iowa. Ira Phillips, prest.; Henry Phillips, secy.; E. L. Kilby, treas. Cap. stk. \$200,000. Shaft, slope, 25,000 tons; steam, electricity. Wm. Foulkes, supt.
Ry. 141.		
Boone	Boone	Milford Coal Co. John Birmingham, prest. and secy.; John Keating, treas., mgr. and supt. Cap. stk. \$40,000. Inv. cap. \$20,000. Milford. 20,000 tons; steam.
Ry. 150.		
Boonesboro	Boone	W. D. Johnson & Co. Coal Co. W. D. Johnson, prest.; T. S. Cantfield, secy., treas. and mgr. Cap. stk. \$2,000. Johnson's No. 2. Shaft, 3,500 tons; steam. C. Logan, supt.
Ry. Boone 150, 218.		
"	"	Riverside Coal Co. James Weir, mgr. Cap. stk. \$2,500. Shaft, 1,200 tons; horse.
"	"	Rogers & Craw. Cap. \$2,000. Shaft, 21,500 tons; steam. Wm. Craw, supt.
"	"	
Brazil	Appanoose	Brazil Coal & Mining Co. B. F. Silkmitter, mgr. Drift, 70,000 tons; horse.
Ry. 394.		
"	"	Phillips Fuel Co., Ottumwa, Iowa. Ira Phillips, prest.; Henry Phillips, secy.; E. L. Kilby, treas. Cap. stk. \$200,000. Shaft, slope, 25,000 tons; steam, electricity. Wm. Foulkes, supt.
"	"	Phenix Coal Co., Council Bluffs, Iowa. Rooms 224 and 225 Merriam Block. Joseph Turner, prest., mgr. and supt.; John Freese, secy. and treas. Cap. stk. \$10,000. Phenix. Slope, 10,000 tons; horse.
"	"	
Buffalo	Scott	C. G. Rowan. Cap. \$7,000. Pennsylvania No. 2. Shaft, 2,000 tons; horse.
Ry. Blue Grass 87.		
"	"	Thomas Webster, Iron Dollar. Shaft, 1,240 tons; horse.
Carlton	Adams	Wm. Chaffee (local). Cap. \$250. Remby. Shaft, 80 tons; horse.
Ry. 135.		
"	"	Gibbie Bros. Cap. \$500. Gibbie. Shaft, 3,000 tons; horse. T. Gibbie, mgr. and supt.
"	"	Gibson & Co. (local). Cap. \$1,000. No. 2. Shaft, 2,200 tons; horse. J. W. Gibson, supt.
"	"	Wm. Ruth & Co. Cap. \$1,000. Ruth. Shaft, 30,000 tons; hand. Wm. Ruth, supt.
"	"	
Carbonado	Mahaska	Excelsior Coal Co., Oskaloosa, Ia. Cap. stk. \$500,000. Shafts Nos. 4 and 5. Shafts, 300,000 tons; steam. B. Wightman, supt.
Ry. Oskaloosa 89, 142, 327 (4 miles).		
"	"	Andrew Love (local). Cap. \$300. Slope, 2,500 tons; horse.
"	"	
Cedar Mines	Monroe	Chicago & Iowa Coal Co., Chicago, Ill., 1006 Home Insurance Bldg. L. L. Coburn, prest.; Alfred Cowles, secy. and treas. Cap. stk. \$150,000. Cedar. Shaft, 75,000 tons; steam. W. P. Jones, supt.
Ry. 135.		
Centerville	Appanoose	Anchor Coal Co. J. M. Biddle, prest.; T. R. Riggs, secy.; James Wilson, treas. and mgr. Cap. stk. \$8,000. Anchor. Shaft, 15,000 tons; horse.
Ry. 141, 142, 364.		
"	"	Diamond Coal Co. W. W. Oliver, prest.; C. W. Lane, secy. and treas. Cap. stk. \$60,000. Diamond. Shaft, 40,000 tons; steam, compressed air. Alex. Dargavell, supt.
"	"	Eldon Coal & Mining Co., Ottumwa, Iowa, 102 Market st. W. R. Daum, prest.; George P. Daum, secy., treas. and mgr. Cap. stk. \$50,000. Eldon No. 2. Shaft, 25,000 tons. John Morris, supt.
"	"	Happy Coal Co. C. Erikson, prest. and supt.; G. Olson, secy.; A. P. Anderson, treas.; Andrew Burkhum, mgr. Cap. stk. \$5,000. Happy. Shaft, 100 tons; horse.
"	"	Monitor Coal Co. D. A. Crawford, prest.; A. D. Crawford, secy. and mgr. Cap. stk. \$10,000. Shaft, 6,000 tons; horse. Geo. Helman, supt.
"	"	Raney & Co. Cap. \$8,000. No. 3. Shaft, 8,000 tons; steam. John Raney, supt.
"	"	Scandinavian Coal Co. Charles Burkland, prest.; Claus Johnson, secy.; C. A. Stanton, treas.; T. J. Greene, mgr. and supt. Cap. stk. \$15,000. Scandinavian. Shaft, steam.
Chariton	Lucas	Thomas H. Smith (local). Cap. \$1,000. Little White Breast. Tunnel, 674 tons; hand.
Ry. 135.		

## COAL—BITUMINOUS—(CONTINUED)

TOWN AND COUNTY.	LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, COKE OVENS, AND NAME OF MINE SUPERINTENDENT.
Chilholm Ry. Manon 135.	Monroe	Whitebreast Fuel Co., Chicago, Ill., 949 Rookery Bldg. J. C. Osgood, pres.; C. E. Phelps, secy. G. W. Traer, treas.; T. J. Phillips, mgr. Cap. stk. \$1,300,000. No. 10. Shaft, 38,968 tons; steam. R. D. Rosser, supt.
Cincinnati Ry. 133.	Appanoose	Appanoose Coal Co. J. N. Marsh, pres., treas. and mgr., E. S. Marsh, secy. Cap. stk. \$20,000. Shaft, 36,000 tons; steam. D. H. Morrison, supt.
"	"	Cincinnati Coal Co. J. C. McDonald, pres. and treas.; G. W. Colton, secy. and mgr. Cap. stk. \$10,000. Cincinnati. Shaft, 5,000 tons; horse.
Coalfield Ry. 327.	Monroe	A. B. Little, Oskaloosa, Iowa. Black Diamond. Slope, 3,000 tons; steam.
Conlyville Ry. Coalville Mines 503.	Webster	I. Rhodes & Co. Rhodes. Open pit, 80 tons; hand.
Coffax Ry. 142, 144.	Jasper	Jasper County Coal Co. E. H. Griggs, pres.; Geo. A. Goodrich, secy., treas. and mgr. Cap. stk. \$60,000. Jasper county. Shaft, 40,000 tons; steam. D. S. Couch, supt.
Commerce Ry. 142.	Polk	Thomas D. Hulme. Cap. \$5,000. Commerce. Shaft, 1,000 tons; horse. Samuel Dale, supt.
Confidence Ry. 135.	Wayne	Frye Bros. Cap. \$1,200. Frye. Shaft, 1,600 tons; steam. H. E. Frye, mgr.
"	"	William Rousseau (local). Cap. \$200. Rousseau. Slope, 80 tons; hand.
Cory	Keokuk	North Star Coal Co. John Rettig, secy. and treas.; John Farly, mgr. Cap. stk. \$20,000. Shaft, 45,000 tons; steam.
Darby P. O. Mystic Ry. 141.	Appanoose	Darby Coal Co. W. R. Williams, pres.; J. F. Richards, secy.; W. T. Holtner, treas. and mgr. Cap. stk. \$50,000. Darby. Shaft, 20,000 tons; steam. B. B. Stull, supt.
Dawson Ry. 141.	Dallas	Dawson Coal Co. Cap. stk. \$30,000. Shaft, steam.
Dean Ry. 364.	Appanoose	Patrick Gorman. Gorman. Slope, 80 tons; hand.
Des Moines Ry. 135, 139, 142, 144, 217, 218, 219, 784.	Polk	Bloomfield Coal & Mining Co., 400 E. Walnut st., John Wilson, pres.; A. A. Nelson, secy.; Charles S. Worth, treas., mgr. and supt. Cap. stk. \$30,000. Bloomfield. Shaft, 40,000 tons; steam.
"	"	Campfield Coal & Mining Co., 411 E. Sixth st., J. G. Haskins, pres.; Henry F. Garver, secy., treas. and mgr. Cap. stk. \$10,000. Campfield. Shaft, steam (developing). David Ash, supt.
"	"	Christy Coal Co., Room 90 Cripp Block. J. M. Christy, pres. and mgr.; C. F. Hemenway, secy. and treas. Cap. stk. \$30,000. Christy. Shaft, 50,000 tons; steam. James E. Stouff, supt.
"	"	Coon Valley Coal Co., Seventh and Mulberry sts., J. D. Stockton, pres.; J. Whitney Ross, secy.; Geo. W. Boyney, treas.; Thomas Beck, mgr. Cap. stk. \$65,000. Coon Valley. Shaft, 25,000 tons; steam. Thomas Bates, supt.
"	"	Eureka Fuel Co., 611 W. Locust st., W. L. Brown, pres.; C. J. Carlson, secy. and supt.; J. A. Brown, treas. and mgr. Cap. \$10,000. Eureka. Shaft, 11,000 tons; steam.
"	"	Maple Grove Coal & Mining Co., 505 E. Sixth st., W. F. Garrison, pres. and secy.; A. W. Carlson, treas. Cap. stk. \$50,000. Maple Grove. Shaft, 75,000 tons; steam. C. A. Swanson, supt.
"	"	Proctor Coal Co., cor. Third and Laeust sts., D. Proctor, pres.; F. Proctor, secy. Cap. \$10,000. Proctor. Shaft, 30,000 tons; steam. W. Edge, supt.
"	"	Vanginkel Coal Co., First and Court avs., G. Vanginkel, pres. and treas.; G. C. Vanginkel, secy.; W. E. Marsh, mgr. Vanginkel. Shaft, 20,000 tons; steam. Claus Vanginkel, supt.
Donds Station Van Buren Ry. 142.	Carson & Walker	Slope, 8,000 tons; horse. Matthew Walker, supt.
"	"	G. W. Findley. Cap. \$5,000. Business Corner. Slope, 12,000 tons; horse.
Dunreath Ry. 784.	Marion	Black Diamond Coal & Mining Co., Des Moines, Iowa, 212 W. Seventh st., Isaac Brandt, pres.; C. D. Boardman, secy.; J. C. Macy, treas. and mgr. Cap. stk. \$100,000. Black Diamond. Slope, 116,000 tons; steam. Wm. Robinson, supt.
Eldon Ry. 152.	Wapello	A. T. Dotson (local). Dotson. Tunnel, 800 tons; hand.
"	"	Eli Dye. Cap. \$3,000. Salt Creek. Open, 1,200 tons; hand.
Evans Ry. 142.	Mahaska	American Coal Co., Oskaloosa, Iowa. H. W. McNeill, pres.; Wm. T. Phillips, secy.; James F. McNeill, treas.; W. A. McNeill, mgr. Cap. stk. \$300,000. No. 2. Slope, 17,000 tons; steam. R. E. Wilson, supt.
Fairfield Ry. 135, 142.	Jefferson	G. W. Bates (local). Cap. \$500. Cedar Hill. Shaft, 720 tons; horse.
"	"	John Williamson (local). Slope, 120 tons.
Fanslers Ry. Guthrie Centre 142.	Guthrie	P. Renstow (local). Cap. \$1,000. Renstow. Shaft, 800 tons; horse.
Farmington Ry. 133, 142.	Van Buren	Farmington Coal & Mining Co. James Carr, pres., mgr. and supt.; Frank D. Carr, secy.; C. W. Sherrick, treas. Cap. stk. \$6,000. Panie. Shaft, slope, 10,000 tons; horse.
Flaglers Ry. 135.	Marion	S. R. Rollings (lessee). Oak Hill. Slope, 12,000 tons; horse.
Forbush Ry. 327.	Appanoose	Whitebreast Fuel Co., Chicago, Ill., 940 Rookery Bldg. J. C. Osgood, pres.; C. E. Phelps, secy.; G. W. Traer, treas.; T. J. Phillips, mgr. Cap. stk. \$1,300,000. No. 19. Shaft, 46,721 tons; steam. J. Holland, supt.
Fort Dodge Ry. 142, 319, 423, 456.	Webster	Albert Stine. Cap. \$125. Slope, 400 tons; horse.

## COAL—BITUMINOUS (CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, COKE OVENS, AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Foster, Ry. 141. Monroe	Deep Vein Coal Co., Cedar Rapids, Iowa. E. I. Foster, prest. and treas.; C. H. Fugle, secy. and supt. Cap. stk. \$200,000. Shaft, slope, 100,000 tons; steam.
" " " "	Monroe Coal & Prospecting Co. A. McCoy, prest.; B. F. Fritchle, secy. and mgr.; F. P. Hank, treas. Cap. stk. \$2,500. Shaft; horse.
Fredrie, Ry. 135. Monroe	Charles Akers. Cap. \$2,000. Shaft, 4,000 tons; horse.
Glvin, Ry. 142, 327, 784. Mahaska	C. Alexander. Cap. \$1,000. Glvin. Slope, 10,000 tons; horse.
" " " " "	Chilton Bros. Cap. \$5,000. Chilton. Slope, 500 tons; hand. Arthur Chilton, supt.
Guthrie Centre, Ry. 142. Guthrie	Guthrie Centre Coal Co. H. K. Dewey, prest.; J. D. Brown, secy.; Ed. Dash, treas. Cap. stk. \$5,000 (developing).
Hamilton, Ry. 135, 147. Marion	Boudinot Bros. Cap. \$5,000. Hamilton. Slope, 32,000 tons; steam. G. A. Boudinot, supt.
" " " " "	Geo. C. Davis. Cap. \$5,000. Davis. Shaft, 8,000 tons; horse.
Harvard, Ry. 142. Wayne	James A. Winger. Cap. \$10,000. Happy Hollow. Shaft, 5,400 tons; horse.
Hickory, Ry. 327. Monroe	Hickory Coal Co. C. C. Cox, prest.; C. N. Bloomfield, secy. and treas. Cap. \$7,000. Hickory. Shaft, 30,000 tons; steam. Wm. Jamison, mgr. and supt.
Hillsboro, Ry. 137. Henry	David Cox. Cap. \$300. Hillsboro. Tunnel, 100 tons; hand.
Hitman, Ry. 135. Monroe	Wapello Coal Co. J. C. Pearsley, prest.; H. E. Jarvis, secy.; S. A. Corey, treas.; H. L. Waterman, mgr. Cap. stk. \$730,000. Shaft, 250,000 tons; steam. J. W. Hayne, supt.
Jamaica, Ry. 141. Guthrie	Simon & Sons. G. W. Simon, secy.; J. H. Wallace, treas.; W. D. Simon, mgr. and supt. Cap. stk. \$10,000. Greenbrier. Shaft, 6,000 tons; horse, steam.
Jerome, Ry. 141. Appanoose	Gladstone Coal Co. Joseph Goss, prest.; Peter Marsden, secy. and treas.; Robert Marsden, mgr. and supt. Cap. stk. \$5,000. Gladstone. Shaft, 12,000 tons; steam.
Kalo, Ry. 456. Webster	E. Johnson (local). 175 tons.
" " " " "	Porter & Bird. Tunnel, 10,000 tons; hand. James Porter, supt.
Keb, Ry. 135. Wapello	Whitebreast Fuel Co., Chicago, Ill. 940 Rookery Bldg. J. C. Osgood, prest.; C. E. Phelps, secy.; G. W. Traer, treas.; T. J. Phillips, mgr. Cap. stk. \$1,300,000. No. 22. Shaft, 129,107 tons; steam. J. Luke Jr., supt.
Kirkville, Ry. 142. Wapello	F. A. Waddell (local). Waddell. Shaft, 20 tons; horse.
Knoxville, Ry. 142. Marion	S. M. Buckman. Buckman. Slope, 780 tons; horse.
" " " " "	S. L. Collins Coal and Mining Co. S. L. Collins, prest.; Lyle S. Collins, secy., treas. and mgr. Cap. stk. \$3,000. No. 3. Shaft.
" " " " "	Wm. Lewis. Cap. \$3,000. Lewis. Shaft, 2,500 tons; horse.
" " " " "	W. O. Robinson (local). Slope, 2,400 tons; horse.
Laddsdale, Ry. 142. Davis	Eldon Coal & Mining Co., Ottumwa, Iowa, 102 Market st. W. R. Daum, prest.; Geo. P. Daum, secy., treas. and mgr. Cap. stk. \$50,000. No. 1. Shaft, 50,000 tons; steam. Samuel Smith, supt.
Lehigh, Ry. 429, 794. Webster	Corey Coal Co. Frank Corey, mgr. Cap. \$6,000. Corey, No. 1. Slope, 2,000 tons; steam. Rees Stephens, supt.
" " " " "	S. W. Corey. Cap. \$2,000. Corey. Slope, 5,000 tons; horse. John Davenport, supt.
" " " " "	Crooked Creek R. R. & Coal Co. W. C. Willson, prest.; J. M. Funk, secy. and treas.; Samuel McClure, gen. mgr. Cap. stk. \$225,000. Crooked Creek. Shaft, slope, 17,165 tons; steam, horse. John Hamilton, supt.
" " " " "	W. H. & S. McClure. Cap. \$10,000. Black Diamond. Slope, 8,222 tons; horse. D. W. Townley, supt.
" " " " "	S. V. Smith. Cap. \$2,000. Smith. Shaft, 1,000 tons; horse.
Leighton, Ry. 142. Mahaska	M. B. Foster, Des Moines, Iowa, Room 509 Iowa Loan & Trust Bldg. H. A. Foster, mgr. Cap. \$25,000. Leighton. Shaft, 50,000 tons; steam. R. T. Montgomery, supt.
Libertyville, Ry. Collett 137. Jefferson	A. J. Zimmerman (local). Cap. \$1,500. Lick Creek. Slope, 2,400 tons; horse.
Lockridge, Ry. 135. Jefferson	M. D. Brown. Cap. \$6,000. Coal Port. Shaft, 6,000 tons; horse.
Marysville, Ry. Hamilton 135. Marion	John Yenser. Cap. \$300. Yenser. Open pit, 1,700 tons; horse.
Milledgeville, Ry. Melrose 135. Appanoose	Fenton & Bros. (local). Shaft, 1,800 tons; horse.
Milo, Ry. 135. Warren	N. D. Bales (local). Bales. Shaft, 200 tons; horse.
" " " " "	S. C. Bryant. Cap. \$2,000. Bryant. Shaft, 3,000 tons; horse.
Molonga, Ry. 150. Boone	John Peacock. Cap. \$1,500. Scottish Chief. Shaft, 1,621 tons; horse.
Monroe, Ry. 142. Jasper	R. D. Marshall (local). Marshall. Slope, 300 tons; hand.
Morgan Valley, Ry. 784. Marion	Midland Coal Co., Des Moines, Iowa. F. M. Hubble, prest.; L. M. Martin, secy. and treas.; A. W. Austin, mgr. Cap. stk. \$3,000,000. Midland. Slope, shaft, 10,000 tons; steam. J. W. Miller, supt.

## COAL—BITUMINOUS (CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, COKE OVENS, AND NAME OF MINE SUPERINTENDENT.
TOWN	COUNTY.	
Mystic	Appanoose Ry. 141.	Clarkdale Coal Co. John Clark, pres.; Geo. Clark, secy.; James Clark, treas.; Alex. Clark, mgr. and supt. Cap. stk. \$2,500. Clarkdale, Shaft, 4,200 tons; horse.
"	"	Iowa & Missouri Coal & Mining Co., Kansas City, Mo., 291-291 N. Y. Life Bldg. Elijah Gates, pres.; John H. Owens, secy. and treas.; C. C. Coff, mgr. Cap. stk. \$1,500,000. Slope; shaft; steam. Thomas Woodson, supt.
"	"	Lodwick Bros. Cap. stk. \$10,000. Lodwick, Drift, slope, 20,000 tons; horse. I. L. Lodwick, supt.
"	"	Mystic Coal & Mining Co. James A. Seddon, pres., secy. and treas.; Wm. Harris, mgr. Cap. stk. \$8,000. Slope; 30,000 tons; horse.
"	"	Orr Bros. Cap. stk. \$25,000. Pittsburg. Slope, shaft, 30,000 tons; steam, horse.
"	"	Phillips Fuel Co., Ottumwa, Iowa. Ira Phillips, pres.; Henry Phillips, secy.; E. L. Kirby, treas. Cap. stk. \$200,000. Shaft, slope, 25,000 tons; steam, electricity. Wm. Foulkes, supt.
"	"	Raven Coal Co. W. F. Vermilion, pres.; A. A. Hightberger, secy., mgr. and supt. C. W. Vermilion, treas. Cap. stk. \$15,000. Raven. Slope; horse.
"	"	R. F. Silkmitter, Cap. \$5,000. Mystic, Drift, 75,000 tons; horse. Walter Cowles, supt.
New Market	Taylor Ry. 316.	Benjamin Anderson (local). Cap. \$3,000. Anderson's. Shaft, 7,500 tons; horse.
"	"	Campbell & Sons. Cap. \$2,000. Bean. Shaft, 4,500 tons; horse. R. Campbell, mgr. and supt.
Newton	Jasper Ry. 142, 227.	Carson Bros. Cap. \$2,000. Shaft, 2,000 tons; steam. Robert Carson, supt.
"	"	Newton Coal Co. A. Murdoch, pres.; David Conn, secy.; I. Murdoch, treas. Wm. Conn, mgr. and supt. Cap. stk. \$8,000. Newton. Shaft, 9,000 tons; steam, horse.
Oskaloosa	Mahaska Ry. 89, 142, 327.	H. E. Evans & Co. Cap. \$5,000. Shaft, 20,000 tons; steam. B. F. Evans, supt.
"	"	S. C. Guthrie, Cap. \$5,000. Guthrie. Shaft, 6,000 tons; steam. J. D. Guthrie, supt.
"	"	Iowa Fuel Co., cor. Market and High sts. W. H. Seavers, pres.; D. B. Fleming, secy.; C. E. Lofland, treas.; E. C. Smith, mgr. and supt. Cap. stk. \$75,000. Iowa No. 1. Shaft, steam.
"	"	Long Bros. Cap. \$1,000. Shaft, 15,000 tons; steam. Thomas Long, supt.
Oswalt	Jasper Ry. Valeria 135, 328.	Diagonal Coal Co., St. Paul, Minn. Metropolitan Opera House Bldg. Raymond Du Puy, pres. and treas.; Robert U. Wight, secy.; C. G. Koll, gen. mgr. and supt. Cap. stk. \$250,000. Diagonal. Shaft, 150,000 tons; steam.
Otley	Marion Ry. 142.	Marion County Coal Co., Des Moines, Iowa. H. A. Foster, pres. and mgr. Cap. \$10,000. Otley. Shaft, 40,000 tons; steam. R. Fraser, supt.
Ottumwa	Wapello Ry. 135, 141, 142, 784.	Burch Bros., South Ottumwa, 1027 Church st. (local). Cap. \$5,000. Pickwick. Shaft, 15,000 tons; horse. E. D. Burch, supt.
"	"	Hawkeye Coal & Mining Co., 112 Market st. A. C. Coughlan, pres.; J. E. Burgess, secy.; E. D. Fair, treas. Hawkeye. Shaft, 30,000 tons; steam. C. W. Grant, supt.
"	"	Phillips Fuel Co. Ira Phillips, pres.; Henry Phillips, secy.; E. L. Kirby, treas. Cap. stk. \$200,000. Phillips No. 2. Shaft, 25,000 tons; shaft. Wm. Foulkes, supt.
"	"	Van Gent & Dixon, 530 E. Main st. (local). Cap. \$4,700. Shaft, 20,000 tons; steam. E. H. Dixon, supt.
Pekay	Mahaska Ry. 327.	Whitebreast Fuel Co., Chicago, Ill. 340 Rookery Bldg. J. C. Osgood, pres.; C. E. Phelps, secy.; G. W. Tracy, treas.; T. J. Phillips, mgr. Cap. stk. \$1,000,000. No. 28. Shaft, 100,000 tons; steam. John T. Phillips, supt.
Pella	Marion Ry. 142.	J. M. Markham (local). Cap. \$2,500. Markham, Keystone. Shaft, 1,200 tons.
"	"	Lewis Woolyard, Chris-man. Tunnel, 2,000 tons. Frank Woolyard, supt.
Redfield	Ballas Ry. 219.	Bott & Bros. Cloud. Slope, 15,000 tons; horse. Thomas R. Bott, supt.
Red Rock	Marion (E. O. Monroe) Ry. Timbreth 784.	Hugh McNeish. Cap. \$5,000. Liberty Corner. Tunnel, 1,500 tons; horse, hand.
Rose Hill	Mahaska Ry. 142.	Carey Bros. Cap. \$3,000. Bacon. Shaft, 1,200 tons; horse. M. Carey, mgr. and supt.
Rummels	Polk Ry. 784.	Acme Coal Co., Des Moines, Iowa, 913 W. Walnut st. J. R. Nelson, pres.; S. W. Glasgow, secy. and treas.; J. A. Lytle, mgr. and supt. Cap. stk. \$8,000. Acme. Slope, 15,000 tons; horse.
"	"	Midland Coal Co., F. M. Hulbie, pres.; L. M. Martin, secy. and treas.; A. W. Austin, mgr. Cap. stk. \$1,000,000. Midland. Shaft, 100,000 tons; steam. J. W. Miller, supt.
Seymour	Wayne Ry. 142, 141.	Chicago Coal Co., Chicago, Ill. 185 Adams st. D. C. DeWolf, pres.; Albert A. Augustus, secy. and treas.; J. M. Varney, mgr. Cap. stk. \$50,000. Chicago. Shaft, 45,000 tons; steam. Peter Thomas, supt.
"	"	Seymour Coal Co., Seymour. Shaft, 10,000 tons; steam. George Elmore, supt.
Shambaugh	Page Ry. Clearmont, Mo., 135.	Turner & Fulk. Cap. \$3,000. Shambaugh. Shaft, 5,000 tons; horse. W. H. Fulk, supt.
Sigourney	Keokuk Ry. 141, 142.	B. Ronely (local). Cap. \$12,000. Sigourney. Shaft, 7,500 tons; horse.
Summerset	Warren Ry. 142.	D. K. Jones. Jones. Shaft, 2,000 tons; horse.
Superior Mines	Mahaska P. O. and Ry. Rose Hill 142.	Superior Coal Co., Oskaloosa, Ia. Thomas Seavers, pres. and treas.; Mrs. J. L. Myers, secy.; J. L. Myrick, mgr. and supt. Cap. stk. \$25,000. Superior. Shaft, 20,000 tons; steam.
Tracy	Marion Ry. 135.	S. Hallowell (local). Hallowell. Slope, 125 tons; hand.

## COAL BITUMINOUS (CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, COKE OVENS, AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Tracy, Marion (Continued.)	Samuel Ream (local). Cap. \$2,500. Cedar. Open pit, 240 tons; hand.
Van Meter, Dallas Ry. 142.	Chicago & Van Meter Coal & Mining Co., Ft. Dodge, Iowa, 501 W. Market st. James L. Platt, pres., treas. and mgr.; R. B. Berryhill, secy. Cap. stk. \$100,000. No. 1. Shaft, 30,000 tons; steam. F. A. White, supt.
What Cheer, Keokuk Ry. 87, 150.	Armstrong Coal Co. Joel Stewart, pres.; Sam Gillfoy, secy. and treas.; W. B. Armstrong, mgr. Cap. stk. \$40,000. Armstrong. Shaft, 82,784 tons; steam. John Donovan, supt.
" " "	William Blatt. Black Diamond. Shaft, 1,600 tons; horse.
" " "	Carl & Irvin Bros. Joseph Irvin, pres.; Fred. Carl, secy., mgr. and supt. W. Irvin, treas. Cap. stk. \$5,800. Shaft, 3,000 tons; steam.
" " "	Crescent Coal Co. Andrew Langdon, pres.; J. S. Chipman, secy. and treas.; S. W. White, mgr. Cap. stk. \$50,000. Crescent, Nos. 1 and 2. Shaft, 127,637 tons; steam, electricity. Martin Coleman, supt.
" " "	Keystone Coal Co. S. P. Pascoe, pres. and treas.; J. J. Pascoe, secy., mgr. and supt. Cap. stk. \$50,000. Keystone. Slope, 6,340 tons; horse.
" " "	Morgan & Garlan. "Q" Mine. Slope, 300 tons; horse.
" " "	What Cheer Coal Co. E. N. Saunders, pres. and treas.; G. A. Wheeler, secy. Shaft, 125,000 tons; steam, compressed air. E. M. Trossoff, supt.
Zenonville, Boone Ry. Gilbert SBL 150.	Hutchison Bros. & Son. James Hutchison, pres.; R. B. Hutchison, secy. and treas.; John Hutchison, mgr. Cap. \$10,000. No. 1. Shaft, 7,875 tons; horse. W. C. Hutchison, supt.

## GYPSUM

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Fort Dodge, Webster Ry. 142, 319.	Iowa Plaster Association. L. Bloudeu, pres.; G. S. Ringland, v.-pres.; Leon Vincent, secy. Open pit; steam.
" " "	Duncombe Stucco Co. John F. Duncombe, pres.; C. F. Duncombe, secy., treas. and mgr. Cap. stk. \$50,000. Open pit, 16,000 tons; steam; mill. Patrick Cahill, foreman.

## LEAD AND ZINC

LOCATION OF MINE RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, SMELTERS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Dubouque, Dubuque Ry. 141, 319.	E. T. Goldthorp & Co., 363 Alta Vista st. N. H. Snow, pres.; W. A. Jones, secy. and treas.; E. T. Goldthorp, mgr. and supt. Dubuque, zinc. Shaft, 1,000 tons; horse.
" " "	Truub, Southwell & Co., 363 Alta Vista st. J. Truub, pres.; S. Southwell, secy.; A. Truub, treas.; E. T. Goldthorp, mgr. and supt. Cap. stk. \$10,000. Alpine Blossom, zinc, lead. Shaft, 2,000 tons; horse. E. T. Goldthorp, supt.

## STONE, MARBLE, GRANITE AND ONYX

LOCATION OF MINE OR QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE OR QUARRY, KIND OF STONE, KIND OF MINE OR QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STONE OR MARBLE MILLS, LIMEKILNS AND CAPACITY, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Mason City, Cerro Gordo Ry. 141, 327, 423.	Mason City Stone Co. Adin Randall, pres.; W. E. Randall, secy. and mgr. O. T. Denison, treas. Cap. stk. \$6,000. Mason City, sand and limestone. Open pits; steam.
Stone City, Jones Ry. 141.	H. Dearborn & Sons. Stone City, limestone. Open pit, 50,000 tons; steam and horse. H. Dearborn, supt.

SEE ALSO SUPPLEMENTARY LIST

## KANSAS

## COAL—BITUMINOUS

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, COKE OVENS, AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Arcadia, Crawford Ry. 348.	G. W. Campbell. Cap. \$1,000. Campbell's. Open pit, slope, 6,000 tons; hand.
" " "	Wm. Dinsmore (local). Bunker Hill. Strip.
Arvonia, Osage Ry. Lebo 26.	W. J. Jeremy (local). Open pit, 200 tons.
" " "	Rees Lewis (local). Cap. \$450. Lewis. Tunnel, 100 tons; hand.
" " "	Morris & Bebb (local). Open pit, 300 tons.
" " "	Mrs. H. Umdenstock (local). Open pit and tunnel, 125 tons; hand.
Am, Bourbon (P. O. Woodland) Ry. 460.	H. McCorkle. Cap. \$4,000. McCorkle. Open pit 300 tons; hand, horse.
Bayne, Lincoln Ry. Lincoln 776.	N. B. Allen (local). Cap. \$3,000. Ingalls. Shaft, 1,000 tons; horse.
Bunker Hill, Russell Ry. 776.	Joseph Menzler. Menzler. Open pit, 1,200 tons; hand.
Burlingame, Osage Ry. 26.	Elza Armstrong. Cap. \$5,000. Boss. Shaft, 6,000 tons; horse. W. Foster, supt.
" " "	Central Coal & Mining Co. Cap. stk. \$1,000. Central. Shaft; hand. Alfred E. Cole, supt.
" " "	Jack's Coal & Mining Co. John D. Jack, mgr. Cap. stk. \$400. Burke's, 1,000 tons; horse, hand.
" " "	Sarah Mings. Cap. \$1,000. Central. Open pit; hand. Alfred E. Cole, supt.
" " "	Rielhard Underwood. Cap. \$1,000. Eureka. Shaft, 300 tons; horse.
Carbondale, Osage Ry. 26, 355.	D. P. Clement. Cap. \$5,000. Clement's. Open pit, slope, 1,000 tons; horse.
" " "	John Coffman (local). Open pit, 600 tons. hand.
" " "	H. J. Hartman (local). Cap. \$600. Hartman. Open, 200 tons; horse.
" " "	T. N. Thomas, Carbon Hill, Kan. Cap. \$1,000. Eagle. Slope, 1,600 tons; horse.
" " "	Wm. H. Thomas. Cap. \$1,200. Excelsior. Shaft, 6,000 tons; horse.
Center, Russell P. O. and Ry. Bunker Hill 776.	X. E. Warner (local). Cap. \$100. Spring Creek. Slope, 70 tons; hand.
Cherokee, Crawford Ry. 348, 460.	H. Germain. Cap. \$10,000. Open pits, 6,000 tons; horse.
Chetopa, Labette Ry. 450, 460.	T. A. Yaden (local). Cap. \$50. Trott. Open pit, 100 tons; horse.
Clarksburg, Bourbon Ry. 348.	John Bishop (local). Open pit, 50 tons; horse, hand.
Convale, Crawford Ry. 348.	Bell & Co. Bell. Drift; hand. J. W. Davenport, supt.
Columbus, Cherokee Ry. 348, 720.	George Robinson. Robinson. Shaft, 1,680 tons; horse.
Denmark, Lincoln Ry. Lincoln 776.	Mike Morris (local). Buseman's. Shaft; hand.
" " "	W. B. Smith (local). Cap. \$2,000. I. X. L. Shaft, 500 tons; horse.
Fleming, Crawford Ry. 460.	Western Coal & Mining Co., St. Louis, Mo., Sixth and Locust sts. Edwin Gould, pres.; D. S. H. Gould, secy. and treas. R. M. McPhowell, v. pres. and mgr. Cap. stk. \$1,000,000. Fleming, 2 and 3. Shaft and slope, 50,000 tons; steam. Josiah Lane, supt.
Fort Scott, Bourbon Ry. 348, 460.	Newton Chase (local). Open pit, 100 tons; hand.
" " "	Francis Ferree & Sons. Cap. \$30,000. Ferree. Tunnel, open pit, 5,000 tons; hand, horse. J. W. Ferree, supt.
" " "	Thomas Hill (local). Hill. Open pit, 80 tons; horse.
" " "	Wm. Peerman (local). Dalton. Open pit; horse, hand.
Frontenac, Crawford Ry. 26.	Cherokee & Pittsburg Coal & Mining Co., Topeka, Kan. A. Manvel, pres.; E. Wilder, treas.; Chas. J. Deylin, mgr. Shaft, 200,000 tons; steam. Robt. T. Herreke, supt.
Garland, Bourbon Ry. 348.	G. W. Pellett (local). Cap. \$500. Pellett's. Open pit, 1,000 tons.
Godfrey, Bourbon Ry. 348.	N. D. Curtis (local). Open pit; hand.
Lansing, Leavenworth Ry. 26, 348, 460, 776.	Kansas State Penitentiary. Geo. H. Case, warden. Penitentiary. Shafts, 80,000 tons; steam; ovens, 50 tons. Oscar F. Lamm, supt.
Leavenworth, Leavenworth Ry. 26, 144, 145, 348, 460, 776.	Home Mining Co. H. D. Bush, pres.; C. S. Hartough, secy.; W. C. Sprague, treas.; Peter Straus, mgr. and supt. Cap. stk. \$500,000. Home. Shaft, 50,000 tons; steam.

## COAL—BITUMINOUS—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, COKE OVENS, AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Leavenworth Leavenworth (Continued.)	Leavenworth Coal Co., north end of Second st., Lucien Scott, pres.; Tiffin Sinks, secy.; J. E. Carr, treas., mgr. and supt. Cap. stk. \$300,000. Leavenworth. Shaft, 120,000 tons; steam, electricity, rope.
Lebo..... Coffey Ry. 26.	John Bolhstadt. Open pit, 600 tons; horse.
"....."	Hugh Jones (local). Open pit, 600 tons.
"....."	W. M. Phinney. Open pit, 240 tons; horse, hand.
"....."	Geo. Reid (local). Tunnels, 5,000 tons; hand.
"....."	W. A. Richardson. Cap. \$2,785. Red Flag. Open pit; horse.
"....."	Louis Siebuh. Open pit, 800 tons; horse.
"....."	J. R. Woodworth. Cap. \$2,000. White Star. Open pit, 3,000 tons; horse, hand.
Lincoln..... Lincoln Ry. 776.	Ben Goode & Sons (local). Cap. \$4,000. Shaft, 200 tons; horse.
Litchfield..... Crawford Ry. 729.	Kansas & Texas Coal Co., St. Louis, Mo., Fourth and Olive sts., Laclede Bldg. B. F. Hobart, pres.; W. P. Heath, secy. and treas. Shaft, open pit; steam. D. Ramsey, supt.
Mcune..... Crawford Ry. 348.	W. Huntsinger (local). Cap. \$3,000. Huntsinger. Open pit, 1,300 tons; horse, hand.
Midway..... Crawford Ry. 348, 460, 729.	Pittsburg & Midway Coal Co., E. H. Brown, pres. and mgr.; John T. Morrison, secy. and treas. Cap. stk. \$200,000. Mines 1, 2 and 3. Shafts, 106,300 tons; steam. J. T. Morrison, supt.
Minersville..... Cloud Ry. Concordia 26, 88, 460, 776.	Alexander Henderson. Shafts, 5,000 tons; horse.
"....."	T. P. Kirk & Hoy. Cap. \$3,000. Murray. Slope, 2,000 tons; horse. J. Gushaway, supt.
"....."	William Weitzel. Cap. \$1,000. Minersville. Shaft, 2,000 tons; horse.
Orchard..... Linn P. O. and Ry. La Cygne 348.	T. W. Gage (local). Cap. \$1,000. Harrison. Shaft, 2,000 tons; horse.
Osage City..... Osage Ry. 26, 460.	Black Diamond Coal Co. Cap. stk. \$5,000. Shaft, 11,000 tons; horse. J. M. Hershey, supt. and mgr.
"....."	Wm. Lounsberry (local). Fulton, Kan. Open pit and shaft, 1,000 tons; hand.
"....."	Osage Carbon Co., Topeka, Kan., A. Manvel, pres.; E. Wilder, secy. and treas.; C. J. Devlin, mgr. No. 2. Shafts, 77,214 tons; horse. Robt. Craig, supt.
"....."	Pittsburg Coal, Land & Mining Co., W. T. Williams, pres.; E. E. Dome, secy. Cap. stk. \$10,000. Pittsburg. Shaft, 6,000 tons; horse. John Ogrim, supt.
"....."	L. Baker. Cap. \$3,000. Oswego. Pit, 800 tons; horse.
Pawnee Station..... Bourbon Ry. 348.	G. F. Lanquest. Open pit, 1,000 tons; horse, hand.
Peterton..... Osage Ry. 26.	Wm. Fletcher (local). Open pit; hand.
"....."	N. C. Standiford. Cap. \$1,000. Farmer's. Open pit, 700 tons; horse, hand.
Pittsburg..... Crawford Ry. 26, 348, 460, 729.	Kansas & Texas Coal Co., St. Louis, Mo., Fourth and Olive sts., Laclede Bldg. B. F. Hobart, pres.; W. P. Heath, secy. and treas. Shaft and open pit; steam. D. Ramsey, supt.
"....."	Minerd & Co., cor. Third and Broadway. W. B. Calhoun, mgr. Cap. stk. \$25,000. New York. Shaft, 30,000 tons; steam. J. H. Minerd, supt.
"....."	Montgomery & Sheets. Cap. \$1,000. Open pit, 1,200 tons; hand. David Ramsey, supt.
"....."	C. L. Stotts & Co. (local). Butler. Open pit, 30 tons.
"....."	Wear Coal Co., Topeka, Kan., 110 W. Sixth st. F. E. Wear, pres.; T. G. Wear, v.-pres.; N. S. Wear, secy. Cap. stk. \$50,000. Shaft, 150,000 tons; steam. A. B. Kirkwood, supt.
"....."	Wear Coal Co., Topeka, Kan., 110 W. Sixth st. F. E. Wear, pres.; T. G. Wear, v.-pres.; N. S. Wear, secy. Cap. stk. \$50,000. No. 2. Shaft, 120,000 tons; steam.
Pleasanton..... Linn Ry. 348, 460.	Mine Creek Coal Co., Thos. Fleming, pres. and treas.; I. M. Fleming, secy. and mgr. Cap. stk. \$50,000. No. 1. Shaft, 15,876 tons; steam. Hugh Reid, supt.
"....."	Pleasanton Coal Co., Alfred Blaker, pres.; W. W. McCullough, secy. and treas.; A. L. Humphrey, mgr. Cap. stk. \$10,000. Pleasanton No. 1. Shaft, 10,000 tons; steam.
"....."	Thomas Station. Open pit, 2,500 tons; hand.
Pomona..... Franklin Ry. 26, 460.	Dyer & Graves. Cap. \$500. Dyer. Tunnel, 2,500 tons; hand. F. E. Dyer, supt.
"....."	Paynter & Challand Coal Co. Cap. \$5,000. Pomona. Shaft, tunnel; steam, compressed air. J. P. Paynter, supt.
Prescott..... Linn Ry. 348.	Edwin S. Belangy. Cap. \$7,000. Link. Open pit, 4,300 tons; horse.
"....."	J. C. Billings. Cap. \$5,000. Billings. Open pit, 500 tons; horse.
"....."	John Brown sr. Cap. \$200. Brown's. Open pit, 2,000 tons; horse, hand.
"....."	J. T. Durkin (local). Open pit, 300 tons.
"....."	J. J. Ham. Cap. \$300. Ham. Open pit, 2,500 tons; horse. Elmer Ham, supt.
Quonemo..... Osage Ry. 26, 460.	John Boyle (local). Osage. Shafts; horse. Pat. Ryan, supt.



## COAL—BITUMINOUS (CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWNS AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, COKE OVENS, AND NAME OF MINE SUPERINTENDENT.
Quenemo.....Osage (Continued.)		A. S. Mason (local). Cap. \$300. Drift; hand.
Quindaro.....Wyandotte Ky. 355.		Sunflower Coal & Mining Co., Kansas City, Mo., 706 Wall st. John E. Carr, pres.t. and supt.; R. H. Stewart, secy.; W. J. E. Carr, treas.; J. Oswald Clarke, mgr. Cap. stk. \$150,000. Sunflower, shaft, 310,000 tons; steam.
Ransomville.....Franklin Ky. 26.		Caples & Bro. Ransom. Tunnel, 3,000 tons; hand. George Caple, supt.
"....."		Ransom & Sims. Cap. \$3,000. Ransomville. Shaft, 12,000 tons; horse. James Sims, supt.
Russell.....Russell Ky. 776.		L. D. Smith & Co. (local). Smith. Shaft, 200 tons; horse.
Seammon.....Cherokee Ky. 348, 720.		Keith & Perry Coal Co., Kansas City, Mo., 905 Walnut st. R. H. Keith, pres.t.; E. E. Riley, secy.; David Mackie sr., treas. and supt.; John Perry, v.-pres.t. and mgr. Cap. stk. \$800,000. Keith & Perry. Shafts, 150,000 tons; steam.
"....."		Norton Coal Co., Baxter Springs, Kan. W. S. Norton, pres.t. and mgr.; E. R. Pattison, secy.; M. E. Norton, treas. Cap. \$50,000. Norton. No. 2. Shaft, 60,000 tons; steam. John Zimmerman, supt.
Seranton.....Osage Ky. 26.		Bell Bros. Cap. \$10,000. Bell's. Shaft, 15,000 tons; horse. Dumean Bell, supt.
"....."		Osage Carbon Co., Topeka, Kan. A. Manuel, pres.t.; E. Wilder, secy. and treas. C. J. Devlin, mgr. No. 1. Shafts, 53,533 tons; horse. Robt. Craig, supt.
"....."		P. Ryan & Co. P. Ryan, treas.; John Hoodham, mgr. Cap. stk. \$6,000. Shaft, 7,200 tons; horse. Thos. Elwood, supt.
Sherman City.....Cherokee Ky. Columbus 348, 720.		Wm. Theobald (local). Cap. \$2,000. Shaft, 100 tons; horse.
Silver Lake.....Shawnee Ky. 776.		Wm. H. Forbes & Co. Wm. H. Forbes, pres.t.; R. M. Forbes, secy. and supt.; J. H. Forbes, treas.; Robt. Forbes, mgr. Cap. \$50,000. Silver Lake. Shaft, 11,000 tons; horse.
Stipville.....Cherokee P. O. and Ky. Colum- bus 26, 348.		Columbus Coal Co. T. P. Anderson, pres.t.; J. W. Spruener, secy. and mgr.; E. E. Trotter, treas. Cap. stk. \$10,000. No. 2. Shaft, 47,332 tons; steam. C. Newlands, supt.
Waverly.....Coffey Ky. 26, 460.		A. P. Ingelman (local). Open pit, 280 tons; horse.
Weir.....Cherokee Ky. 348, 720.		Central Coal Co. Cap. \$15,000. Daisy. Shaft, 60,000 tons; steam. Jas. Dennis, mgr. and supt.
"....."		J. H. Durkee Coal Co., Fort Scott, Kan. J. A. Durkee, pres.t.; J. H. Durkee, secy., treas. and mgr. Cap. stk. \$25,000; surplus \$50,000. Weir City. Shafts, slopes, 130,000 tons; steam. Joseph Humble, supt.
"....."		Kansas & Texas Coal Co., St. Louis, Mo., Fourth and Olive sts., Laclede Bldg. B. F. Hobart, pres.t.; W. P. Heath, secy. and treas. Shaft, open pit, steam. D. Ramsey, supt.
"....."		Keith & Perry Coal Co., Kansas City, Mo., 905 Walnut st. R. H. Keith, pres.t.; E. E. Riley, secy.; David Mackie sr., treas. and supt.; John Perry, v.-pres.t. and mgr. Cap. stk. \$800,000. Keith & Perry. Shafts, 200,000 tons; steam.
Williamsburg.....Franklin Ky. 26.		L. Brown. Open pit, 400 tons; horse.
"....."		Franklin Coal Co. Coal Creek. Drift, 30,000 tons; hand.
"....."		J. T. Morgan (local). Morgan. Tunnel, 400 tons; hand.
"....."		Pearson & Alexander. Shaft, open pit, 400 tons; horse. P. O. Pearson, supt.
"....."		Price & Rusbatch (local). Tunnel, 125 tons.
"....."		W. H. Young. Open pit, 150 tons; horse.

## GYPSUM

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWNS AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
Blue Rapids.....Marshall Ky. 460, 776.		Blue Rapids Plaster Co. T. M. Fowler, pres.t.; H. G. Fowler, secy., treas. and mgr. Cap. stk. \$20,000. Tunnel, 9,000 tons; horse, hand; mill. W. H. Hill, supt.
Dillon.....Dickinson Ky. Swayne 460.		Saline Cement Plaster Co., Saline, Kan. M. J. Wellslager, pres.t.; M. M. Briggs, v.-pres.t.; Fred. H. Quinry, secy.; P. L. Gehlert, treas. Cap. stk. \$450,000. Open pit; steam; mill, 20,000 tons. W. M. Reese, supt.
Gypsum.....Saline Ky. 460.		Aene Cement Plaster Co., Salina, Kan. W. W. Watson, pres.t. and mgr. E. Tupper, secy. and supt.; J. M. Wellslager, treas. Cap. stk. \$25,000. Open pit, 75,000 tons; steam, mill, 54,000 tons.
Medicine Lodge.....Barber Ky. 26.		Best Bros. & Co. Thomas Best, mgr. and supt. Cap. \$25,000. Open pit, 7,000 tons; hand, steam; mill, 8,000 tons.

## IRON

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, BLAST FURNACES, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Galena..... Cherokee Ky. 348, 720.	Cornwall Mining & Smelting Co. J. P. Kleinfeld, prest.; J. A. Walbert, secy. and supt. Cap. stk. \$30,000. Cornwall. Shaft, 400 tons; frce; steam, horse.
"....."	Empire Mining Co. Jas. Murphy (lessee), Empire City, Kan. Cap. \$82,000. Galena. Shaft, 1,002 tons; steam.

## LEAD AND ZINC

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, SMELTERS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Galena..... Cherokee Ky. 348, 720.	Annie Laurie Mining Co. St. Louis, Mo., Broadway and Locust. John F. Shepley, prest.; C. A. Cunningham, secy. and treas.; Green Lanford, mgr. and supt. Cap. stk. \$8,000. Annie Laurie, lead and zinc. Shaft, 604 tons; steam.
"....."	Boice & Son. Cap. \$15,000. Lead and zinc. 1,500 tons; steam, horse; breakers. J. H. Boice, supt.
"....."	Boughten, Forman & Beck. Geo. H. Boughten, prest.; F. H. Boughten, secy.; Gordon Boughten, treas. and supt.; Paul Hopeman, mgr. Cap. stk. \$10,000. Schermerhorn, Big Six, Crystal, lead and zinc. Shaft, 2,800 tons; steam, horse.
"....."	Central Mining Co. Main and First sts. W. R. Cowley, prest.; E. S. Morton, secy.; John Page, treas.; A. E. Matland, mgr. and supt. Cap. stk. \$15,000. Lead and zinc. 685 tons; steam, horse.
"....."	Clement Mining Co., Joplin, Mo. W. W. P. Clement, prest.; John P. McCann, secy.; Thos. Conner, treas.; D. S. Brewster, mgr. Cap. stk. \$24,000. Clement, lead and zinc. 2,715 tons; steam. W. F. Phillips, supt.
"....."	John M. Cooper Mining & Milling Co. John M. Cooper, prest.; E. B. Schermerhorn, secy., treas. and mgr. Cap. stk. \$100,000. Shaft, 1,371 tons; steam, horse.
"....."	Cooper & Schermerhorn. Cap. \$100,000. Lead and zinc. Shaft, 1,915 tons; steam, horse.
"....."	Robert Crowe. E. J. Tutty, mgr. Cap. \$5,000. Crowe, galena. 2,690 tons; steam.
"....."	Al Emmons & Bro. Cap. \$8,000. Lead, zinc. 3,000 tons; horse, steam.
"....."	Galena Lead & Zinc Co. E. Zelleken, prest.; A. C. Spring, secy.; John Houricks, treas.; Peter Rice, mgr. and supt. Cap. stk. \$175,000. Galena, lead and zinc. Shafts; steam, horse, hand.
"....."	Maggie Taylor Mining & Smelting Co. P. W. Perkins, prest.; A. H. Hunt, secy.; C. O. Stocklegot, treas.; J. A. Walbert, mgr. and supt. Cap. stk. \$50,000. Maggie Taylor, galena. Shafts, 251 tons; horse, steam.
"....."	Mall Reed Paint Co. C. L. Mall, prest. treas. and mgr.; F. Weber, secy. Cap. stk. \$12,500. Mall Reed, lead and zinc. Shaft, 55 tons; steam, horse. C. L. Mall, supt.
"....."	Ohio Lead & Zinc Mining Co. B. Cooley, prest. and mgr.; K. J. Cooley, secy. and treas. Cap. stk. \$20,000. Shafts, 20,000 tons; steam, horse.
"....."	Queen Bee Mining Co. Alex. Walkenshaw, mgr. and supt. Queen Bee, lead and zinc. Shaft; steam.
"....."	Shenango Mining Co., Joplin, Mo. Alfred Boker, prest.; O. H. Picher, secy.; Phil. J. Penning, mgr. Cap. stk., \$25,000. Shafts, 2,000 tons; hand, steam. N. U. Wilson, supt.
"....."	South Side Mining & Manufacturing Co. W. B. Stone, prest.; W. H. D. Brown, secy.; W. E. Stice, treas.; Thos. Moonlight, mgr. and supt. Cap. stk. \$500,000. Lead and zinc. Shafts, 10,500 tons; steam, horse.
"....."	W. B. Stone. Cap. \$25,000. Homestake, galena. Shafts, 2,151 tons; steam. Robt. O'Hare, supt.
"....."	W. B. Stone & Howard Gove. Cap. stk. \$25,000. Folmer Tract, lead and zinc. Shafts; steam. W. A. Stone, supt.
"....."	Williams & Robeson. Cap. \$10,000. Zinc, lead. Shaft, 100 tons; steam.
"....."	Wyandotte Lead & Zinc Co. F. S. Boice, prest.; L. J. Haines, secy.; E. R. Schermerhorn, treas.; J. H. Boice, mgr. Cap. stk. \$25,000. Wyandotte, lead and zinc. Shafts, 1,500 tons; steam. E. St. George Doble, supt.

## MINERAL PAINT

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF PRODUCT, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, PAINT MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Collyer..... Trego Ky. 776.	Saline River Paint Co., Kansas City, Kan., Betsey ave. Hugh MacMillan, prest. and treas.; M. A. Mac- Millan, secy. and mgr. Cap. stk. \$25,000. Saline River, yellow and red ochre. Open pit, 1,500 tons.

## SALT

LOCATION OF MINE OR WELL, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF PRODUCT, KIND OF MINE OR WELL, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWNS AND COUNTY.	
Anthony ..... Harper Ry. 318, 460.	Anthony Salt Co. Geo. W. Maffet, prest.; T. B. Smith, secy. and treas.; Lew Sargent, mgr. and supt. Cap. stk. \$50,000. Anthony, common, fine. Wells, 14,000 tons; steam.
" ..... "	Globe Salt Co. T. B. Smith, prest.; M. L. Sargent, secy. Cap. stk. \$50,000. Globe, fine, dairy. Wells, 10,000 tons; steam.
Hutchinson ..... Reno Ry. 26, 142, 318, 460.	Barton Salt Co. Barton, common, fine. Wells, 17,885 tons; steam.
" ..... "	Kansas Salt Co. R. R. Price, prest.; J. W. Mulkey, secy. and treas.; W. L. Moore, mgr. Cap. stk. \$1,000,000. Common, dairy. Wells, 50,000 tons.
" ..... "	The Star Salt Co. R. E. Conn, prest. and mgr.; W. R. Randle, secy. and treas. Cap. stk. \$50,000. Star, common, fine, dairy. Well, 8,000 tons; steam. R. E. Conn, supt.
Kanopolis ..... Ellsworth Ry. 460, 776.	Royal Salt Co., Kansas City, Mo., New York Life Bldg. J. S. Crowell, prest.; R. A. Worthington, secy.; John H. Thomas, treas.; S. E. Baker, mgr. Cap. stk. \$500,000. Royal, rock. Shaft, 35,000 tons; steam. James Cowie, supt.
Kingman ..... Kingman Ry. 26, 318, 460.	Farmers' & Drivers' Salt Co. F. A. Parsons, mgr. Fine, evaporated. Well, 2,500 tons; steam.
" ..... "	Kingman Rock Salt Co. Shaft, steam.
Lyons ..... Rice Ry. 26, 142, 460.	Lyons Rock Salt Co., St. Louis, Mo., Globe-Democrat Bldg. Alfred Bevis, prest.; C. H. Longstreth, secy.; Jean F. Webb, v.-prest., treas. and mgr. Cap. stk. \$250,000. Salt wells, 50,000 tons; steam.
" ..... "	Midland Rock Salt & Mineral Co., Cleveland, Ohio. Dan P. Edls, prest.; H. W. Gebauer, secy.; Howard P. Edls, treas.; John P. Brisben, mgr. Midland, rock salt. Shafts, 100,000 tons. Geo. M. Anderson, supt.
Solomon City ..... Dickinson Ry. 26, 142, 776.	Solomon Solar Salt Co., Kansas City, Mo., 709 Walnut st. L. J. Talbott, prest.; John R. Ranson, secy., treas. and mgr. Cap. stk. \$30,000. Solomon, coarse, fine. Well, 2,000 tons; steam. J. Samuel Winn, supt.
Sterling ..... Rice Ry. 26.	Sterling Salt Co. T. H. Brown, prest.; Dr. P. P. Trueheart, secy.; J. C. Turner, treas. and mgr. Cap. stk. \$24,000. Coarse. Wells, 13,000 tons; steam.
Wellington ..... Sumner Ry. 26, 145.	D. A. Espy. Coarse. Well, 5,000 tons; water.

SEE ALSO SUPPLEMENTARY LIST

# KENTUCKY

## COAL—ANTHRACITE

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, COKE OVENS, AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Carlton ..... Webster Ry. 612.	Henry Rowland. Slope, 640 tons; horse.
Hindman ..... Knott P. O. Ry. Jackson 362.	R. S. Cornett (local). Sassafras, Ky. Cap. \$3,000. Open pit; hand.
Knottsville ..... Daviess Ry. Owensboro 467, 408	C. E. Coomes (local). Cap. \$500. Hobbs. Tunnel, 200 tons; hand.
" .....	Milton Roberts (local). Cap. \$500. Roberts. Open pit; hand.
Laurel Creek ..... Clay Ry. London 408.	J. L. Hornsby & Sons (local). J. L. Hornsby, prest. and supt.; H. C. Hornsby, secy. and treas.; Isaac Hornsby, mgr. Cap. \$25,000. Laurel Creek. Open pit, 3,000 tons; steam and water.
Lily ..... Laurel Ry. 408.	Lily Coal Co. C. Crook, prest.; S. W. Hodge, secy.; J. C. Wilder, treas.; Roscoe Lodge, mgr. Cap. stk. \$100,000. Lily. Tunnel; hand. Frank Elliott, supt.
Line Creek ..... Pulaski Ry. Somerset 612.	John M. Mayfield (local). Lacey's Fork. Tunnel; hand.
Pleasant ..... Martin Ry. Pench Orchard 537.	S. D. McCoy (local). Open pit, 3 tons; hand.

## COAL—BITUMINOUS

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, COKE OVENS, AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Aberdeen ..... Butler Ry. 2880.	Aberdeen Coal & Mining Co. Morgantown, Ky. E. P. Aspley, prest.; G. D. Render, secy. and treas.; James F. Phillips, mgr. and supt. Cap. stk. \$20,000. Aberdeen. Open pit, drift, 40,000 tons; horse, hand.
Etnaville ..... Ohio Ry. 360.	Justice Simpson. Etnaville. Drift; hand.
Alphorita ..... Floyd Ry. Prestonsburg 537.	S. P. Dings & M. C. Spencer (local). Tunnel; hand.
Alpine ..... Pulaski Ry. 166.	Richmond Coal Co., Chattanooga, Tenn., Keystone Block. C. B. Finley, prest.; T. L. Richmond, secy. and treas. Cap. stk. \$25,000. Richmond. Drift, 50,000 tons; compressed air. E. A. Foster, supt.
Altamont ..... Laurel Ry. 408.	Altamont Coal Co. C. Crooke, prest. and mgr.; F. E. Sampson, secy.; W. P. Crooke, treas. Cap. stk. \$200,000. Altamont. Tunnel, 60,477 tons; steam, horse. J. C. McK. Richardson, supt.
Anglin ..... Carter Ry. 242.	Little Fork Coal & Sand Co., Lexington, Ky. S. W. Lyttle, prest.; Miss Mamie Lyttle, secy. and treas.; M. L. Deall, mgr. Cap. stk. \$25,000. Little Fork. Tunnel; hand (developing).
Anville ..... Jackson Ry. East Bernstadt 468.	Vaughn Mining Co., Tyner, Ky. Cap. \$2,000. Vaughn. Open pit, 20,000 tons; hand. James St. John, supt.
Back Bone ..... Elliott Ry. Willard 242.	J. K. Pennington (local). Tunnel; hand.
" .....	M. M. Rice (local). Tunnel; hand.
Barnett's Creek ..... Johnson Ry. Paintsville 537.	William Trimble (local). Tunnel; hand.
Barnsley ..... Hopkins Ry. Earlington 468.	Coöperativ Mining & Manufacturing Co. John Doney, prest.; S. Platt, secy. and treas. Cap. stk. \$50,000. Coöperative. Drift, 32,000 tons; horse.
Baskett ..... Henderson Ry. 467.	Baskett Coal Co. C. L. Nall, prest.; R. S. Easton, secy. and treas.; William Jamieson, mgr. and supt. Cap. stk. \$25,000. Baskett. Shaft, 50,000 tons; steam.
Beattyville ..... Lee Ry. St. Helens 362.	John G. McGuire (local). Tunnel; hand.
Beila ..... Ohio Ry. Beaver Dam 429.	Mrs. Martha P. Ward (local). Open pit, 24 tons; hand.
Beech Grove ..... McLean Ry. Wrightsburg 2880.	W. H. Hardin (local). Tunnel, 100 tons; hand, horse.
" .....	John L. Hudson (local). Slope; horse.
Bee Spring ..... Edmonson Ry. Grayson Spgs. 439.	John F. Meredith (local). Tunnel; hand.
Boneville ..... Owley Ry. 362.	Richard Reynolds & A. D. Brandenburgh. Cap. \$15,000. Reynolds. Tunnel, 6,000 tons; hand.
Boon's Camp ..... Johnson Ry. Richardson 537.	Wm. A. Wells (local). Cap. \$3,000. Tunnel, 20 tons; hand.
Bowen ..... Powell Ry. 362.	W. B. Coughlin, Shade, Ky. Branch. Tunnel; hand. H. S. McKellobb, supt.
Back Creek ..... Owley Ry. St. Helens 362.	S. Isaacs & Nelson Price (local). Isaacs. Open pit, 80 tons.

## COAL—BITUMINOUS (CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF FUEL, USE, COAL BREAKERS, WASHERS, COKE OVENS, AND NAME OF MINE SUPERINTENDENT.
Binesville . . . . . Knott Ry. Jackson 362.	W. F. Amburgey & Peter Madden (local). Tunnel; hand.
Busseyville . . . . . Lawrence Ry. Louisa 537.	A. J. Thompson. Cap. \$1,500. Tunnel, 20 tons.
" . . . . . "	Webb & Bussey (local). Tunnel; hand.
Byron . . . . . Clay Ry. London 408.	Jerry Benge (local). Open pit, 70 tons; hand.
Caneysville . . . . . Grayson Ry. 499.	Samuel Preston (local). Tunnel, 200 tons; hand.
Centretown . . . . . Ohio Ry. Beaver Dam 499.	Amslah Carter (local). Tunnel; hand, 100 tons.
" . . . . . "	L. C. Morton (local). Tunnel, 240 tons; hand.
" . . . . . "	J. P. Tichenor (local). Open pit, 175 tons; hand.
Central City . . . . . Muhlenberg Ry. 491, 549.	Central Coal & Iron Co., Louisville, Ky., 410 W. Main st. R. du Pont, pres't., Banner Coleman, secy. and treas.; Thomas J. Tapp, v.-pres't. Cap. stk. \$400,000. Central. Shaft, 125,000 tons; steam. James Stephens, supt.
Chavies . . . . . Perry Ry. 302.	Hikman & Co., D. L. Hikman, pres't.; O. J. Chandler, secy.; R. Sighmore, treas.; J. Hikman, mgr. Cap. stk. \$6,000. Miller's Branch. Open pit, 6,000 tons. E. Duff, supt.
" . . . . . "	J. L. Moon & Co., J. L. Moon, pres't.; P. F. Johnson, secy.; J. A. Duff, treas.; G. W. Martin, mgr. Cap. stk. \$50,000. Chavies. Open pit, 2,000 tons; hand.
Clay . . . . . Webster Ry. 302.	A. E. Cullen. Cap. \$12,000. Wallace. Drift, slope, 800 tons; mule.
" . . . . . "	W. A. Galbraith (local). Cap. \$1,000. Open pit, drift, 800 tons; hand.
" . . . . . "	James M. Hasbitt. Cap. \$1,500. Open pit, 800 tons; hand.
Cloverport . . . . . Breckenridge Ry. 76, 407.	Sloan & Clark. New Hope. Tunnel, 5,000 tons; hand.
Cora . . . . . Carter Ry. Lawrenceburg 408.	F. M. Kiser (local). McGlone, Ky. Cora. Tunnel, 1,000 tons; hand. Wm. Kiser, supt.
Corydon . . . . . Henderson Ry. 536.	Corydon Coal & Mining Co. H. A. Powell, mgr. Corydon. Shaft, 70 tons; hand. B. M. Powell, supt.
Crockettsville . . . . . Breathitt Ry. Athall 362.	James G. Deaton. Daniel Thompson, mgr. Cap. \$7,000. Crockettsville. Open pit, 500 tons; hand. James G. Deaton, supt.
Cuteh . . . . . Floyd Ry. Preston 499.	Noah Stone, Dotson, Ky. Fitz Patrick. Open pit; horse, hand.
Danleyton . . . . . Greenup Ry. 192.	J. W. Dingess (local). Open tunnel, hand.
Dawson . . . . . Hopkins Ry. 491.	J. S. Meadors (local). Tunnel, horse.
DeKoven . . . . . Union Ry. 531, 536.	Ohio Valley Coal & Mining Co. S. S. Brown, pres't.; S. P. Sturgis, secy. and mgr.; N. M. Jones, treas. Cap. stk. \$200,000. De Koven. Slopes, 50,000 tons; steam, 10 coke ovens. John Whitehead, supt.
Denton . . . . . Carter Ry. Mt. Savage 151, 491.	Strait Creek Coal Co., Mt. Sterling, Ky. M. M. Cassidy, pres't. Wm. Mitchell, treas.; Kent Pritchard, mgr. and supt. Cap. stk. \$100,000. Strait Creek. Tunnel, 35,000 tons; steam and horse.
Drakesboro . . . . . Muhlenberg Ry. 408.	Green River Coal & Mining Co. James T. Pierce, pres't. and mgr.; W. L. Burnam, secy.; Warren Deposit Bank, treas. Cap. stk. \$150,000. Pierce. Shaft, slope, 35,615 tons; steam. John Wright, supt.
" . . . . . "	James T. Pierce (lessee). Cap. \$25,000. Shaft, slope; steam. John Wright, supt.
Earle's . . . . . Muhlenberg Ry. Greenville 499.	Edward Bennett (local). Strawberry. Tunnel, 80 tons; hand.
Earlington . . . . . Hopkins Ry. 408.	Hecla Coal & Mining Co., Nashville, Tenn. J. F. Fourd, pres't.; W. F. Anderson, secy. and treas.; Ben. R. Robinson, mgr. Cap. stk. \$200,000. Hecla. Shaft, 50,000 tons; steam, electricity.
" . . . . . "	St. Bernard Coal Co. E. G. Sobree, pres't.; John B. Atkinson, v.-pres't. and treas.; Geo. C. Atkinson, secy. Cap. stk. \$1,000,000. St. Bernard. Tunnels, 76,176 tons; steam; breaker, washer, 104 coke ovens, capacity 35,000 tons.
East Bernstadt . . . . . Laurel Ry. 408.	Litton Coal Co. C. Litton, pres't.; W. J. Litton, secy., treas. and mgr. Cap. \$5,000. Drift, 8,500 tons; horse.
" . . . . . "	Nickel Plate Coal Co. J. M. Thompson, mgr. Cap. stk. \$12,000. Nickel Plate. Slope, 30,000 tons; steam.
" . . . . . "	Star Coal Co. J. McNeill, pres't.; R. J. Morris, secy. and treas. Star. 15,000 tons; horse. George Harrison, mgr. and supt.
East Point . . . . . Johnson Ry. Richardson 537.	Thomas Blackburn (local). Tunnel; hand.
" . . . . . "	W. J. Conley (local). Fletcher, bituminous, canal. Tunnel; hand.
Elk Fork . . . . . Morgan Ry. Morehead 499.	E. B. Perry, West Liberty, Ky. (local). Cap. \$1,500. Rush Branch. Tunnel, 500 tons. Frank Fannin, supt.
Ezel . . . . . Morgan Ry. Rothwell 363.	Frank Sample (local). Tunnel; hand.
Falou . . . . . Hancock (P.O. name New Chapel) Ry. 467.	Hawesville Coal Co., Hawesville, Ky. W. S. Morrison, pres't.; I. C. Adair, secy. and treas.; John S. Adair, mgr. Cap. stk. \$25,000. Slope, horse developing.
Flat Gap . . . . . Johnson Ry. Webbville.	Crislip & Co. Cap. \$800. Crislip. 600 tons; hand. Wm. Phillips, supt.

## COAL—BITUMINOUS—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.			NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, COKE OVENS, AND NAME OF MINE SUPERINTENDENT.	
TOWN	AND	COUNTY.		
Fordsville		Ohio	Gains & Read. Cap. \$4,000. Open pit, 18,000 tons; horse. W. S. Gains, supt.	
"	Ry. 403, 54.	"	"	G. C. Gentry (local). Tunnel; horse.
"	"	"	"	John Johnson. Open pit; horse.
Frenchburg	Menifee (P. O. Rothwell) Ry. Mt. Sterling 363, 489.		J. J. & W. T. Dennis (local). Indian Creek. Tunnel; hand.	
Gay's Creek	Perry Ry. Richmond 300.		Peter Gross & Sons. Cap. \$10,000. Open pit; hand.	
Grassy Creek	Morgan Ry. Morehead 499.		Wiley Mullens (local). Tunnel; hand.	
Gray	Knox		North Jellico Mining Co. C. S. Neile, mgr. Cap. stk. \$75,000. North Jellico. Tunnel, 500 tons; horse, steam; breaker.	
Grayson	Carter		Hord Bros. Tunnel, 150 tons; hand.	
"	Ry. 242, 132.	"	"	James Osenton. Cap. \$50,000. Osenton. Tunnel; horse, hand. Peter Prater, mgr. and supt.
"	"	"	"	Frank Powers. Tunnel; hand.
Greenville	Muhlenberg		N. M. Mann (local). Tunnel, 300 tons; horse.	
"	Ry. 493.	"	"	Joseph Tyson. Cap. \$1,000. Gordon. Tunnel; hand.
Greenwood	Pulaski		Greenwood Railway & Coal Co., Cincinnati, Ohio, 49 W. Third st. Thomas D. Lovett, chairman; Robert McF. Smith, secy.; Louis Krohn, treas.; S. A. Adams, mgr. Cap. stk. \$50,000. Greenwood, Beaver. Tunnel.	
Groverdale	Magoffin Ry. Rothwell 363.		J. W. Beck & Co. (local). Cap. \$10,000. Groverdale. Tunnel, 100 tons; hand; breaker. G. Williams, supt.	
Gypsy	Magoffin Ry. Prestonburg 549.		E. H. Whitaker and others. Cap. stk. \$30,000. Open pit; hand. Calvin Howard, supt.	
Habit	Daviess Ry. Owensboro 408, 407, 2987.		P. E. Howard (local). Cap. \$1,500. Howard. Tunnel, 4,500 tons; horse.	
Hanson	Hopkins		Amos Hook. Jones. Slope, 8,000 tons; hand.	
"	Ry. 406.	"	"	
Hawesville	Hancock		Hawesville Coal Co. W. S. Morrison, pres.; Ike C. Adair, secy. and treas.; John S. Adair, mgr. Cap. stk. \$25,000. Falcon. Slope; horse. James Gillians, supt.	
"	"	"	"	P. Kelly (local). Slope; horse.
Hazard	Perry		John C. Spencer, Chavies, Ky. Grapevine. Shaft, tunnel.	
"	Ry. Jackson 362.	"	"	
Hazel Green	Wolfe		S. W. Cecil (local). Cap. \$5,000. Tunnel, 500 tons; hand.	
"	Ry. Torrent 362.	"	"	Ely & Son (local). Open pit, 45 tons; hand. James F. Ely, supt.
"	"	"	"	Fletcher McGuire (local). Tunnel, 375 tons; hand.
"	"	"	"	Jeremiah Proffitt (local). Tunnel, 100 tons; hand.
"	"	"	"	G. B. Swango (local). Tunnel, 100 tons; hand.
Hendricks	Magoffin Ry. Paintsville 132.		H. P. Arnett. Cap. \$10,000. Hendricks. Tunnel, 6,000 tons; water.	
Hindman	Knott Ry. Jackson 362.		Samuel Madden (local). Open; hand.	
Horse Branch	Ohio		Robert A. Miller. Horse Branch. Tunnel; hand.	
"	Ry. 493.	"	"	
Huntsville	Butler Ry. Rochester 2387.		D. Hunt. Cap. \$10,000. Muddy River. Slope (developing).	
Hyden	Leslie		John Asher (local). Cap. \$2,000. Asher. Open pit, 2,000 tons; hand.	
"	Ry. 746.	"	"	
Inez	Martin Ry. Peach Orchard 537.		G. W. Comer (local). Kirk. Open pit, 500 tons; hand.	
"	"	"	"	John Dugan, Eden, Ky. (local). Kingfisher. Tunnel, 3,200 tons; hand. M. C. Dugan, supt.
Island	MeLean		Sid Gardner (local). Drake. Open pit, 8,000 tons; hand.	
"	Ry. 408.	"	"	Alva Karnes (local). Drift, open pit; horse. Walter Davis, supt.
"	"	"	"	George Wood (local). Tunnel, 300 tons; hand.
"	"	"	"	James Wood (local). Open pit, 120 tons; hand.
Jackson	Breathitt Ry. El Katava 362.		Kentucky Union Land Co., Clay City, Ky. E. T. Halsey, receiver; Charles Hendrie, mgr. and supt. Cap. stk. \$15,000. El Katava. Tunnel, 2,000 tons; hand.	
Jellico	Whitley P. O. and Ry. Jellico, Tenn., 240, 408.		East Tennessee Coal Co. Knoxville, Tenn., 50 Union st. E. J. Davis, pres. and gen. mgr.; T. C. Richmond, secy. and treas. Cap. stk. \$150,000. Dowlais. Tunnel, 84,767 tons; steam. Philip Francis, supt.	
"	"	"	"	Jellico & Bird-Eye Coal Co., Louisville, Ky., 434 W. Main st. E. T. Halsey, pres.; Wm. L. Halsey, secy.; Columbia Finance & Trust Co., treas. Cap. stk. \$650,000. Tunnel; steam (developing).

## COAL—BITUMINOUS—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, COKE OVENS, AND NAME OF MINE SUPERINTENDENT.	
TOWN	COUNTY.		
Johnsburg	Harlan	John L. Jones (local)	Cap. \$3,000. Hand, 11 tons.
Ry. Wasisto 408.			
Kenesee	Whitley	Main Jellico Mount Coal Co. Attila Cox, pres.; H. V. Sanders, secy. and treas.; Hywel Davies, mgr.	Cap. stk. \$300,000. Tunnel, 85,000 tons.
Ry. Jellico, Tenn., 408.			
Kilgore	Carter	Norton Iron Works, Ashland, Ky. C. H. Green, pres. and mgr.; E. E. Seaton, secy.; John Russell, treas.	Cap. stk. \$1,000,000. Star Furnace. Tunnel, 60,000 tons; horse; breaker. James W. Hughes, supt.
Ry. 499.			
Kingston	Madison	Mrs. K. J. Moran (local)	Bighill. Open pit, 320 tons; hand.
Ry. Harris 360.			
Laso	Whitley	George W. Hamilton (local)	Cap. \$1,000. Tunnel, slope, open pit, 20 tons; hand
Ry. Mahan 408.			
Laynesville	Floyd	J. D. Bush & Co. J. D. Bush, pres.; Henry Hatcher, secy.; Archibald Gibson, treas.	Cap. stk. \$10,000. Tunnel, 200 tons; hand.
Lewisport	Hancock	Wm. T. King, lessee (local)	Pate. Slope, 700 tons; horse.
Ry. 407, 553.			
Lily	Laurel	Lily Mining & Manufacturing Co. J. Irvin Blanton, pres.; W. Addams, secy.; Hywel Davies, treas. and mgr.	Cap. stk. \$100,000. Lily. Tunnel, 50,000 tons; steam, horse; washer.
Ry. 408.			
Laymore	McLean	Wm. Herron	Cap. \$10,000. Hicks. Open pit, 200 tons; horse.
Ry. 549.			
McClone	Carter	Wm. Kiser & Co. Kiser	Open pit, hand.
Ry. 499.			
McHenry	Ohio	McHenry Coal Co. W. Y. Duncan, pres. and mgr.; C. W. Taylor, secy.; G. T. McHenry, treas.	Cap. stk. \$145,000. McHenry. Slope, 12,000 tons; hand. Robert Duncan, supt.
Ry. 499.			
"	"	Williams Coal Co. J. S. Williams, pres.; K. V. Williams, secy.; J. W. Cooper, treas.; Samuel James, mgr. and supt.	Cap. stk. \$40,000. Williams. Slope, 18,000 tons; steam.
"	"		
McKee	Jackson	Joseph Harrison and others (local)	Cap. \$5,000. Bill Branch. 2,000 tons; hand.
Ry. Harris 360.			
Madisonville	Hopkins	John Jackson (local)	Island. Slope, 300 tons; horse.
Ry. 408.			
"	"	Reinecke Coal Co. Conrad Reinecke, pres.; Inkerman Bailey, secy., treas. and mgr.	Cap. stk. \$100,000. Reinecke. Shaft, 175,000 tons; steam, air. Louis Fezer, supt.
"	"		
Manche-ter	Clay	T. T. Garrard (local)	Open pit, 200 tons; hand.
Ry. London 408.			
Mercer Sta	Muhlenberg	Wm. H. Dovey. Dovey's Kentucky.	Shaft, 25,000 tons; steam 7 coke ovens. Wm. Wade, supt.
Ry. 499.			
Monticello	Wayne	T. J. Alexander (local)	Smoking Ridge. Tunnel, 400 tons; hand.
Ry. Mill Springs 201.			
Morganfield	Union	Watkins & Dunnagan	Cap. \$10,000. Watkins, 2,000 tons; steam.
Ry. 536.			
Morgantown	Butler	Aberdeen Coal & Mining Co. E. P. Aspley, pres.; J. D. Bender, secy. and treas.; James F. Phillips, mgr. and supt.	Cap. stk. \$25,000. Aberdeen. Tunnel, 12,871 tons.
Ry. 533, 2880.			
"	"	J. M. Forgy (local)	Hope. Open pit, hand.
"	"	O. F. Wade (local)	Tunnel, hand.
"	"		
Morton's Gap	Hopkins	St. Bernard Coal Co. Earlington, Ky. E. G. Seebree, pres.; John R. Atkinson, v. pres. and treas.; Geo. C. Atkinson, secy.	Cap. stk. \$1,000,000. Diamond. Tunnel, 110,000 tons; steam; breaker, washer.
Ry. 408.			
Mountain Ash	Whitley	Jellico Coal Mining Co., 56 Union st. E. J. Davis, pres.; F. C. Richmond, secy.; Charles Duclow, treas.	Cap. stk. \$100,000. Jellico. Slope, horse developing.
Ry. 2.			
Mt. Vernon	Rock Castle	E. W. & E. D. Hansel (local)	Tunnel, 500 tons; hand.
Ry. 408.			
Mud River	Muhlenberg	Mud River Coal, Coke & Iron Co. Isaac Litten, pres.; John C. Gordon, v. pres.; W. G. S. Anderson, secy., treas. and supt.	Cap. stk. \$200,000. Mud River. Slope, 100,000 tons; steam.
Ry. 408.			
Music	Carter	Lexington & Carter County Mining Co., Lexington, Ky., 10 Short st. R. H. Courtney, pres. and treas.; J. T. Vance, secy.; F. S. Cully, mgr. and supt.	Cap. stk. \$300,000. Music. Tunnel, 46,520 tons; steam, horse, hand.
Ry. 132.			
Nobo	Hopkins	T. P. Barnes (local)	Cap. \$1,000. Drift, 200 tons; horse.
Ry. 408.			
"	"	W. C. Custer	Cap. \$100. Brinkley. Slope, 500 tons; hand.
"	"		
New Chapel	Hancock	T. D. Lewis (local)	Tunnel, 30 tons; hand.
Ry. Falcon Station 407.			
Olive Hill	Carter	Jarvis Branch Coal Mining Co. John Jarvis, pres. and supt.; D. Jarvis, secy.; Robert Jarvis, treas.; James S. Jarvis, mgr.	Cap. \$4,000. Jarvis Branch. Tunnel, 12,000 tons; hand.
Ry. 499.			
Owensboro	Daviess	R. S. Patrick	Cap. \$4,000. Shaft, 2,400 tons; horse.
Ry. 407, 408, 549.			
Paintsville	Johnson	E. W. Fairchild	Cap. \$25,000. Lick Spring. Tunnel, hand. Daniel Hitchcock, supt.
Ry. 537.			
"	"	G. W. George (local)	Cap. \$500. Tunnel, hand.
"	"	E. F. & H. S. Howes	Cap. \$10,000. Howes. Tunnel, 4,000 tons; hand. Wm. Castle, supt.
"	"		
Paradise	Muhlenberg	Gen. D. C. Buell	Cap. \$60,000. Airdrie. Tunnel, shaft, 30,000 tons; horse. Thomas Hull, supt.
Ry. 333.			

## COAL—BITUMINOUS (CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAME OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, CORE OVENS, AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Patesville..... Hancock Ry. Orchardport 76, 407	Samuel Flowers (local). Tunnel; hand.
Peach Orchard, Lawrence Ry. 533, 537.	Great Western Mining & Manufacturing Co., Ashland, Ky. B. D. Harris, pres.; John Carlisle, secy. and treas.; W. S. Howell, gen. mgr. Cap. stk. \$300,000. Elizabeth, Annie. Slope, 125,000 tons; steam, compressed air. Conrad Frank, supt.
Pikeville..... Pike Ry. 121.	Fulton Boozé. Ratliff Creek. Tunnel; hand. Milton McGlofan, supt.
Pine Hill..... Rock Castle Ry. 408.	Mitchell Coal & Mining Co. William Mitchell, pres.; W. H. Strossman, secy. and treas.; W. Welsh, gen. mgr. and supt. Cap. stk. \$50,000. Mitchell. Tunnel.
Pineville..... Bell Ry. 408.	Pine Mountain Iron Co. Cap. stk. \$100,000. Strait Creek, West Pineville. Tunnel, 1,500 tons; steam; breaker, 200 coke ovens.
"....."	Southern Land Improvement Co. J. C. Howard, pres.; Jesse B. Butin, secy.; J. G. Taylor, treas.; J. D. Blake, mgr. Cap. stk. \$5,000,000. Truxton. Open pit, 75,000 tons; horse, electricity; 100 coke ovens, capacity 45,000 tons. D. K. Koger, supt.
Pittsburg..... Laurel Ry. 408.	Laurel Coal Co. Geo. Givens, pres. and treas.; J. W. Bastin, secy. and supt. Cap. stk. \$80,000. Laurel Slope. 400,000 tons; horse.
"....."	Pitman Coal Co. W. A. Pugh, pres.; J. M. Bailey, secy.; S. V. Rowland, treas. and mgr. Cap. stk. \$100,000. Pitman. Slope. Wm. M. Neill, supt.
"....."	W. A. Pugh. Cap. \$6,000. Etna. Open pit, 12,000 tons; horse. I. H. Collins, supt.
"....."	Union Coal Co. Thompson Jeffrey, pres., mgr. and supt.; John Jeffrey, secy. and treas. Cap. stk. \$5,000. Union. Tunnel, 22,000 tons; horse.
"....."	Victoria Coal Co. W. M. Baxter, pres.; J. E. Baxter, secy. and mgr.; J. J. Hughes, treas. Cap. \$12,000. Victoria. Slope, 32,000 tons; horse. J. E. Carnel, supt.
Pleasant View..... Whitley Ry. 408.	Central Jellieo Coal Co. J. P. Mahan, pres.; J. W. Siler, secy. and treas.; John Phillips, mgr. and supt. Cap. stk. \$24,000. Central Jellieo. Open pit, 100,000 tons; horse.
Pro-stonsburg..... Floyd Ry. Richardson 537.	Mary L. Hatcher (local). Rock Port. Tunnel, 60 tons; hand.
"....."	David Sammons (local). Open pit; hand.
"....."	J. H. Spradlin & Co. (local). Cap. \$25,000. Big Sandy. Hand.
Providence..... Webster Ry. 408.	Providence Coal Co. E. B. Hayden, pres.; W. L. Barnes, secy., treas., mgr. and supt. Cap. stk. \$100,000. Providence. Slope, shaft, 32,000 tons; steam.
Rockhouse..... Letcher Ry. Washoto 408.	James M. Collins & Co. James M. Collins, pres.; W. H. Nickels, secy., treas. and mgr. Cap. \$20,000. (Developing.)
Rothwell..... Menifee Ry. 363.	W. A. Allen (local). Hathaway. Tunnel, 400 tons; hand. Louis Beer, supt.
Rumsey..... McLean Ry. 298a.	J. E. Arnold (local). Slope, drift; hand.
Rush..... Boyd Ry. 24.	Ashland Coal & Iron Railway Co., Ashland, Ky. Douglas Putnam jr., pres. and gen. mgr.; Robert Peebles, secy. and treas.; E. C. Means, supt. Cap. stk. \$1,500,000. Rush, Kilgore. Tunnel, 200,000 tons; horse. Jacob Selngub, supt.
Sacramento..... McLain Ry. South Carrollton 408.	Andrew Bros., lessees (local). Sacramento. Shaft; steam.
St. Charles..... Hopkins Ry. 409.	St. Bernard Coal Co., Earlinton, Ky. E. G. Schroe, pres.; John B. Atkinson, v.-pres. and treas.; Geo. C. Atkinson, secy. Cap. stk. \$1,000,000. St. Charles. Tunnel, 110,000 tons; steam; breaker, washer.
Salversville..... Magoffin Ry. Richardson 537.	Grats Allen. Cap. \$10,000. Open pit, 150 tons; hand; 12 coke ovens, 1,000 tons.
"....."	Isaac Bock and others (local). Cap. \$10,000. Tunnel, 6,000 tons; hand; breaker.
"....."	Add. Marshall. Tunnel, water.
"....."	Jasper Owens. Cap. \$5,000. Oakley Creek. Open pit; hand.
Sandy Hook..... Elliott Ry. Morehead 499.	John Watson (local). Open, 30 tons; hand. Peter Smith, supt.
Schree..... Webster Ry. 408.	Henry Rowland (local). Tunnel, 500 tons; horse.
See..... Powell Ry. Bowen 362.	Moses Morton (local). Gladly. Open pit; hand.
Semiway..... McLean Ry. Rumsey 298a.	Russel Bates (local). Cap. \$200. Bates. Slope; horse.
"....."	Jerry Vaneleve (local). Cap. \$300. Boiler. Slope, 200 tons; horse.
Sharon Grove..... Todd Ry. Elkton 408.	R. W. Driskill (local). Cap. \$200. Tunnel, 500 tons; hand.
Shrevesbury..... Grayson Ry. Millwood 499.	M. Willis (local). Open pit, 400 tons; hand.
Sip..... Johnson Ry. Richardson 537.	John Henry Caudill (local). Caudill. Tunnels, 100 tons; hand.
Skilesville..... Muhlenburg Ry. 298a.	J. W. Castree (local). Cap. \$50. Open pit, 800 tons; horse.
Somersot..... Pulaski Ry. 407.	C. C. Whiteaker, Line Creek, Ky. Whiteaker. Tunnel; horse; breaker, washer, 11 coke ovens. George Givens, supt.



## COAL—BITUMINOUS—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.			NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, COKE OVENS, AND NAME OF MINE SUPERINTENDENT.
TOWN	AND	COUNTY.	
S. Carrollton	Muhlenburg	Ry. 408.	George W. Doss (local). Lewisburg. Open pit, 4,000 tons; hand.
Spottsville	Henderson	Ry. 407.	T. Shinn & Bros. T. Shinn, pres. and mgr.; R. H. Shinn, secy. and treas. Cap. stk. \$40,000. Green River. Shaft, 64,000 tons; steam. Evan Reese, supt.
Spring Grove	Union	Ry. Morgantield 499.	J. W. Hall (local). Slope, 750 tons; hand.
Stephens	Elliott	Ry. Willard 242.	Jesse Lyon (local). Harican. Tunnel; horse.
Staubenville	Wayne	Ry. 201.	Staubenville Coal Co. M. H. Bohon, pres.; Mrs. W. P. Jones, secy.; J. H. Duncan, treas. Cap. stk. \$10,000. Steubenville. Open pit; hand. John E. Bohon, mgr. and supt.
Sturgis	Union	Ry. 499, 533, 536.	Barnaby & Son. Slope, 700 tons; hand. C. Barnaby Jr., supt.
"	"	"	Cumberland Coal Co., Nashville, Tenn. W. W. Smith, pres.; Isaac Reese, secy. and treas. Cap. stk. \$150,000. Wardlaw. Slope, 150,000 tons; steam. J. C. Wardlaw, supt.
"	"	"	Sturgis Coal & Coke Co., Louisville, Ky., cor. Fourth and Main sts. F. C. Mills, pres.; Geo. H. McCartney, secy. and mgr.; Moses Schwartz, treas. Cap. stk. \$800,000. Sturgis. Shaft, 150,000 tons; steam. Herbert H. Richards, supt.
Treadway	Clay	Ry. London 408.	Kelth & Co. Cap. \$7,000. High Nob. Tunnel, 2,000 tons; electricity; 500 coke ovens. J. B. Howard, supt.
Vest	Knott	Ry. Jackson 302.	James M. Grisby (local). Open pit, hand.
Walnut Grove	Pulaski	Ry. Eubank 612.	Budie Caskey. Cap. \$25,000. Lykins. Open pit, 200 tons; hand.
Ward City	Johnson	Ry. Richardson 557.	Preston & Price (local). Tunnel, 500 tons; hand. Henry Price, supt.
Warfield	Martin	Ry. Peach Orchard 537.	Tug River Salt & Coal Co. (local). Warfield. Open pit, horse. John Meade, supt.
Webbville	Lawrence	Ry. 242.	J. C. Webb (local). Tunnel; hand.
West Liberty	Morgan	Ry. Moorehead 499.	John L. Henry (local). Open pit; hand.
West Louisville	Dayless	Ry. Owensboro 407, 408.	T. L. Harl. Cap. \$150. Buck Washington. Shaft, 320 tons; horse.
"	"	"	J. P. O'Bryan (local). Cap. \$1,000. Shaft, 800 tons; horse. J. H. Stallings, supt.
"	"	"	Wood Bros. & Elder. Cap. \$6,000. Shaft, 2,000 tons; steam.
Weston	Crittenden	Ry. 534.	J. H. Tate (local). Cap. \$1,000. Open pit, 500 tons; steam.
Whalen	Dayless	Ry. Shorts 549.	H. C. Brown (local). Slope, hand.
Whitesburg	Letcher	Ry. Morton, Va., 408, 523.	H. B. Branson (local). Cap. \$2,500. Open pit, 300 tons; hand.
Willard	Carter	Ry. 242.	Bent's Coal Works (local). Tunnel, hand.
"	"	"	Eastern Kentucky Railway Co., Greenup, Ky. H. W. Bates, gen. mgr. Lost Creek. Tunnel, 24,000 tons; George Gibbs, supt.
"	"	"	Jacob Horton (local). Tunnel; horse.
Williamsburg	Whitley	Ry. 408.	G. W. Sproule (local). Open pit, 500 tons; hand.
"	"	"	J. Wilder (local). Cap. \$1,000. Slope, open pit.
Woodbine	Whitley	Ry. 408.	S. B. Hart (local). Open pit; hand.
Yelvington	Dayless	Ry. 407.	Henry Creason. Cap. \$300. Slope, 4,800 tons; hand.

## COAL—CANDEL

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.			NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, COKE OVENS, AND NAME OF MINE SUPERINTENDENT.
TOWN	AND	COUNTY.	
Back Bone	Elliott	Ry. Willard 242.	R. B. Leedy (local). Tunnel; hand.
Booneville	Owsley	Ry. 362.	H. B. Cawood (local). Tunnel, 300 tons; hand.
"	"	"	Daniel Reynolds & Simeon Reynolds (local). Cap. \$1,000. Reynolds. Tunnel, 100 tons; hand.
"	"	"	G. B. Reynolds. Open pit, 5,000 tons; hand.

## COAL—CANNEL—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, COKE OVENS, AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Caneville.....Grayson Ky. 499.	D. A. Williams. Open pit; hand.
Cloverport.....Breckinridge Ky. 76, 467.	Breckinridge Co., Ltd., Louisville, Ky., Room 62 Kentucky National Bank Bldg. Wm. Hopper, mgr. Cap. stk. \$2,500,000. Breckenridge. Tunnel, 16,000 tons; horse. James Heron, supt.
Conkling.....Owsley Ky. St. Helens 362.	J. P. Jett and others. J. P. Jett, prest. and supt.; J. A. Wilson, secy.; Wm. Blake, treas.; L. Day, mgr. Cap. stk. \$40,000; ind. cap. \$2,000. Elwood Creek. Open; hand.
Dawson.....Hopkins Ky. 499.	J. P. Alexander (local). Tunnel; hand.
East Point.....Johnson Ky. Richardson 537.	W. L. Smith, Paintsville, Ky. Cap. \$50,000. Smith. Tunnel, 100,000 tons; hand. D. J. Smith, supt.
Elkalawa.....Breathitt Ky. 362.	Charles Henry (local). Open pit; hand.
Ezel.....Morgan Ky. Rothwell 363.	Wm. M. Hensley (local). Open pit; hand.
Flat Rock.....Pulaski Ky. 612.	Barren Fork Mining & Coal Co., Lexington, Ky., 47 N. Mill st. J. T. Shade, prest.; W. Bright, secy. and treas. Cap. stk. \$130,000. Barren Fork. Drift, 74,900 tons; air, hand. J. H. Holland, supt.
Hager.....Magoffin Ky. Torrent 362.	Reed & Stacey (local). Cap. \$8,000. Hand. Lewis Reed, supt.
Helton.....Leslie Ky. Pineville 408.	Peter Wilson (local). Cap. \$1,000. Beech Group. Open pit; hand; breaker.
McDowell.....Floyd Ky. Prestonsburg 537.	Wm. Henson and others (local). Cap. \$5,000. Open pit; hand. J. B. Treasure, supt.
Manchester.....Clay Ky. London 408.	Thomas J. Brown (local). Horse Creek. Tunnel; hand.
Mt. Carbon.....Johnson (P. O. Myrtle) Ky. Richardson 537.	Wm. Richardson & Co., Paintsville, Ky. (local). White House, Sandy River. Tunnel; horse. E. S. Thomas, supt.
"....."	Sandy River Cannel Coal Co., Chillicothe, Ohio. F. A. Stacey, prest.; G. O. Richardson, secy. and mgr.; J. P. Dieter, treas. Cap. stk. \$20,000. Sandy River. Tunnel, 7,667 tons; hand. G. R. Bickford, supt.
Mt. Savage.....Carter Ky. 132.	Lexington & Carter County Mining Co., Lexington, Ky., 40 Short st. R. H. Courtney, prest. and treas.; J. T. Vance, secy.; F. S. Cully, mgr. and supt. Cap. stk. \$300,000. Timson. Tunnel, 6,500 tons; steam, horse, hand.
Myrtle.....Johnson Ky. 132, 537.	Big Sandy Cannel Co. — Deater, prest.; G. C. Richardson, secy. — Stacey, treas. Cap. stk. \$50,000. Big Sandy. Open pit; horse. George Bigbart, mgr. and supt.
"....."	White House Cannel Coal Co., Ashland, Ky. J. H. Northup, prest.; George C. Galan, secy. Cap. stk. \$30,000. White House. Tunnel, 300,000 tons; hand. G. H. Thomas, supt.
Paintsville.....Johnson Ky. 537, 746.	X. T. Brunett (local). Cap. \$3,000. Tunnel, slope, 75 tons; hand.
"....."	John C. Cellayo Cannel Coal Co. Henry Ort, prest.; John C. Cellayo, secy. E. H. Martin, treas. Cap. stk. \$20,000. Paintsville. Tunnel, 1,000 tons.
"....."	James Dills (local). Cap. \$3,000. Muddy Branch. Tunnel, 600 tons; hand.
"....."	J. C. C. Mayo & Co. Cap. \$10,000. Fletcher. Open pit, 500 tons; hand. A. S. Leslie, supt.
"....."	D. Peiphrey & Son. Barnett's Creek. Tunnel; hand; breaker. J. V. Adams, supt.
Pikeville.....Pike Ky. 121.	Monarch Coal & Coke Co., Frankfort, Ky. T. W. Hardin, prest.; W. A. Wilson, secy.; D. S. McIntyre, treas.; Wm. T. Love, gen. mgr. Cap. stk. \$60,000. Monarch. Shaft.
Prestonsburg.....Floyd Ky. Richardson 537.	T. Jefferson Patton (local). Cap. \$300. Prestonsburg. Open, 300 tons; hand, horse.
Rockhouse.....Letcher Ky. Waslo 408.	Peter Adkins (local). Cap. \$2,000. Tunnel (developing).
Salyersville.....Magoffin Ky. Richardson 537.	Adam Allen, Calvin. Open pit; hand.
"....."	Buck & Co. Cap. \$15,000. Open pit, 50,000 tons; steam; washer, 12 coke ovens. R. W. Row, supt.
"....."	Samuel Carpenter. Tunnel, 2,300 tons; hand.
"....."	Benjamin Hammond. Coal Branch. Tunnel, 600 tons.
Sandy Hook.....Elliott Ky. Morehead 499.	M. P. Skaggs (local). Buck Fork. Tunnel; hand.
Victoria.....Hancock Ky. Cloverport 76, 467.	Breckinridge Coal Co., Ltd., Cloverport, Ky. William Hooper, mgr.; O. Gregory, secy. Cap. stk. \$75,000. Breckenridge. Open pit, 24,000 tons; horse, steam. James DeLeon, supt.
West Liberty.....Morgan Ky. Morehead, 499.	J. H. Cole (local). Rush Branch, Calvin. Tunnel; hand.
"....."	E. B. Perry (local). Elk Fork. Open pit, 300 tons; hand.
Whitesburg.....Webster (P. O. Beech Grove.)	Mary Hardin (local). Shaft; hand.

## FIRE CLAY

LOCATION OF MINE OR BANE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE OR BANE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, ETC., AND NAME OF SUPERINTENDENT.
TOWN AND COUNTY.	
Glenn (Not a P. O. in Lewis Ry. 151.	Kentucky Fire Brick Co., Portsmouth, Ohio. George Davis, pres.; L. C. Turley, treas. Cap. stk. pd. up \$100,000. Tunnel. Open pit, 3,000 tons; hand.

## IRON

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, BLAST FURNACES, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Grand Rivers, Livingston Ry. 132, 201, 400.	Grand Rivers Mining Co., Boston, Mass., 64 Federal st. Aristas Blood, pres.; Fred Joy, secy.; A. H. Brown, treas.; Thomas W. Lawson, genl. mgt. Cap. stk. \$1,500,000. Brown iron ore. Open cut and pit; hand, horse; 2 furnaces. Joseph M. Scarle, supt.

## SALT

LOCATION OF MINE OR WELL, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF PRODUCT, KIND OF MINE OR WELL, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Brandenburg, Meade Ry. 146.	Meade County salt Works, Abnzo Moremen, propr. Flu. 7,500 brls; steam.

## STONE, MARBLE, GRANITE AND ONYX

LOCATION OF MINE OR QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE OR QUARRY, KIND OF STONE, KIND OF MINE OR QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STONE OR MARBLE MILLS, LIMERILLS AND CAPACITY, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Big Chilly, Grayson Ry. 499.	Ohio Bituminous Rock Co., Cincinnati, O., 99 W. Fourth st. H. D. Emerson, pres.; C. J. McCrea, secy. Cap. stk. \$400,000. Bituminous rock. Open pit, steam.
Garfield, Breckenridge Ry. 107.	Breckenridge Asphalt Co., Louisville, Ky., Room 16 Norton Bldg. Marshall Morris, pres. and mgr.; B. M. Rivers, secy. and treas. Cap. stk. \$100,000. Bituminous sandstone. Open pit, 10,000 tons.
Hadley, Warren Ry. 286a.	F. R. Caden & Co., Evansville, Ind., 411-425 E. Ohio st. Oaffle limestone. Steam, mill.
Irvington, Breckenridge Ry. 107.	Morris-Bennett Stone Co., Louisville, Ky., Room 16 Norton Bldg. Marshall Morris, mgr. Limestone, 20,000 tons; hand; mill. Ed. Bennett, supt.
Langford, Rock Castle Ry. 303.	M. N. Langford, Bluestone. Steam.
Morehead, Rowan Ry. Rockville 499.	Kentucky Blue Stone Co. George M. Pierce, pres.; F. S. Martin, secy. and treas.; John F. Knapp, mgr. Cap. stk. \$125,000. Free limestone. Open pit, 20,000 tons; steam; mill. Winslow S. Martin, supt.
Muellersville, Rock Castle P. O. and Ry. Langford 303.	Buena Vista Free Stone Works, Cincinnati, Ohio, 408 W. Front st., P. O. Box 292. Cap. \$80,000. Rock Castle, free limestone, 15,000 tons; steam. Wilbert Newhall, supt.
S. Carrollton, Muhlenburg Ry. 549, 298a.	John Oman, Nashville, Tenn., 989 S. High st. Cap. \$50,000. Green River, sandstone. Open pit, 60,000 tons; steam; stone and marble mills. D. S. Oman, supt.

SEE ALSO SUPPLEMENTARY LIST

## LOUISIANA

## SALT

LOCATION OF MINE OR WELL, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF PRODUCT, KIND OF MINE OR WELL, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
New Iberia, Iberia Ry. 692.	New Iberia Salt Co., New York City. John L. Welsh, pres.; J. Koek, secy.; J. E. Nash, treas.; J. L. McCalla, mgr. and supt. Cap. stk. \$80,000. Avery. Shafts, 50,000 tons; steam.

## MAINE

## MICA

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF PRODUCT, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Paris, ..... Oxford Ry. 290.	Mount Mica Co., Bangor, Me. A. C. Hamlin, prest. and mgr.; H. M. Fairbanks, secy.; J. S. Jenness, treas. Mount Mica. Open pit; hand.

## SLATE

LOCATION OF QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF QUARRY, KIND OF SLATE, KIND OF QUARRY, ANNUAL OUTPUT IN TONS OF KIND OF POWER USED, MILLS, ETC., AND NAME OF QUARRY SUPERINTENDENT.
TOWN AND COUNTY.	
Brownville, Piscataquis Ry. 46, 90.	Merrill Brownville Slate Co. T. W. Merrill, prest.; S. P. Johnson, secy. and treas.; Arthur Merrill, mgr. and supt. Cap. stk. \$240,000. Merrill, Brownville. Open pit, 5,500 tons; steam.
Monson, ..... Piscataquis Ry. 414.	Monson Lakeside Slate Co., Portland, Me., 185 Middle st. M. P. Frank, prest.; P. J. Larrabee, secy. and treas.; M. T. Phillips, mgr. and supt. Cap. stk. \$30,000. Monson Lakeside. Open pit; steam.
Shirley, ..... Piscataquis P. O. and Ry. Blanchard 46.	Deslauriers Slate Co., Blanchard, Me. A. Deslauriers, prest.; H. M. Heath, secy.; F. W. Eaton, treas., mgr. and supt. Cap. stk. \$150,000. Munshead. Open pit, 1,000 tons; steam.

## STONE, MARBLE, GRANITE AND ONYX

LOCATION OF MINE OR QUARRY RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE OR QUARRY, KIND OF STONE, KIND OF MINE OR QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STONE OR MARBLE MILLS, LIMEKILNS AND CAPACITY, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Addison, ..... Washington Ry. 31.	Pleasant River Granite Co. of Maine, Philadelphia, Pa., 435 Drexel Bldg. J. Thompson Baker, prest.; Robert P. Willson, secy.; Philip P. Baker, treas.; John L. Dabot, mgr. and supt. Cap. stk. \$250,000. Pleasant River, granite. Open pit, 500 tons; steam; mill.
Athens, ..... Somerset Ry. Skowhegan 414.	T. X. Joaquin. Joaquin, granite. Hand.
Auburn, ..... Androscegin Ry. 290, 414.	Mount Apatite Mineral Co. (local), 68 Main st. Henry W. Oakes, prest.; A. E. Yerrill, treas. Cap. stk. \$9,000. Mount Apatite, tourmalines and aquamarines. Open pit; hand. H. C. Royal, supt.
Augusta, ..... Kennebec Ry. 414.	F. E. Garland. Granite. Open pit; horse and hand.
Biddeford, ..... York Ry. West Biddeford 71.	Gordon & Michie. Cap. \$3,000. Granite. Open pit, 3,000 tons; hand.
Blue Hill, ..... Hancock Ry. 31.	W. P. Bisset. Orland, granite. 3,200 tons; horse.
" " " " " " " "	Capt. J. T. Miller. Granite. Open pit; hand.
" " " " " " " "	White Granite Co., New York City, 547 W. Fourteenth st. X. G. White, prest.; J. E. Dutton, secy. and treas.; A. Le Poidevin, v.-prest. and mgr. Cap. stk. \$12,000. Blue Hill, granite. Steam.
Bridgton, ..... Cumberland Ry. 77.	Allen Bros. Granite. Slope; hand; mill.
Bristol, ..... Lincoln (P. O. South Bristol) Ry. 31.	South Bristol Granite Quarry. South Bristol, granite. 3,000 tons; horse, mill. E. P. Gamag, supt.
Calais, ..... Washington Ry. 31, 93, 325.	Douglas Bros., St. Stephen, New Brunswick. Granite, 4,000 tons; hand; mills. W. S. A. Douglas, supt.
" " " " " " " "	Maine Red Granite Co., Main st. E. B. Harvey, prest.; O. S. Tarbox, secy. and mgr.; C. H. Newton, treas. Cap. stk. \$30,000. Beaver Lake, granite. Open pit, 1,400 tons; water, steam; mills.
Canaan, ..... Somerset Ry. Skowhegan 414.	Samuel L. Fowler. Cap. \$3,000. Fowler, granite. Open pit, 400 tons; hand.
Clark's Island, ..... Knox Ry. 31	Clark's Island Granite Works, New York City, 265 Broadway. J. M. Snow, mgr. Clark's Island, granite. Open pit, 1,000,000 tons; steam; mill. W. T. Crosson, supt.
Crowleys Junction, ..... Androscegin (P. O. Lewiston) Ry. 290, 440.	J. P. & James Murphy, Lewiston, Me., 12 Bates st. Cap. stk. \$16,000; indy. cap. \$8,000. Granite. Open pit, 21,000 tons; steam; mills. J. P. Murphy, supt.
" " " " " " " "	P. G. Merrill. Granite. 10,000 tons; horse.
" " " " " " " "	Sullivan Green & Co. North Side. Open pit, 2,000 tons; hand; mill. Sullivan Green, supt.
" " " " " " " "	H. M. Thayer, Green's Landing, Me. Cap. \$5,000. Granite. Open; hand.
" " " " " " " "	Thos. Warren & Co., Green's Landing, Me. Cap. \$2,000. Green Head and Crotch Island. Granite. 3,000 tons; steam; mill. Frank S. Warren, supt.
" " " " " " " "	White Granite Co., New York City, 547 W. Fourteenth st. X. G. White, prest.; J. E. Dutton, secy. and treas.; A. Le Poidevin, v.-prest. and mgr. Cap. stk. \$12,000. Green Island, granite. Steam.

## STONE, MARBLE, GRANITE AND ONYX (CONTINUED)

LOCATION OF MINE OR QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT.		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE OR QUARRY, KIND OF STONE, KIND OF MINE OR QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STONE OR MARBLE MILLS, LIMESTONES AND CAPACITY, ETC., AND NAME OF MINE SUPERINTENDENT.	
TOWN	AND COUNTY.		
East Blue Hill Ry. 31.	Hancock	Dugdale, Stansfield & Co.	Cap. stk. \$6,000. Dugdale & Stansfield, granite. Open pit, 2,000 tons; hand.
Franklin Ry. 31.	Hancock	T. M. Blaisdell.	East Franklin, Me. Cap. \$25,000. Granite. 1,000 tons; horse.
"	"	W. B. Blaisdell.	Cap. \$20,000. Cape Elen, granite. Shaft and slope, 6,000 tons; horse.
"	"	Frank Bradbury.	Cap. \$5,000. Springer Hill, granite. Open pit, 3,000 tons; horse.
"	"	John P. Gordon.	Cap. \$30,000. Gordon's granite. 10,000 tons; horse and hand. Fred. A. Gordon, supt.
"	"	Joseph H. West.	Taunton, granite. 2,500 tons; horse. D. E. Smith, supt.
Gorham Ry. 508.	Cumberland	Gardiner D. Weeks.	Cap. \$2,000. Gorham, granite and marble. Mills.
Green's Landing Ry. 31.	Hancock	James Clegg.	Moose Island, granite. 2,000 tons, hand.
Hallowell Ry. 31, 414.	Kennebec	Hallowell Central Granite Co.	Cap. stk. \$75,000. Hallowell, granite. 5,000 tons; steam. Joseph Arche, supt.
"	"	Hallowell Granite Works.	J. F. Bodwell, prest.; L. D. Merchant, secy.; C. W. Thiden, treas.; J. P. Hunt, mgr. Cap. stk. \$200,000. Hallowell, granite. Slope and open pit, 15,000 tons; steam. B. J. Richards, supt.
Jay P. O. and Ry. North Jay 414.	Franklin	F. L. Billings.	North Jay, Me. Cap. \$5,000. North Jay, granite. Open pit, 12,000 tons; steam.
Jonesboro Ry. 31.	Washington	N. W. Fish.	Cap. \$1,500. Granite, paving. Horse; mill.
Jonesport Ry. 31.	Washington	Jonesport Red Granite Co.	G. F. Mansfield, prest.; H. H. Mansfield, secy.; D. J. Sawyer, treas.; W. O. Sawyer, mgr. Cap. stk. \$30,000. Jonesport, red granite. Steam.
Lincolntonville Ry. 31.	Waldo	E. H. Fernald.	Camden, Me. Beach Grove, granite. 222 tons; steam.
Machias Port Ry. 31.	Washington	Machias Port Granite Co.	F. L. Shaw, prest.; N. S. Toloy, secy.; A. L. Harmon, treas.; W. R. Pattangall, mgr. Cap. stk. \$0,500. Granite. Slope; steam. Benjamin Shattuck Jr., supt.
Marshfield P. O. and Ry. Machias 31.	Washington	Levi B. Getchell.	Machias, Me. Marshfield, granite. Open pit, 300 tons; hand.
Millbridge Ry. 31.	Washington	Millbridge Paving Co.	Jewel Gary, prest.; J. C. Harvey, secy. and treas.; A. F. Fishett, mgr. and supt. Cap. stk. \$3,000. White Rock, stone. Open pit, 2,500 tons; hand; mill.
Momt Desert Ry. 31.	Hancock	Brown & Freeman.	J. P. Brown, mgr. Cap. \$5,000. Brown & Freeman, granite. Slope, 10,000 tons; horse and hand. C. R. Joy, supt.
"	"	John J. Carr.	Cap. \$20,000. Carr's, granite paving blocks. Open pit, 4,000 tons; horse.
"	"	Graves Bros.	Cap. stk. \$2,000. Granite. Open pit, 2,000 tons; hand; mill.
"	"	Higgins & Graham.	Cap. \$3,000. Higgins & Graham, paving, 10,000 tons; horse. J. M. Higgins, supt.
"	"	Savage & Moore.	Cap. \$5,000. Brown's, granite. Open pit, 1,000 tons; horse and hand. R. Moore, supt.
"	"	Standard Granite Co.	Somes Sound, granite. 28,000 tons; steam.
"	"	Whiting & Allen.	Granite. 8,000 tons. O. Allen, supt.
Norridgewock Ry. 688.	Somerset	Dodlin Granite Co.	Waterville, Me. Wm. M. Ayer, prest.; E. F. Webb, secy.; I. S. Bangs, treas. and mgr. Cap. stk. \$50,000. Dodlin Hill, granite. Open pit, 15,000 tons; steam and hand.
N. Yarmouth Ry. 290, 414.	Cumberland	E. D. Freeman.	Yarmouth, Me. Cap. \$10,000. Freeman, granite. Open pit, 2,000 tons; Charles H. Knight, supt.
Norway Ry. 290.	Oxford	L. L. Howard Jr.	Pike's Hill, granite. Open pit, hand.
"	"	J. E. Long.	30 Pleasant st. Cap. \$3,000. Longacre, granite. Open pit; hand.
Oxford Ry. 290, 410.	Oxford	J. P. & James Murphy.	Lewiston, Me. Cap. stk. \$16,000; indy. emp. \$8,000. Granite. Open pit, 21,000 tons; steam; mills. J. P. Murphy, supt.
Red Beach Ry. 31.	Washington	Maine Red Granite Co.	Calais, Me. Main st. E. B. Harvey, prest.; O. S. Tarbox, secy. and mgr.; C. H. Newton, treas. Cap. stk. \$30,000. Red Beach, granite. Slope, 1,400 tons; water and steam; mills.
Rockland Ry. 31.	Knox	Booth Bros. & Hurricane Isle Granite Co.	New York City, 60 Bank st. Wm. Booth, prest.; J. Donaldson, secy.; John Booth, treas.; W. S. White, mgr. and supt. Cap. stk. \$250,000. Hurricane Isle, granite. Open pit, 25,000 tons; steam; mills.
"	"	Spruce Head Granite Co.	14 Water st. T. E. Hurley, prest. and treas.; Wm. P. Hurley, mgr. Cap. stk. \$15,000. Spruce Head, limestone. Slope, 3,000 tons; steam; kiln, 30,000 brls.
Saint George P. O. Rockland Ry. 31.	Knox	Booth Bros. & Hurricane Isle Granite Co.	New York City, 60 Bank st. Wm. Booth, prest.; J. Donaldson, secy.; John Booth, treas. and mgr. Cap. stk. \$250,000. Long Cove, granite. Open pit, 25,000 tons; steam; mills. W. S. White, supt.
"	"	Robinson & Gilchrist.	Cap. \$15,000. Eagle, granite. Open pit, 700 tons; horse.
South Thomaston Ry. 31.	Knox	H. P. Babb.	Babb's, granite. Open pit, horse.
"	"	W. C. Bassick & Sons.	Cap. \$1,500. Bassick, granite. Open pit, 5,000 tons; horse. N. C. Bassick, supt.
S. Turner, Rockfield 599.	Androscoggin	Nm. D. Barrell (local).	Poplar Hill, granite. Slope; hand; mill.
Sullivan Ry. 31.	Hancock	Hooper & Harvey.	West Sullivan, Me., P. O. Box 49. Granite. Open pit, 5,000 tons; horse.

## STONE, MARBLE, GRANITE AND ONYX—(CONTINUED)

LOCATION OF MINE OR QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE OR QUARRY, KIND OF STONE, KIND OF MINE OR QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STONE OR MARBLE MILLS, LIMEKILNS AND CAPACITY, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Sullivan.....Hancock (Continued.)	C. A. Stimson. Cap. \$40,000. Stimson, granite. Open pit, 500,000 tons; steam, horse; mill.
Swans Island.. Hancock Ry. 31.	Goss & Small (local). Granite. Slope, 14,000 tons; steam.
Vinal Haven... Knox Ry. 31.	Booth Bros. & Hurricane Isle Granite Co., New York City, 60 Bank st. Wm. Booth, prest.; John Donaldson, secy. and mgr.; John Booth, treas. Cap. stk. \$250,000. State Point, granite. Open pit, 25,000 tons; steam; mills. W. S. White, supt.
" " " "	Crown Hill Granite Works. J. P. Armbrust, mgr. Cap. \$20,000. Crown Hill, granite. Open pit, 10,000 tons; horse. Chas. Grant, supt.
" " " "	Geo. Smith. Cap. \$3,000. Diamond Rock, granite. Shaft, open pit, 48,000 tons; horse; mill.
Waldoboro... Lincoln Ry. 370.	Waldoboro Granite Co. W. B. Ludwig, prest.; E. T. Hodge, secy., treas. and supt. Cap. stk. \$9,600. Waldoboro, granite. Slope, 3,000 tons; hand.
Wayne... Kennebec Ry. North Leeds 414.	J. Frank Gordon. Cap. \$3,000. Wayne, granite. Open pit, 150 tons; hand.
West Sullivan, Hancock Ry. Frenchman's Bay 31.	Alexander Taylor & Son. Hopewell, granite. Open pit, 15,000 tons; horse, hand; mill.
Whitefield... Lincoln Ry. Gardiner 414.	E. C. Jewett. Cap. \$3,000. Whitefield, granite. Open pit, 500 tons; horse; mill.
Yarmouthville, Cumberl'd Ry. 31, 290.	Horace G. Ross. Cap. \$3,000. Granite, 20,000 tons; horse, hand; mill.

SEE ALSO SUPPLEMENTARY LIST

# MARYLAND

## COAL—BITUMINOUS

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, COKE OVENS, AND NAME OF MINE SUPERINTENDENT.
Bittinger Ry. W. Salisbury, Pa., 42.	Garrett	Michael Seeger (local). Cap. \$500. Glade Run. Open pit, 300 tons; hand.
Bloomington Ry. 42.	Garrett	Andrew Mullen (local). Tunnel, 400 tons; hand.
Friendsville. Ry. 42.	Garrett	Benjamin F. Friend. Tunnel, 400 tons; hand.
"	"	E. M. Friend (local). Copper Spring. Slope, 12 tons; hand.
Frostburg Ry. 200.	Allegany	Barton & Georges Creek Valley Coal Co., Baltimore, Md., 1 and 3 Chamber of Commerce. A. Crawford Black, pres.; John Wilson, secy. and treas.; Owen Hitchins, mgr. Carlos. 300,000 tons.
"	"	Big Vein Coal Co. of West Virginia, Baltimore, Md., 21 S. Gay st. Jacob H. Taylor, pres.; Thos. W. Hooper, secy.; Oliver P. Lantz, treas.; James Little, mgr. and supt. Cap. stk. \$900,000. Big Vein. Tunnel, 70,565 tons, steam.
"	"	Borden Mining Co., New York City, 70 and 71 West st. L. W. Lovell, pres.; Chas. A. Greene, treas. Cap. stk. \$240,000. Bowersy. Slope and drift, 337,500 tons; steam and horse. D. Armstrong, resident agt.
"	"	Consolidated Coal Co., Baltimore, Md., 44 South st. Charles F. Mayer, pres.; T. K. Stuart, secy. and treas. Ocean Nos. 1, 2, 3, 3 1/2 and 5. Drifts and slopes, 1,000,000 tons; steam, air and horse. Beverly S. Randolph, supt.
"	"	J. B. Hansel (local). Cap. \$1,500. Open pit, 200 tons; horse.
"	"	Union Mining Co., Baltimore, Md., Chamber of Commerce. Lloyd Lowndes, pres.; A. T. Burr, secy. and treas.; John Sheridan, mgr. Cap. stk. \$500,000. Union. Slope, 210,000 tons; steam and horse. Harrison Brown, supt.
Grantsville Ry. W. Salisbury, Pa., 42.	Garrett	Daniel Baker (local). Caselman. Tunnel, 100 tons; hand.
"	"	Baker Mining Co. Samuel Baker, pres.; J. C. Goffy, secy.; O. L. Gungley, treas.; L. Kuntz, mgr. Cap. stk. \$104,000. Baker. Open pit, 10,000 tons; hand.
"	"	Aaron Beachey (local). Cap. \$4,000. Beachey. Tunnel, 15,000 tons; hand.
"	"	Lewis Backman (local). Cap. \$10,000. Backman. Open pit, 1,200 tons; hand.
"	"	Levi Kinsinger (local). Tunnel, 100 tons; hand.
"	"	Andrew J. Stanton (local). Cap. \$500. Open pit, 1,000 tons; hand.
"	"	W. T. Stanton. W. T. Stanton, pres.; J. C. Goffy, secy.; A. L. Gnagee, treas.; Peter Hedley, mgr. Cap. stk. \$10,000. Stanton. Open pit, 1,000 tons; hand.
Longeomg Ry. 278.	Allegany	American Coal Co., New York City, 1 Broadway. W. De L. Wallbridge, pres.; Sidney Wintringham, v.-pres.; Geo. M. Rowley, secy. and treas. Cap. stk. \$1,500,000. Jackson and Caldonia. Drift, 304,000 tons; steam and horse. John H. Parrott, supt.
"	"	George's Creek Coal & Iron Co., Baltimore, Md., 29 and 31 Chamber of Commerce. Julian J. Alexander, pres. and mgr.; Chas. W. Miller, secy. and treas. Cap. stk. \$110,000. Tunnel, 410,000 tons; horse and steam. R. L. Somerville, supt.
"	"	Maryland Coal Co. of Allegany County, New York City, 35 Broadway. J. E. Knapp, pres.; J. W. Love-ridge, v.-pres.; H. B. Nedham, treas. Cap. stk. \$4,300,000. New Detmold, Patton, Kingsland and Appleton. 400,000 tons; gravity and steam. F. E. Brackett, supt.
"	"	New Central Coal Co., New York City, 1 Broadway. Henry S. Little, pres.; Malcolm Baxter, v.-pres. and secy.; Rufus Blodgett, treas. Cap. stk. \$5,000,000. Koontz. Slope, 230,000 tons; steam. Duncan Sinclair, supt.
Oakland Ry. 42.	Garrett	Chauncey Kimmell. Open pit, 350 tons; hand.
"	"	B. F. Shaffer (local). Shields Run. Slope, 150 tons; hand.
Selbysport Ry. 42.	Garrett	William H. Frazee (local). Open pit, 50 tons; hand.
Western Port. Ry. 42.	Allegany	A. J. Merrill. Cap. \$6,250. Open pit, 8,300 tons; horse.
" P. O. and Ry. Pied- mont, W. Va., 42, 583.	Garrett	Franklin Consolidated Coal Co., Baltimore, Md., Chamber of Commerce Bldg. John A. Boyce, pres. and mgr.; W. N. Worley, secy. and treas. Cap. stk. \$50,000. Franklin and Phoenix. Tunnel, 200,000 tons; horse. P. E. Haldeeman, supt.

## FIRE CLAY

LOCATION OF MINE OR BANK, RAILWAYS, WATER ROUTES, AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE OR BANK, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, ETC., AND NAME OF SUPERINTENDENT.
Frostburg Ry. 200.	Allegany	Savage Mountain Fire Brick Works. James G. Brown, secy.; A. E. Gorsuch, mgr. Cap. stk. \$30,000. Savage Mountain, fire clay. Slope, 15,000 tons; horse and hand.

## GOLD AND SILVER

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Rockville.....Montgomery Ry. 42.	Columbian Mining & Milling Co., Reading, Vt. L. E. Read, prest. and mgr.; H. S. Pearson, secy. and treas. Cap. stk. \$500,000. Columbian, gold. Shaft and open pit; free; 10 stamps (developing).

## IRON

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, BLAST FURNACES, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Beltsville Prince George's Ry. 42.	Charles E. Coffin, Muirkirk Furnace, Md. Wm. Shea, mgr. Cap. \$7,500. Twampudle, hematite. Open pit, 1,200 tons; free; horse; furnace.
Catoctin Furnace, Fred'k Ry. 42.	Catoctin Mount Iron Co. Thomas Gorsuch, prest., mgr. and supt.; Harry P. Gorsuch, secy.; Geo. Houck, treas. Iron ore. Open pit, 3,000 tons; steam and horse.
Hanoverville..... Howard Ry. 42.	G. W. Hobbs, Fossil ore. Open pit, 1,200 tons; hand.
"....."	J. White, Open pit, iron; hand.
Muirkirk...Prince George Ry. 42.	Fred Duvall, Cap. \$3,000. Iron ore. Open pit, 2,500 tons; horse; furnace.

## MINERAL PAINT

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF PRODUCT, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, PAINT MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Hanoverville..... Howard Ry. 42.	Wilson & Bro. Paint ore. Open pit, 2,500 tons; horse.

## SILICA

LOCATION OF MINE OR BANK, RAILWAYS, WATER ROUTES, AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE OR BANK, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, ETC., AND NAME OF SUPERINTENDENT.
TOWN AND COUNTY.	
Muirkirk..... Calvert Ry. Upper Marlboro 44.	New York Silicite Co., New York City, 40 and 42 Broadway. J. E. Franks, prest.; W. A. Weed, secy., treas. and mgr. Cap. stk. \$100,000. Infusorial earth. Open pit, 3,000 tons; steam.

## STONE, MARBLE, GRANITE AND ONYX

LOCATION OF MINE OR QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE OR QUARRY, KIND OF STONE, KIND OF MINE OR QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STONE OR MARBLE MILLS, LIMEKILNS AND CAPACITY, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Baltimore..... Baltimore Ry. 17, 41, 42, 44, 528, 577, 584.	Henry Fox (local), 25 Jackson st. Cap. \$10,000. Olive Mills, black. Open pit, 6,000 tons; horse.
"....."	John G. Schwind, 2819 Raymer av. Cap. \$35,000. Calverton, gneiss, 40,000 tons; steam. John Boyling, supt.
"....."	A. A. Wight, 7 N. Calvert st. Cap. \$5,000. Stony Run, granite. Open pit, 11,000 tons; hand. Geo. Blucher, supt.
Cambria..... Hartford (P. O. Delta, Pa.) Ky. Cambria Station 41.	W. A. McLaughlin. Cambria, marble. Open pit; steam.
Capital View, Montgomery (P. O. Alexandria, Va.) Ry. 42, 602.	Consolidated Quarry Co., Washington, D. C., Room 8 Sun Bldg. H. P. Gilbert, prest.; J. C. Pratt, secy. and treas. Cap. stk. \$120,000. Capital View, Glen Echo, granite. Slope; steam; mill (developing).
Catoctin Furnace, Fred'k Ry. 42.	D. M. S. MacPherson. Flint, 2,000 tons.
Cockeysville, Baltimore Ry. 528.	Beaver Dam Marble Co., Baltimore, Md., 704 Constitution st. Hugh Sisson, prest.; Edward C. Wilson, secy. and treas. Cap. stk. \$100,000. Beaver Dam, marble. Open pit, 30,000 tons; steam; mills. Thos. McDonnell, supt.
Ellicott City, Howard Ry. 42.	Werner Bros., Jacob J. Werner, prest.; Augustus Werner, secy.; Frederick Werner, treas.; Chas. J. Werner Jr., mgr. Ellicott City, granite. Open pit, 10,000 tons; horse, hand.
Govanstown, Baltimore Ry. 41.	James J. McCann. Granite. Open pit; mill.



## STONE, MARBLE, GRANITE AND ONYX (CONTINUED)

LOCATION OF MINE OR QUARRY RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE OR QUARRY, KIND OF STONE, KIND OF MINE OR QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STONE OR MARBLE MILLS, LIMESTONES AND CAPACITY, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Granite ..... Baltimore Ry. Woodstock 42.	Wm. E. Cavey. Cap. \$2,000. Granite. Open pit, 1,000 tons; steam.
" .....	Wm. F. Weller. Cap. \$25,000. Pickwick, granite. Open pit, 10,000 tons; hand and steam; mill.
" .....	Woodstock Granite Co., Baltimore, Md., 700 W. Pratt st. Wm. A. Gault, pres.; Matthew Gault, secy., treas. and mgr. Cap. stk. \$10,000. Fox Rock, granite. Open pit, 3,000 tons; steam. John J. Evans, supt.
Greenwood ..... Baltimore Ry. Summerfield 804.	H. E. Shlap. Gunpowder, granite. Open pit, 1,500 tons; hand. John Chenoworth, supt.
Marriottsville ..... Howard Ry. 42.	Maryland Soapstone Co., Tamaqua, Pa. John Weldy, pres.; K. G. Weldy, treas. Soapstone, 6,000 tons; 341 ft.
New Windsor ..... Carroll Ry. 804.	Michael McCaffrey. Myers, limestone. 400 tons, hand.
Port Deposit ..... Cecil Ry. 563, 577.	McClellan & Bro. Cap. \$100,000. Granite. Open pit, 72,000 tons; steam and horse.
" .....	Port Deposit Granite Co., Camden, N. J. Richard T. Miller, pres.; W. H. Ramsey, secy.; D. R. Patterson, treas.; Benjamin Keiper, v.-pres., mgr. and supt. Cap. stk. \$100,000. Port Deposit, granite. Open pit; steam and hand; mill.
" .....	Port Deposit Stone Co. of Hartford Co. Franklin Taylor, pres.; Otho Nowland, secy. and treas.; Thos. W. Nowland, mgr. Cap. stk. \$100,000. Granite. Horse. Wm. P. Ewing, supt.

SEE ALSO SUPPLEMENTARY LIST

# MASSACHUSETTS

## CORUNDUM

LOCATION OF MINE  
OR BANK,  
RAILWAYS, WATER ROUTES,  
AND SHIPPING POINT.

TOWN AND COUNTY.

Chester.....Hampden  
Ry. 70.

NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK,  
NAME AND KIND OF MINE OR BANK, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER  
USED, ETC., AND NAME OF SUPERINTENDENT.

Hampden Emery & Corundum Co. H. L. Lucas, prest.; N. A. Harwood, treas. Cap. stk. \$500,000.  
Corundum. 1,200 tons; steam and water.

## IRON

LOCATION OF MINE,  
RAILWAYS, WATER ROUTES  
AND SHIPPING POINT.

TOWN AND COUNTY.

Hawley.....Franklin  
P. O. and Ry. Charle-  
mont 261.

NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK,  
NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND  
OF POWER USED, BLAST FURNACES, ETC., AND NAME OF MINE SUPERINTENDENT.

Forge Hill Mining Co., New York City, 35 Broadway. Wm. J. Sloane, prest.; John F. Ruttmann, secy. and  
treas.; Ferdinand S. Ruttmann, mgr. Cap. stk. \$500,000. Forge Hill Iron Mine, magnetic. Shaft;  
steam. William Rogers, supt.

RichmondFurn. Berkshire  
Ry. 70.

Richmond Iron Works. George Church, prest.; P. S. Burrall, secy.; R. A. Burget, treas. and mgr. Cap.  
stk. \$54,000. Cone, Lute & Bacon, brown hematite. Incline, shafts, 40,000 tons; steam; furnace.

Rowe.....Franklin  
(P. O. District). Ry.  
Charlmont 261.

Davis Sulphur Ore Co., New York City, 45 Wall st. H. J. Davis, prest. and mgr.; C. B. Stranahan, supt.  
and treas. Cap. stk. \$15,000. Shaft, 45,000 tons; steam.

W. StockbridgeBerkshire  
Ry. State Line 70, 312.

Hudson Iron Co., Hudson, N. Y. John E. Gillette, prest.; S. R. Rainey, secy. and treas.; S. C. McArthur,  
mgr. Chamcey Leet Ore Mine, brown hematite. Shaft, 15,000 tons; steam. Chas. R. Van Buskirk,  
supt.

"....."

Pomerooy Mining Co. Geo. Church, prest.; Porter S. Burrall, secy.; R. A. Burget, treas. and mgr. Cap. stk.  
\$5,000. Pomerooy Mine, hematite. Slope, 25,000 tons; steam.

"....."

Stockbridge Iron Co. A. C. Collins, prest.; E. L. Baker, treas. Cap. stk. \$125,000. Leet Ore Bed, brown  
hematite. Shaft, 17,000 tons; steam. H. F. Thompson, supt.

## MINERAL PAINT

LOCATION OF MINE,  
RAILWAYS, WATER ROUTES  
AND SHIPPING POINT.

TOWN AND COUNTY.

Tisbury.....Dukes  
P. O. and Ry. North  
Tisbury 31.

NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK,  
NAME OF MINE, KIND OF PRODUCT, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND  
OF POWER USED, PAINT MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.

Vineyard Ocher Co., Boston, Mass., 26 India st. Cap. \$8,000. Red ocher. Open pit, 50 tons; water.

## SALT

LOCATION OF MINE  
OR WELL,  
RAILWAYS, WATER ROUTES  
AND SHIPPING POINT.

TOWN AND COUNTY.

S. BrittonNorth Bristol  
Ry. New Bedford 540.

NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK,  
NAME OF MINE, KIND OF PRODUCT, KIND OF MINE OR WELL, ANNUAL OUTPUT IN TONS OF 2,000  
POUNDS, KIND OF POWER USED, ETC., AND NAME OF MINE SUPERINTENDENT.

Nathaniel Howland (local). Buzzard's Bay, salt. 130 tons; hand and evaporation.

## STONE, MARBLE, GRANITE AND ONYX

LOCATION OF MINE  
OR QUARRY,  
RAILWAYS, WATER ROUTES  
AND SHIPPING POINT.

TOWN AND COUNTY.

Acton.....Middlesex  
(P. O. North Acton)  
Ry. 185, 540.

NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK,  
NAME OF MINE OR QUARRY, KIND OF STONE, KIND OF MINE OR QUARRY, ANNUAL OUTPUT IN TONS OF  
2,000 POUNDS, KIND OF POWER USED, STONE OR MARBLE MILLS, LIMEKILNS AND  
CAPACITY, ETC., AND NAME OF MINE SUPERINTENDENT.

D. C. Harris. Cap. \$0,000. Marble and granite. Open pit, 1,000 tons; hand; mill.

Beverly.....Essex  
P. O. and Ry. Beverly  
Farms 71.

Connolly Bros. Cap. \$5,000. Connolly, granite. Open pit, 900 tons; hand and steam.

Braintree.....Norfolk  
Ry. 540.

Braintree Granite Co., Boston, Mass., 7 Exchange place. H. S. McKay, prest.; S. A. Lovejoy, secy. and  
treas. Cap. stk. \$5,000. Braintree, granite, 9,000 tons; steam.

Buckland.....Franklin  
P. O. and Ry. Shel-  
burne Falls 261.

Wright, Lyons & Co., Springfield, Mass., 13 Cooley Block, Main st. Frank Irvin, mgr. G. G. Merrill  
Quarry, gneiss. Slope, 2,500 tons; steam.

## STONE, MARBLE, GRANITE AND ONYX—(CONTINUED)

LOCATION OF MINE OR QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT.		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE OR QUARRY, KIND OF STONE, KIND OF MINE OR QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STONE OR MARBLE MILLS, LIMESTONES AND CAPACITY, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWNS	AND COUNTY.	
Charlton	Worcester	Arthur F. Hiscox, Webster, Mass., P. O. Box 513. Cap. \$5,000. Rocky Hill Granite Quarry, light and dark gray granite. 350 tons; hand.
"	"	Lansoun, Woodbury & Co. Cap. \$10,000. Gray granite. Open pit, 400 tons; horse and hand. J. L. Woodbury, supt.
Cheshire	Berkshire	A. S. Farnam & Bro. Cap. \$7,000. Limestone. Open pit; hand; kiln, 6,500 tons.
Chester	Hampden	Hudson & Chester Granite Co., Hudson, N. Y., 600 Warren st., Frederick J. Collier, pres.; Edwin C. Rowley, secy. and treas. Cap. stk. \$350,000. Dark gray granite. Open pit and slope; steam; mill. W. Laig, supt.
Concord	Middlesex	Jeremiah Sheehan, Concord Junction, Mass. Gray stone. Open pit; hand; mill.
Cumington	Hampshire	The Pike Manufacturing Co., Pike Station, N. H. E. B. Pike, pres. and mgr.; F. M. Tucker, secy. and treas. Cap. stk. \$70,000. Pike sandstone.
Dunstable	Middlesex	Adolph J. Tetto, Nashua, N. H., 100 W. Hollis st. Cap. \$10,000. Flat Rock Hill Quarry, light granite. Slope, 1,776 tons, horse.
Erying	Franklin	J. F. Allen, Northfield, Mass. Gneiss. Open pit, 200 tons; hand.
Fall River	Bristol	Wm. Beattie, Quarry st. Cap. \$15,000. Gray granite. 25,000 tons; steam.
"	"	C. H. Sears, 133 Second st. Cap. \$35,000. Merchants Mill Quarry, building stone. Open pit, 60,000 tons; steam. Ferd. Healy, supt.
Fitchburg	Worcester	Litchfield Bros., 47 Main st. Cap. \$20,000. Granite. Slope; steam.
"	"	G. A. Tenell, 5 Hazel st. Rollstone Quarry, granite, stean and horse.
Glocester	Essex	Wm. P. Barker, Quiney, Mass., 22 Greenleaf st. Granite (syenite). Open pit, 12,000 tons; steam. G. W. Hayden, supt.
"	"	John G. Chick Jr. Stone. Open pit; hand; mill.
"	"	Francis Reid, 5 High st. Cap. \$1,000. Granite. 1,500 tons; horse.
"	"	Ezra Sherburne, 37 Laingsford st. Granite. Open pit, 3,000 tons; hand.
"	"	James J. Vernon. Cap. \$30,000. Granite. 25,000 tons; steam. John Newall, supt.
Hampden	Hampden	Hudson & Chester Granite Co., Hudson, N. Y., 620 Warren st., Frederick J. Collier, pres.; Edwin C. Rowley, secy. and treas. Cap. \$200,000. Bldg granite. Open pit; steam, mill. Wm. York, supt.
Holliston	Middlesex	Daniel Phipps (local). Granite. Open pit, 2,000 tons; hand.
Lanesville	Essex	Rowley & Co., 780 Washington st. Cap. \$400. Granite. Open pit, 1,500 tons, horse and hand.
Lawrence	Essex	Locke & Jones, 41 Carver st. (local). Cap. stk. \$20,000. Lawrence Lodge Quarry, stone. Open pit, 5,000 tons; steam. John Shea, supt.
Lynnfield	Essex	Thomas R. Newhall, Wakefield, Mass., 15 Eaton st., Fred E. Newhall, mgr. Lynnfield Granite Works, granite. Open pit, hand. Thos. R. Newhall, supt.
Medford	Middlesex	Martin Hawkins, 30 Paris st. Cap. \$2,000. Fulton Quarry, stone. Open pit, 25,000 tons; hand. Jas. S. Hawkins, supt.
"	"	Samuel B. Tay. Granite and trap. Open pit; horse and hand.
Milford	Worcester	Darling Bros., 42 E. Worcester st. Granite. Slope, 2,000 tons; horse. Frank A. Whipple, supt.
"	"	Milford Pink Granite Co., Boston, Mass., 166 Devonshire st., I. F. Woodbury, pres.; Geo. E. Leighton, secy.; A. W. Eames, treas. and mgr. Cap. stk. \$5,200. Milford Quarry, pink granite. Open pit, 25,000 tons; steam. T. M. Perry, supt.
"	"	Peter Ross, P. O. Box 792. Granite. Open pit; horse and hand.
"	"	T. N. Sherman. Cap. \$8,000. Granite. Open pit, 2,000 tons; horse.
"	"	Wm. M. Sherman. Cap. \$5,000. No Purchase Quarry, pink granite. Open pit, 1,500 tons; steam. G. H. Sherman, supt.
New Bedford	Bristol	Brownell & Murkland, Liberty Hall Bldg. Cap. \$5,000. Open pit, 10,000 tons; steam. Philneas F. Drew, supt.
"	"	A. Rogers, 264 Pleasant st. (local). Freestone Quarry. 2,000 tons; steam; mill.
Northbridge	Worcester	George M. Blanchard. Cap. \$5,000. Granite. 5,000 tons; hand.
"	"	John T. Tank, Providence, R. I., 29 Exchange pl. Cap. \$25,000. Granite. Open pit, 10,000 tons; steam.
Peabody	Essex	Lewis Brown, 85 Lynnfield st. (local). Cap. \$3,000. Granite. Horse and hand.
Pellam	Hampshire	Shaw & Shaw, Amherst, Mass., P. O. Box 14. Granite. Open pit, hand.
Quincy	Norfolk	Adams Granite Works, Penn st., Geo. M. McFarlane, propr. Granite. Open pit; steam; mill.
"	"	Badger Bros., 101 Willard st. Wigwam Quarry, granite. Steam.
"	"	Craig & Richards Granite Co., 106 Water st., James Craig, pres., John H. Richards, treas. Cap. stk. \$20,000. Mount Ararat Quarry, dark, light and medium granite. Open pit, 1,375 tons; steam, mill.
"	"	Eloek & Son, 186 Copeland st., J. H. Eloek, mgr. Granite. Steam; mill.
"	"	Galvin Granite Co., 71 Granite st. Cap. \$5,000. Dark granite. 1,000 tons; steam.

## STONE, MARBLE, GRANITE AND ONYX—(CONTINUED)

LOCATION OF MINE OR QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT.			NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE OR QUARRY, KIND OF STONE, KIND OF MINE OR QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STONE OR MARBLE MILLS, LIMESTONES AND CAPACITY, ETC., AND NAME OF MINE SUPERINTENDENT.	
TOWNS	AND	COUNTY.		
Quincy	.....	Norfolk	Granite Railway Co., Boston, Mass., 166 Devonshire st. Wm. B. Sewall, pres.; J. Albert Simpson, secy. and treas.; H. E. Sheldon, mgtr. Cap. stk. \$250,000. Granite. Open pit; steam and electricity. W. B. Robertson, supt.	
"	.....	"	C. H. Hardwick & Co. Granite. Steam; polishing mill.	
"	.....	"	Jones & Desmond. Cap. \$5,000. Granite. Open pit, 75,000 tons; steam; mill.	
"	.....	"	McDonald & Turner. Granite. Open pit. Geo. McDonald, supt.	
"	.....	"	McDonnell & Sons, Garfield st., P. O. Box 83. Granite. Open pit, 3,000 tons.	
"	.....	"	Merry Mount Granite Co., 68 Water st. John C. Kapples, pres.; Patk. W. Driscoll, treas.; John Layers, mgr. and supt. Cap. stk. \$15,000. Merry Mount Quarry, granite. Open pit, 700 tons; steam; mill.	
"	.....	"	Milne & Chalmers, Penn st. Granite. 500 tons. Steam; mill.	
"	.....	"	Quincy Granite Co. F. J. Fuller, propr. Open pit, 5,000 tons; steam; mill.	
"	.....	"	Alphonse Reinhalter, 116 Williard st. Cap. \$12,000. Granite. Open pit, 20,000 tons; steam; mill.	
"	.....	"	O. T. Rogers Granite Co. W. H. H. Andrews, gen. mgr. Cap. stk. \$30,000. Dark and light granite. Open pit, 1,750 tons; steam; mill. M. P. Wright, supt.	
"	.....	"	Townsend & Clements. Cap. \$25,000. Granite. Open pit, 7,000 tons; steam.	
Randolph	.....	Norfolk	S. B. Corliss. Randolph, granite. Open pit; hand; mill.	
Ry. 540.				
Rockport	.....	Essex	Edwin Canney. Granite. Open pit; steam.	
Ry. 71.				
"	.....	"	Pigeon Hill Granite Co., Boston, Mass., 166 Devonshire st. F. Scripture, propr. Cap. stk. \$30,000. Granite, 75,000 tons; steam; mill.	
"	.....	"	Rockport Granite Co. Geo. O. Sanborn, pres.; Chas. S. Rogers, treas. and mgr. Cap. stk. \$200,000. Granite. Open pit, 110,000 tons; steam. Frank E. Foster, supt.	
Uxbridge	.....	Worcester	B. J. Blanchard. Cap. \$10,000. Blanchard, granite. Open pit, 5,000 tons; steam.	
Ry. 508.				
Westford	.....	Middlesex	Charles M. Cummings. Cap. \$4,000. Bond Quarry, granite. Open pit, 3,000 tons; horse.	
Ry. 71, 185.				
"	.....	"	H. E. Fletcher & Co. Cap. \$15,000. Granite. Open pit, 14,000 tons; steam.	
"	.....	"	Noah Prescott. Cap. \$5,000. Stone. 2,000 tons; horse and hand; mill.	
"	.....	"	Hammett D. Wright. Cap. \$2,200. Granite, surface. 1,000 tons; hand.	
W. Stockbridge	.....	Berkshire	Truesdells & Fuarey. Cap. stk. \$12,000. Limestone. 7,500 tons; steam; two kilns, 4,500 tons.	
Ry. 312.				
Worcester	.....	Worcester	Webb Granite & Construction Co., 44 Front st. Geo. D. Webb, pres.; Elliott K. Wheelock, secy. and treas. Cap. stk. \$300,000. Millstone Hill Quarry, stone. Open pit, 23,000 tons; steam; mill.	
Ry. 71, 261, 508, 513, 830.				

SEE ALSO SUPPLEMENTARY LIST

## MICHIGAN

## COAL—BITUMINOUS

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, CORE OVENS, AND NAME OF MINE SUPERINTENDENT.
TOWNS AND COUNTY.	
Eagle . . . . . Clinton Ry. Grand Ledge 222.	Thomas Jenkins (local), Grand Ledge, Mich. Cap. \$150. Shaft, 150 tons; hand.
Grand Ledge . . . Eaton Ry. 222.	F. Boyle. Slope, 382 tons; hand.
Jackson . . . . . Jackson Ry. 230, 383, 440.	R. H. Emerson & Co., Room 9 Allen Bennett Block, C. H. Higdon, mgr. Cap. \$14,000. Emerson, Shaft, 30,000 tons; steam. John Robson, supt.
" . . . . . "	Standard Mining Co., 118 N. Mechanic st. Chas. Gage, prest.; T. B. Jones, treas.; Robt. Gage, mgr. and supt. Standard. Shaft, 25,000 tons; steam.
Sebewaing . . . Huron Ry. 643.	Saginaw Bay Coal Co., Saginaw, Mich., Edly Bldg. Wm. L. Webber, prest.; James B. Peter, secy. and treas. Cap. stk. \$100,000. Saginaw. Shaft, 12,000 tons; steam. Lewis Stockell, supt.
" . . . . . "	Sebewaing Coal Co., West Bay City, Mich. Spencer O. Fisher, prest.; John F. Seeley, secy. and treas.; W. T. Chappell, mgr. and supt. Cap. stk. \$150,000. Shaft.

## COPPER

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, FURNACES, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWNS AND COUNTY.	
Adams . . . . . Houghton (P. O. Atlantic Mine) Ry. Houghton 229.	Atlantic Mining Co., New York City, 76 Wall st. Jos. E. Gay, prest.; John Stanton, secy. and treas.; F. McM. Stanton, mgr. and supt. Cap. stk. \$1,000,000. Atlantic, copper. Shafts, 237,430 tons; steam and electricity.
Albion . . . . . Keweenaw Ry. 394.	Albion Mining Co., New York City, 76 Wall st. Wm. C. Stuart, prest.; John Stanton, secy. and treas. Cap. stk. \$2,000,000. Albion, copper. Shafts, 1,250 tons; steam. Fred Smith, supt.
" . . . . . "	Wolverine Copper Mining Co., New York City, 76 Wall st. John Stanton, prest.; John R. Stanton, secy. and treas.; Fred Smith, mgr. and supt. Cap. stk. \$1,500,000. Wolverine, copper. Shafts, 300 tons; steam.
Calumet . . . Houghton Ry. 453.	Centennial Mining Co., E. B. Hinsdale, prest.; D. L. Denmon, treas.; Johnson Vivian, mgr. and supt. Cap. stk. \$100,000. Centennial, copper. Shaft; steam.
" . . . . . "	Kearsarge Mining Co., Boston, Mass. Thos. Nelson, prest.; A. S. Bigelow, secy. and treas.; J. D. Hasking, mgr. and supt. Cap. stk. \$1,250,000. Kearsarge, copper. Shafts, 1,200 tons; free; steam.
Clifton . . . . . Keweenaw (P. O. Phoenix) Ry. Al- bion 394, Eagle Har- bor 386.	Cliff Copper Co., Boston, Mass., 7; Beacon st. D. D. Brockway, mgr. and supt. Cliff, copper. Shafts; steam.
Copper Falls Mine Keweenaw Ry. Eagle Harbor 386.	Copper Falls Mining Co., Boston, Mass., 19 Exchange pl. David Nevins, prest.; John Brooks, secy. and treas.; J. H. Moyle, mgr. and supt. Copper Falls. Tunnel and shafts, 120,000 tons; steam and compressed air; mill.
Greenland . . Ontonagon Ry. Ontonagon 451.	Ridge Copper Co., Boston, Mass., 53 State st. Charles H. Andrews, prest.; Philip Highley, secy. and treas.; Alfred Meads, mgr. and supt. Cap. stk. \$500,000. Ridge, copper. Shafts, 50 tons; steam.
Hancock . . . Houghton Ry. 394, 380, 453.	Franklin Mining Co., Boston, Mass. T. H. Perkins, prest.; D. L. Denmon, secy. and treas. Graham Pope, mgr. Cap. stk. \$1,000,000. Franklin, copper. Shaft, 2,200 tons; steam.
" . . . . . "	Quincy Mining Co., New York City, 52 Broadway. Thomas F. Mason, prest.; Wm. Rogers Todd, secy. and treas.; S. B. Harris, mgr. and supt. Cap. stk. \$1,550,000. Quincy, copper. Shaft, 6,000 tons; steam.
" . . . . . "	St. May Copper Co., Boston, Mass., 68 Devonshire st. John C. Walters, prest.; Frederick Beck, secy. and treas. Cap. stk. \$1,000,000. St. May, copper.
Oscoda . . . Houghton (P. O. Opechee) Ry. Houghton 229.	Oscoda Consolidated Mining Co., Boston, Mass., 100 Washington st. A. S. Bigelow, prest.; Thomas Nelson, secy. and treas.; John Daniell, mgr. and supt. Cap. stk. \$1,250,000. Oscoda, copper. Shaft, 3,800 tons; steam.
Red Jacket . Houghton Ry. Dollar Bay 386.	Tamarack Junior Mining Co., Boston, Mass., 100 Washington st. Albert S. Bigelow, prest.; Thomas Nelson, secy. and treas. J. Daniell, mgr. and supt. Cap. stk. \$1,250,000. Tamarack Junior, copper. Shafts; steam.
Rockland . . . Ontonagon Ry. 451.	Minnesota Mining Co., Boston, Mass., 19 Congress st. H. J. Stevens, prest.; D. L. Denmon, secy. and treas.; Benjamin Debs, mgr. and supt. Minnesota, copper. Shafts; steam.
" . . . . . "	National Mining Co., Boston, Mass., 19 Congress st. W. C. Watson, prest.; D. L. Denmon, secy. and treas.; B. F. Chynoweth, mgr. Cap. stk. \$500,000. National, copper. Shafts, 10 tons; steam.
Sherman . . . Keweenaw (P. O. Central Mine) Ry. Eagle Harbor 386.	Central Mining Co., New York City, 76 Wall st. Joseph E. Gay, prest.; John Stanton, secy., treas. and mgr. Cap. stk. \$500,000. Central, copper. Shaft, 1,100 tons; steam. James Dunstan, supt.

## GOLD AND SILVER

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.			NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN	AND	COUNTY.	
Ishpeming	.....	Marquette Ry. 150, 229, 451.	Fire Centre Gold Mining Co., Milwaukee, Wis., 148 New Insurance Bldg., S. S. Curry, pres't.; H. S. Hase-toll, secy. and treas.; D. McVieho, mgr. Cap. stk. \$20,000. Fire Centre, gold and silver. Shafts and open pit; free steam and horse mill.
"	"	"	Gold Lake Mining Co., George Hayden, pres't.; Chas. T. Fairbairne, secy. and treas.; A. B. Miner, mgr. Gold Lake, gold. Shaft; refractory; hand.
"	"	"	Michigan Gold Co., Marquette, Mich., First National Bank, Chas. R. Sligh, pres't.; E. B. Dikeman, secy.; E. H. Towar, treas.; J. Parke Channing, v.-pres't. Cap. stk. \$1,000,000. Michigan, gold. Shafts; free steam. E. L. Zukoski, supt.
"	"	"	Ropes Gold & Silver Co., Julius Ropes, pres't.; C. R. Ely, secy. and treas.; W. H. Rood, mgr. Cap. stk. \$2,000,000. Ropes, gold and silver. Shaft. 30,000 tons; free steam; 65 stamps. Geo. Weatherston, supt.

## GRAPHITE

LOCATION OF MINE OR BANK, RAILWAYS, WATER ROUTES, AND SHIPPING POINT.			NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE OR BANK, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, ETC., AND NAME OF SUPERINTENDENT.
TOWN	AND	COUNTY.	
L'Anse	.....	Baraga Ry. Taylor's June, 229.	Lake Superior Graphite Co., Detroit, Mich., 540 River st. A. J. Boynton, pres't.; R. A. Parker, secy.; A. A. Boufell, treas. and mgr. Cap. stk. \$500,000. Open pit, 1,000 tons. R. R. Williams, supt.

## GYPSUM

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.			NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN	AND	COUNTY.	
Wyoming	.....	Kent P. O. and Ry. Grand- ville 152.	Loren Day, Cap. \$75,000. Michigan, gypsum. Open pit, 6,000 tons; water. Albert Medemo, supt.

## IRON

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.			NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, BLAST FURNACES, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN	AND	COUNTY.	
Beaumont	.....	Marquette Ry. 150, 229, 451.	Champion Iron Co., Boston, Mass., 37 Franklin st. Jos. S. Fay, pres't.; W. E. Stone, secy. and treas.; A. Kidder, mgr. Cap. stk. \$500,000. Champion, bessemer. Shafts, 280,000 tons; steam. Walter Fitch, supt.
Bessemer	.....	Gogebic Ry. 449, 229, 827.	Avril Mining Co., Milwaukee, Wis., 79 Michigan st. Gage E. Tarbell, pres't.; E. A. Conrad, secy. Cap. stk. \$300,000. Avril, hematite. Shafts, 100,000 tons; steam.
"	"	"	East Dangler Iron Mining Co., Chas. Anderson, pres't.; C. A. Hanscom, secy. and mgr.; T. E. Mays, treas. Cap. stk. \$1,000,000. East Dangler, iron. Shaft; steam. Andrew Johnson, supt.
"	"	"	Eureka Iron Mining Co., Cleveland, Ohio, Perry-Payne Bldg. James Corrigan, pres't. and mgr.; F. T. Ives, secy. and treas. Eureka, iron. Shafts, 25,000 tons; steam. Jas. H. Pearce, supt.
"	"	"	Lowell Iron Mining Co., Cleveland, Ohio, 164 Bank st. Stephen A. Jenks, pres't.; J. B. Zerbe, secy. and treas.; M. W. Burt, mgr. and supt. Lowell, bessemer. Shaft; steam.
"	"	"	Mikado Mining Co., Detroit, Mich., 33 W. Fort st. M. W. O'Brien, pres't.; J. T. Keena, secy. and treas. Cap. stk. \$1,000,000. Mikado, bessemer. Shaft; steam. M. P. O'Brien, supt.
"	"	"	Penokee & Gogebic Consolidated Mines, Cleveland, Ohio, Perry-Payne Bldg. Jos. S. Colby, treas. Cap. stk. \$4,400,000. Colby, Tilden and Palmis, bessemer, hematite. Shaft, 570,000 tons; steam. W. J. Oleoff, supt.
"	"	"	United Mining Co., Detroit, Mich., 33 W. Fort st. M. W. O'Brien, pres't.; W. B. O'Brien, secy. and treas. Cap. stk. \$300,000. United, iron. M. P. O'Brien, supt.
Champion	.....	Marquette Ry. 150, 229, 451.	Hortense Mining Co., Detroit, Mich., 195 Jefferson av. Joseph Troun-tine, pres't.; Seymour Brownell, secy. and mgr.; Herman C. Fechlhelmer, treas. Cap. stk. \$300,000. Hortense, limonite. Shaft, 20,000 tons; steam. W. Fitch, supt.
"	"	"	Phenix Iron Mining Co., Marquette, Mich. Peter White, pres't. and treas.; James E. Jopling, secy. Cap. stk. \$200,000. Phenix, limonite. Shaft and open pit; steam.
Clarksburg	.....	Marquette Ry. Diorite 229.	American Iron Co., Ishpeming, Mich. W. H. Johnston, pres't.; C. R. Ely, secy.; S. K. Wambold, treas. and mgr. American, bessemer. Shaft, 40,000 tons; steam. S. K. Wambold, supt.
Crystal Falls	.....	Iron Ry. 150.	Armenia Mining Co., Milwaukee, Wis., New Insurance Bldg. Ferdinand Schlesinger, pres't. L. Kriehl-sheimer, secy.; William Schlesinger, treas.; T. F. Cole, mgr. Cap. stk. \$300,000. Armenia, hematite. Shafts; steam.
"	"	"	Claire Mining Co., Milwaukee, Wis., New Insurance Bldg. Ferdinand Schlesinger, pres't.; L. Kriehl-sheimer, secy.; William Schlesinger, treas.; T. F. Cole, mgr. Cap. stk. \$250,000. Claire, hematite. Shaft and open pit; steam (developing). S. C. Bennett, supt.
"	"	"	Iron Star Co., Detroit, Mich., 12 Canby Bldg. James M. Fur-ner, pres't.; V. K. Moore, v.-pres't., secy. and mgr.; T. H. Newberry, treas. Cap. stk. \$700,000. Great Western, iron. Shaft, 100,000 tons; steam.

## IRON (CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL. LOCATION OF PRINCIPAL OFFICE. NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MISE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF FLOWER USED, BLAST FURNACES, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Crystal Falls, Iron (Continued.)	Lamont Iron Co., Chicago, Ill., 1103 Rookery Bldg. E. E. Crepin, pres.; R. Floyd Clineh, secy.; S. P. Farinly, treas.; Frank Scadden, mgr. and supt. Cap. stk. \$100,000. Lamont, bessemer. Shaft, 75,000 tons; steam.
" " "	Paint River Iron Co., Ashland, Wis., J. Stack, pres.; M. R. Hunt, secy. and treas.; Frank Scadden, mgr. and supt. Cap. stk. \$300,000. Paint River, bessemer. Shaft, 85,000 tons; steam.
" " "	York Iron Co., Milwaukee, Wis., New Insurance Bldg. Ferdinand Schlesinger, pres.; L. Kreielsheimer, secy.; William Schlesinger, treas.; T. F. Cole, mgr., Cap. stk. \$301,100. Dunn, hematite. Shafts, 181,440 tons; steam. S. A. Bennett, supt.
Humboldt, Marquette Ry. Marquette 150, 229.	Foxdale Iron Mining Co., Ishpeming, Mich., 241 Douglas st., Thos. Buzzo, pres. and mgr.; D. F. Wade-worth, secy.; R. Maxwell, treas. Cap. stk. \$80,000. Foxdale, specular. Shaft, steam. O. Wills, supt.
" " "	Samson Iron Mining Co., Chicago, Ill., 216 Phenix Bldg. Morris Sellers, pres.; J. M. Sellers, secy. and treas.; Richard A. Parker, mgr. and supt. Samson, specular and magnetite. Shaft, 22,500 tons; steam.
Iron Mountain Dickinson Ry. 150, 451.	Chapin Mining Co., Milwaukee, Wis., New Insurance Bldg. W. A. Hanna, pres.; G. H. Kent, secy. and treas.; Chapin, hematite, bessemer. Shafts, 70,000 tons; water and steam. Jas. MacNaughton, supt.
" " "	Lumberman's Mining Co., A. A. Carpenter, pres.; Francis A. Brown, secy. and mgr. Cap. stk. \$1,000,000. Lindington, bessemer. Shaft, 150,000 tons; steam, hydraulic, compressed air.
" " "	Marquette Iron Sandstone, Milwaukee, Wis., 1410 Insurance Bldg. W. A. Severson, pres. and mgr.; R. L. Dingwall, secy. Cap. stk. \$2,000,000. Antoine, iron. Shaft; steam.
" " "	Pewabic Co., Milwaukee, Wis., 337 E. Water st., Mack Block, G. D. Van Dyke, pres.; W. D. Van Dyke, secy. and treas.; Nelson P. Hulst, mgr. Cap. stk. \$200,000. Pewabic, bessemer. Shaft, 73,125 tons; steam and compressed air. E. F. Brown, supt.
Ironwood, Gogebie Ry. 149, 827.	Ashland Iron Mining Co., E. A. Hayes, pres. and mgr. J. O. Hayes, secy. and treas. Ashland, iron ore. Shaft, 400,000 tons; steam. J. H. Taylor, supt.
" " "	Aurora Iron Mining Co., Cleveland, Ohio, Perry-Payne Bldg. Jos. L. Colby, treas.; A. L. Dickerman, mgr. Aurora, North Aurora and Vaughn, bessemer. Shafts, 300,000 tons; steam. W. J. Oleott, supt.
" " "	Metropolitan Iron & Land Co., Milwaukee, Wis., 118 New Insurance Bldg. S. S. Curry, pres. and mgr.; H. S. Haseltin, secy.; S. J. Pettit, treas. Cap. stk. \$2,500,000. Norrie, East Norrie and Babst, bessemer. Shafts; steam. J. D. Day, supt.
" " "	Newport Mining Co., Milwaukee, Wis., E. H. Bottom, pres.; C. E. Wilde, secy.; J. J. Gill, treas.; E. W. Oglebay, mgr. Newport, bessemer. Shafts, steam. M. W. Burt, supt.
" " "	Pemokee & Gogebie Development Co., C. C. Colby, pres.; J. L. Colby, treas.; A. L. Dickerman, mgr. Comet, Palms, Tilden, Colby, Aurora and Superior, bessemer, hematite. Shaft, 1,000,000 tons; steam and air. W. J. Oleott, supt.
Ishpeming, Marquette Ry. 150, 229, 551.	East New York Iron Co., S. K. Wambold, pres.; C. R. Ely, secy.; M. J. Luther, treas.; J. Parke Cham-ling, mgr. and supt. Cap. stk. \$1,500,000. East New York, bessemer and hematite. Shafts, 56,250 tons; steam.
" " "	Lake Superior Iron Co., Boston, Mass., 28 State st., G. W. R. Matteson, pres.; A. C. Tenney, secy.; Jos. P. Fay, treas. Cap. stk. \$2,500,000. Lake Superior, red specular. Shafts, 450,000 tons; steam. W. H. Johnston, supt.
" " "	Pittsburgh & Lake Angelina Iron Co., Cleveland, Ohio, Perry-Payne Bldg. Jas. Laughlin Jr., pres.; Wm. F. Dulock, secy. and treas.; A. Kilder, mgr. Cap. stk. \$500,000. Lake Angelina, bessemer. Shaft; 275,000 tons; steam. Thos. Walters, supt.
" " "	Winthrop Iron Co., Cleveland, Ohio, Perry-Payne Bldg. M. A. Hanna, pres.; A. C. Saunders, secy. and treas.; F. Braastad, mgr. Cap. stk. \$200,000. Winthrop and Mitchell, hematite. Shaft, 150,000 tons; steam. C. T. Fairbairn, supt.
Mansfield, Iron Ry. 150.	Mansfield Iron Mining Co., Chicago, Ill., 300 Phenix Bldg. W. S. Cullum, pres.; C. H. Terry, treas. Cap. stk. \$500,000. Mansfield, iron ore. Shaft, 75,000 tons; steam. Louis Aschehan, supt.
Melchizmeau, Marquette Ry. Marquette 229, 486.	Imperial Iron Co., Boston, Mass., 37 Franklin st. Wm. E. Stone, treas.; Richard A. Parker, mgr. Imperial, limonite. Open pit and shafts, 40,000 tons; steam. J. C. Trembath, supt.
Negaunee, Marquette Ry. 150, 229.	Buffalo Mining Co., Milwaukee, Wis., New Insurance Bldg. Ferdinand Schlesinger, pres.; A. B. Geil-fuss, secy.; Wm. Schlesinger, treas. T. F. Cole, mgr. and supt. Cap. stk. \$1,000,000. Buffalo, hematite. Shafts, 548,300 tons; steam.
Norway, Dickinson Ry. 150.	Appleton Mining Co., Chicago, Ill., 119 and 121 La Salle st., Room 50. W. H. O'Brien, secy. and treas. Cap. stk. \$1,000,000. Appleton, Little Ones, Loretto and Columbus, hematite and bessemer. Shaft, 80,000 tons; steam. Capt. James Bryant, supt.
" " "	Aragon Mining Co., Milwaukee, Wis., 71 New Insurance Bldg. Angus Smith, pres. and treas.; A. W. Wilkins, secy.; P. Larsson, mgr. and supt. Cap. stk. \$1,000,000. Aragon, bessemer. Shafts, 200,000 tons; steam.
" " "	Finlay Mining & Exploring Association, Negaunee, Mich. Robert Finlay, pres.; J. D. Campbell, secy. and treas.; John Finlay, mgr. and supt. Cap. stk. \$100,000. Finlay, bessemer iron ore. Shaft; steam (developing).
" " "	Valencia Mining Co., Milwaukee, Wis., 71 New Insurance Bldg. Angus Smith, pres. and treas.; A. W. Wilkins, secy.; P. Larsson, supt.
Palmer, Marquette Ry. 150.	Platt Mining & Manufacturing Co., R. J. Whaley, pres.; F. A. Platt, secy. and treas. Platt, bessemer. Shaft. Chas. L. Lawton, supt.
" " "	Volunteer Iron Co., Detroit, Mich., Telegraph Bldg. Wm. C. Colburn, pres.; J. C. Metcalf, secy. and treas.; A. Kilder, mgr. Cap. stk. \$1,000,000. Volunteer, iron. Shafts, 250,000 tons; steam. Thos. Walters, supt.
Republic, Marquette Ry. 229.	Republic Iron Co., Cleveland, Ohio, 25 Wade Bldg. W. D. Rees, pres. and treas.; W. D. Castle, secy. Cap. stk. \$2,000,000. Republic, specular and magnetite. Shaft, 225,000 tons; steam and water. Capt. Peter Pasco, supt.
Richmond, Marquette (P. O. Palmer) Ry. 229.	Volunteer Iron Co., Detroit, Mich., Telegraph Bldg. Wm. C. Colburn, pres.; J. C. Metcalf, secy. and treas. Cap. stk. \$1,000,000. Volunteer, specular. Shaft, 150,000 tons; steam. Thos. Walters, supt.

## IRON—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, BLAST FURNACES, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWNS	AND COUNTY.	
Spurr Mountain, Ry. Spurr 229.	Baraga	Spurr Iron Mining Co., Detroit, Mich. Wm. A. Moore, pres.; Wm. J. Gray, secy. and treas. Cap. stk. \$250,000. Spurr, magnetic. Shaft, steam.
Stoneville, Ry. 229.	Marquette	Saginaw Iron Mining Co., Saginaw, Mich. L. Tilotson, pres.; C. H. Gage, secy., F. C. Stone, treas.; T. H. Bargh, mgr. and supt. Saginaw, iron. Shafts, 4,000 tons; steam.
Wakefield, Ry. 449.	Gogebic	Brotherton Iron Mining Co., Milwaukee, Wis., 388 E. Water st. Joseph Sellwood, pres.; Edw. Niedecker, secy.; M. J. Suther, treas.; Jos. Sellwood, mgr. Cap. stk. \$2,000,000. Brotherton, hematite, bessemer. Shafts, 100,000 tons; steam. Richard Bowden, supt.
"	"	Penoque & Gogebic Consolidated Mines, Cleveland, Ohio, Perry-Payne Bldg.; Joseph L. Colby, treas. Cap. stk. \$4,400,000. Superior and Comet, bessemer, hematite. 380,000 tons; steam. W. J. Oleott, supt.
"	"	Sparta Iron Mining Co. P. H. Putnam, pres. and mgr.; F. N. Newton, secy.; M. A. Thayer, treas. Cap. stk. \$1,000,000. Sparta, iron. Shafts, 25,000 tons; steam. Capt. P. H. Byrnes, supt.
"	"	Sunday Lake & Gogebic Co., Milwaukee, Wis., New Insurance Bldg. Ferdinand Schlesinger, pres.; L. Kreibehmer, secy.; William Schlesinger, treas.; T. F. Cole, mgr. Cap. stk. \$100,000. Sunday Lake, hematite. Shafts, 72,300 tons; steam. John McLeod, supt.

## SALT

LOCATION OF MINE OR WELL, RAILWAYS, WATER ROUTES AND SHIPPING POINT.		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF PRODUCT, KIND OF MINE OR WELL, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWNS	AND COUNTY.	
Algonac, Ry. 379.	St. Clair	Walton Salt Co. Albert Millen, pres.; Edgar Rexford, secy., treas. and mgr. Walton, fine, 18,000 brls.; steam. Wm. Beers, supt.
Bay City, Ry. 161, 262, 440.	Bay	F. E. Bradley, 401 N. Water st. Fine. 3 wells, 35,000 brls.; steam. Wm. Gilean, supt.
"	"	Dolson, Chapin & Co. Fine. Wells, 50,000 brls.; steam.
"	"	Eddy, Avery & Eddy. 5 wells, 60,000 brls.; steam. F. H. Mason, supt.
"	"	McLean & Co., 1509 S. Water st. Cap. \$150,000. Fine. 5 wells; 50,000 brls.; steam. John Kanall, supt.
"	"	Michigan Pipe Co. S. A. Hill, pres.; Henry B. Smith, secy. and treas. Cap. stk. \$100,000. Coarse. 2 wells, 20,000 brls.; steam. M. F. Wilcox, supt.
"	"	Pitts & Cramage, Washington st. Fine. Wells; evaporation.
Buena Vista, Ry. Saginaw 222, 202, 379, 440.	Saginaw	Melchers & Serreter, Saginaw, Mich. Cap. \$15,000. Fine. Well, 12,000 brls.; steam.
Carrollton, Ry. 161, 262, 440.	Saginaw	A. T. Bliss, Saginaw, Mich., 321 N. Hamilton st. Fine. Wells, 125,000 brls.; steam. C. C. Cook, supt.
"	"	E. C. Chapman. Shaft, 29,250 brls.; steam.
Caseville, Ry. 594.	Huron	Curran, Flach & Conley. Fine and coarse, 3,000 brls.
Crow Island, Ry. 262.	Saginaw	S. W. Tyler & Son, Saginaw, Mich., 6 Penny Bldg. Fine. Wells, 26,000 brls.; steam. D. H. Slater, supt.
Eastlake, Ry. 455.	Manistee	R. G. Peters Salt & Lumber Co. Michigan Trust Co., receiver. Coarse. 5 wells, 430,000 brls.; steam.
Hampton, Ry. 161, 262, 440.	Bay (P. O. Bay City) Ry.	J. R. Hall. Cap. \$30,000. Common and fine. 42,000 brls.; steam.
"	"	W. B. Rouse, Essexville, Mich. Fine. Well, 32,000 brls.; steam.
Ludington, Ry. 262.	Mason	Pere Marquet Lumber Co. cor. Main st. and Ludington av. John Mason Loomis, pres.; F. J. Dowland, secy., treas. and mgr. Cap. stk. \$50,000. Fine. Wells, 100,000 brls.; steam. H. E. Freeman, supt.
"	"	Thomas Percy. Cap. \$75,000. Coarse. Wells, 180,000 brls.; steam. Fred. L. McElroy, supt.
"	"	Canfield Salt & Lumber Co. John Canfield, pres.; Frank W. Canfield, secy. and treas. Cap. stk. \$1,500,000. Fine. Wells, 100,000 brls.; steam.
Manistee, Ry. 262, 416.	Manistee	Canfield & Wheeler Co. Spruce and Water st. E. D. Wheeler, pres. and mgr.; F. W. Canfield, secy. and treas. Cap. stk. \$250,000. Coarse and fine. Well, 75,000 brls.; steam. E. R. Wheeler, supt.
"	"	Eureka Lumber Co., 72 Arthur st. James Dempsey, pres.; Wm. Wente, secy. and treas. Cap. stk. \$285,000. Wells, 120,000 brls.; steam.
"	"	Louis Sands. Cap. \$50,000. Fine. Well, 100,000 brls.; steam. Nath. Blizzard, supt.
Marine City, Ry. 380, 379.	St. Clair	Marine City Salt & Brick Works. John Mitchell, pres.; W. F. Sauber, secy., treas., mgr. and supt. Cap. stk. \$125,000. Marine City, fine. Wells, 75,000 brls.; steam.
"	"	Marine City Slave Co. Samuel Heavenrich, pres.; R. B. Bloodgood, secy.; C. A. Calzin, treas. and mgr. Cap. stk. \$125,000. Marine City, common, fine, coarse. 90,000 brls.; steam.
Oscoda, Ry. 380.	Iosco	Gratwick, Smith & Fryer Lumber Co., Tonawanda, New York. Wm. H. Gratwick, pres.; Edward Smith, secy. and treas. J. V. O'Brien, mgr. and supt. Cap. stk. \$500,000. Fine. 2 wells, 80,000 brls.; steam.
"	"	Pack, Woods & Co. G. W. N. Pack, pres.; Edwin F. Holmes, secy. and treas.; Greeno Pack, mgr. Cap. stk. \$300,000. Pack & Woods, fine. 90,000 brls.; steam.



## SALT—(CONTINUED)

LOCATION OF MINE OR WELL, RAILWAYS, WATER ROUTES AND SHIPPING POINT.		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF PRODUCT, KIND OF MINE OR WELL, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN	COUNTY	
Saginaw	Saginaw	Bliss & Van Anken, 1100 S. Niagara st. 10 wells, 10,000 tons.
"	"	Brand & Hardin, 500 S. Water. Fine and common. 14,000 brls.; steam.
"	"	Briggs & Cooper. Cap. \$30,000. Common and fine. Well, 10,000 brls.; steam.
"	"	C. L. Grant & Co. Cap. \$30,000. Fine and coarse. Shaft, 15,000 brls.; steam. C. L. Grant, supt.
"	"	Green, Ring & Co. Fine. 4 wells, 60,000 brls.
"	"	D. Hardin & Co., 605 S. Water st. Fine. Well, 8,000 brls.; steam. H. P. Denison, supt.
"	"	N. Holland, foot of Atwater st. Fine. 4 wells, 40,000 brls.; steam.
"	"	Linton Manufacturing Co., cor. Jefferson av. and Euclid st. A. Linton, pres.; C. E. Linton, secy. and mgr.; W. S. Linton, treas. Cap. stk. \$100,000. Common. Well, 30,000 brls.; steam. Peter Christian, supt.
"	"	Chas. Merrill & Co. Cap. 40,000. Fine. 4 wells, 65,000 brls.; steam. Wm. J. Mason, supt.
"	"	Merrill & Ring. Fine. Wells, 32,000 brls.; steam.
"	"	W. B. Mershon & Co. W. B. Mershon, pres. and mgr.; Chester Brown, secy. and treas. Cap. stk. \$250,000. Fine. Well, 30,000 brls.; steam.
"	"	Michigan Dairy Salt Co. (C. K. Eddy & Son). Cap. stk. \$25,000. Table, dairy. 100,000 brls.; steam.
"	"	Michigan Salt Co. Thos. Cranage, pres.; A. G. Holland, secy.; C. A. Rust, treas. Cap. stk. \$300,000. Common, fine, dairy. Wells, 300,000 brls.
"	"	Rust Bros. & Co. Cap. stk. \$25,000. Coarse. 37,000 brls.; steam.
"	"	Sample & Camp. Common. Well, 15,000 brls.; steam.
St. Clair	St. Clair	Diamond Crystal Salt Co. A. F. Moore, pres. and mgr.; R. R. Moore, secy. and treas. Cap. stk. \$47,500. Diamond, fine. Well, 33,000 brls.; steam. John Clark, supt.
"	"	Thomson Bros. Front st. Cap. \$80,000. Coarse and fine. Wells, 75,000 brls.; steam. A. Meno, supt.
Sand Beach	Huron	Huron Dairy Salt Co. Geo. W. Jenks, pres.; Chas. S. Meus, secy. and treas.; John G. Pindlock, mgr. and supt. Cap. stk. \$30,000. Coarse and fine dairy. Well, 35,000 brls.; steam.
Stronach	Manistee	Stronach Lumber Co. John Canfield, pres.; Wm. R. Thorsen, secy. and mgr. Cap. stk. \$250,000. Fine and coarse. Wells, 100,000 brls.; steam.
Tawas City	Iosco	Winona Salt and Lumber Co. John B. Fellows, pres. and mgr.; Geo. R. Kinne, secy. and treas. Cap. stk. \$100,000. Winona, fine. Well, 23,000 brls.; steam.
West Bay City	Iay	H. W. Sage & Co. Fine. 30,000 brls.; steam. W. M. Fletcher, supt.
"	"	Carpenter & Co. Fine. 40,000 brls.; steam.
Zilwaukee	Saginaw	Rust, Eaton & Co., Saginaw W. S. J. Court st. Fine. Well, 39,000 brls.; steam. P. Stafford, supt.

## SLATE

LOCATION OF QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT.		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF QUARRY, KIND OF SLATE, KIND OF QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, MILLS, ETC., AND NAME OF QUARRY SUPERINTENDENT.
TOWN	COUNTY	
Arvon	Baraga	Michigan Slate Co. James M. Turner, pres. and treas.; F. E. Robinson, secy.; C. M. Turner, mgr. and supt. Cap. stk. \$300,000. Steam.

## STONE, MARBLE, GRANITE AND ONYX

LOCATION OF MINE OR QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT.		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE OR QUARRY, KIND OF STONE, KIND OF MINE OR QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STONY OR MARBLE MILLS, LIMEKILNS AND CAPACITY, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN	COUNTY	
Alaqua	Iosco	Western Plaster Works, South Chicago, Ill. B. F. Smith, pres. and mgr.; B. W. McCausland, secy. and treas. Cap. stk. \$400,000. Gypsum rock. Open pit, steam.
Grind Stone City	Huron	Cleveland Stone Co., Cleveland, Ohio, Wilshire Bldg. J. M. Worthington, pres.; Geo. H. Worthington, secy. and treas. Cap. stk. \$2,500,000. Grind-stone, sandstone. Open pit, 42,000 tons; steam, mill, James Nicholl, supt.
Holland	Ottawa	Waverly Stone Co. H. D. Post, pres.; H. H. Pope, v. pres.; W. J. Garrod, secy.; J. C. Post, treas.; F. C. Hall, mgr. Cap. stk. \$25,000. Waverly, sandstone. Open pit, 23,153 tons; steam; mill, John Stroup, supt.
Ira	Monroe	N. Davis, Cap. \$15,000. Ira, limestone. Open pit; steam, mill, kiln, 3,000 tons.
Ishpeming	Marquette	American Verde Antique Marble Co., Milwaukee, Wis., 95 Wisconsin st. C. M. Kendall, pres.; M. W. Sherman, secy. and treas. Cap. stk. \$20,000. Green marble. Steam. Capt. James F. Frowell, supt.
Jacobsaville	Houghton	First, Noy & Co., Chicago, Ill., 187-191 La Salle st. P. W. Noy, mgr. Red and brown sandstone, 15,000 tons; steam; mill, J. W. Wyckoff, supt.

## STONE, MARBLE, GRANITE AND ONYX (CONTINUED)

LOCATION OF MINE OR QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK.
TOWN AND COUNTY.	NAME OF MINE OR QUARRY, KIND OF STONE, KIND OF MINE OR QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STONE OR MARBLE MILLS, LIMERILS AND CAPACITY, ETC., AND NAME OF MINE SUPERINTENDENT.
Jacobsville.....Houghton (Continued.)	Portage Red Stone Co., Chicago, Ill., 189 La Salle st. J. S. Malone, pres.; E. T. Malone, secy.; John Thumlinson, treas. Cap. stk. \$25,000. Portage Entry, red sandstone. Open pit, 25,500 tons; steam. P. B. Parker, supt.
L'Anse.....Baraga Ry. 229, 386.	Detroit Brownstone Co., Detroit, Mich., 502 Hammond Block. Willard Pope, pres.; John Bissell, secy.; Chas. T. Miller, treas.; Charles H. Little, mgr. Cap. stk. \$500,000. Brownstone. Open pit, 2,000 tons; steam; mill. Wm. Corrie, supt.
Marquette.....Marquette Ry. 141, 150, 386.	Furst, Neu & Co., Chicago, Ill., Room 42, 187 La Salle st. Peter W. Neu, mgr. Marquette Brown Stone, brown and red stone. Open pit, 13,000 tons; steam; mill. Peter Pickel, supt.
Monroe.....Monroe Ry. 383, 440.	Michigan Stone and Supply Co., Detroit, Mich., 40 W. Fort st. Gus F. Smith, pres. and mgr.; Cameron Currie, secy. and treas. Cap. stk. \$100,000. Limestone. Open pit, 30,000 tons; steam. James Anderson, supt.
"....."	Michigan Stone & Supply Co., Detroit, Mich., 40 W. Fort st. Gus F. Smith, pres. and mgr.; Cameron Currie, secy. and treas. Cap. stk. \$100,000. Blues-tone, limestone. Open pit, 50,000 tons; steam; 4 crushers. Frank C. Stevens, supt.
Newtonville.....Baraga Ry. 329, 386.	Michigan Red Stone Co., Chicago, Ill., 187 La Salle st. Peter A. Pickel, pres.; P. W. Neu, secy. and mgr.; H. Furst, treas. Sandstone. 15,000 tons; steam. J. W. Wyckoff, supt.
"....."	Portage Red Sandstone Co. Joseph D. Lloyd, pres.; Joseph H. Hillyer, secy. Chas. W. McFadden, treas. Caleb T. LeTourneau, mgr. Cap. stk. \$100,000. Red sandstone.
Rock River.....Alger Ry. 229, 691.	Butler Brownstone Co., Marquette, Mich. Chas. Johnston, pres. and mgr.; Chas. C. Brown, secy.; Geo. Barnes, treas. Cap. stk. \$2,000,000. Butler, sandstone. Open pit; steam (developing). Bert F. Froney, supt.
"....."	Rock River Brownstone Co., Bay City, Mich. W. I. Brotherton, pres.; J. L. Stoddard, secy.; Geo. Barnes, treas. H. N. Watrous, mgr. Cap. stk. \$500,000. Rock River, sandstone. Open pit; steam; mill (developing). S. F. Cook, supt.
Windsor.....Huron (P.O. Bay Port) Ry. 643.	Bay Port Quarries, Bay Port, Mich. Wm. L. Webber, pres. Bay Port, limestone. Steam; 4 kilns, 5,000 tons. Wm. H. Wallace, supt.

SEE ALSO SUPPLEMENTARY LIST

## MINNESOTA

## COPPER

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, FURNACES, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Grand Marais.... Cook Ry. 386.	Grand Marais Copper Mining Co., Chicago, Ill., 2 Sherman st., Room 42. Henry P. Darlington, pres.; Geo. E. Hoyer, secy.; Frank Floyd, treas. and mgr. Cap. stk. \$2,000,000. Grand Marais, copper. Shaft and tunnel; hand.

## GOLD AND SILVER

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Grand Marais.... Cook Ry. 386.	North Shore Mining Co., Detroit, Mich., 16 Bank Chambers. Jas. G. Battelle, pres.; H. F. Eberts, secy. and treas. Cap. stk. \$1,000,000. North Shore, silver. Shaft; free, steam (developing).
" " "	Ancient Diggings Co., Sault Ste. Marie, Mich., 302 Portage av. Wm. P. Spalding, pres., treas., mgr. and supt.; Lewis D. Kemp, secy. Cap. stk. \$1,000,000. Silver. Shaft and levels, free; steam (developing).

## IRON

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, BLAST FURNACES, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Duluth.... St. Louis Ry. 386, 231.	Campbell Iron Co., St. Paul, 601 Pioneer Press Bldg. J. E. Campbell, pres., Frank Barrett, secy. and mgr.; W. W. Braden, treas. Cap. stk. \$3,000,000. Campbell, bessemer. Shaft, 30,000 tons; steam.
" " "	Champion Iron Co., 631 Chamber of Commerce. R. H. Palmer, pres.; H. C. Crawford, secy. and treas.; Chas. F. Howe, mgr. and supt. Cap. stk. \$3,000,000. (Developing.)
" " "	Clark Iron Co., 421 Chamber of Commerce. M. J. Clark, pres.; M. W. Bates, secy.; John G. Williams, treas.; A. B. Upton, mgr. Cap. stk. \$3,000,000. Clark, iron. Shaft (developing.)
" " "	Kakama Iron Co., D. H. Merritt, pres.; K. L. Kneble, secy.; B. Murphree, treas.; Geo. Fay, mgr. Cap. stk. \$1,000,000. Red hematite. Steam (developing). E. J. Longyear, supt.
" " "	Keewatin Iron Co., Room 6, 218 W. Superior st. Martin Pattison, pres.; Myron Reed, secy.; H. H. Groce, treas.; H. R. Spencer, mgr. Cap. stk. \$3,000,000. Keewatin, red hematite. Shaft; steam (developing). Silas Robinson, supt.
" " "	Keystone Iron Co., 513 Palladio Bldg. Clinton Markell, pres.; E. R. Braze, secy.; H. W. Pearson, treas.; H. W. Cheadle, mgr. Cap. stk. \$3,000,000. Shaft (developing).
" " "	Mesaba Chief Iron Co., 312, 313 Lyceum. I. A. Belding, pres.; A. T. Crossley, secy. and treas.; J. C. Mishler, v.-pres. Cap. stk. \$3,000,000. Mesaba Chief, hematite. Open pit. John Wallman, supt.
" " "	North Star Iron Co., Baltimore, Md., 69 Second st. Bernard N. Baker, pres.; Benj. Whiteley, secy. and treas.; D. H. Merritt, v.-pres. and mgr. Cap. stk. \$1,000,000. (Developing.)
" " "	Ohio Mining Co., 507 Chamber of Commerce Bldg. Jas. E. Campbell, pres.; Fred Barrett, secy. and mgr.; T. H. Pressnell, treas. Cap. stk. \$3,000,000. Soft hematite. Open pit, 150,000 tons; steam. Col. W. K. Wallace, supt.
" " "	The Pennsylvania Iron & Steel Co. of Minnesota, 509 Lyceum Bldg. Wm. C. Bond, pres.; Frank M. Zeller, secy.; Simon Clark, treas. Cap. stk. \$3,000,000. William Penn, hard and soft hematite. Open pit and shaft (developing). T. W. Wood, supt.
" " "	Sheridan Iron Co., 508 Barrows Block. R. H. Harris, pres.; C. E. Shannon, secy. and treas.; W. C. McComber, mgr. and supt. Cap. stk. \$1,000,000. Sheridan, red hematite. Shaft; steam.
" " "	Towanda Iron Co., 217 Chamber of Commerce. J. T. Hole, pres.; C. S. Morrow, secy.; B. T. Hole, treas.; John Sullivan, mgr. Cap. stk. \$300,000. Towanda, iron. Open pit (developing). Eric Brunell, supt.
" " "	Washington Iron Co., 421 Chamber of Commerce. Hon. T. B. Miller, pres.; M. W. Bates, secy.; Wm. B. Miller, treas.; James A. Boggs, mgr. Cap. stk. \$3,000,000. Washington. Open pit (developing). E. W. Barnes, supt.
Ely Ry. 230.	St. Louis Anderson Iron Co., Duluth, Minn. W. C. Sherwood, pres.; Charles T. Clement, secy. and treas.; James Bate, mgr. and supt. Cap. stk. \$1,000,000. Anderson Mine, bessemer. Shafts; steam.
" " "	Chandler Iron Co., Chicago, Ill., 1013 Bookery Bldg. C. P. Coffin, pres.; E. L. Merriman, secy.; H. S. Pickands, treas.; Joseph Sellwood, mgr. Cap. stk. \$1,000,000. Chandler, bessemer. Shafts, 500,000 tons; steam.
" " "	Pioneer Vermilion Iron Mining Co., Thomas Bardon, pres.; Wm. H. Phillips, secy. and treas. Pioneer Mine, red hematite bessemer. Shafts, steam. E. J. Gilbert, supt.
Grand Rapids. Ry. 231.	Itasca Mesaba Iron Mining Co., West Superior, Wis., 714 Tower av. A. G. Bernard, pres.; Conway C. Wyatt, secy. and mgr.; H. DeWitt, treas. Cap. stk. \$1,500,000. Mesaba, red hematite. Steam.
La Prairie Ry. 386.	Itasca Buckeye Iron Co., St. Paul, Minn., 601 Pioneer Press Bldg. James E. Campbell, pres.; Frank Barrett, secy.; W. W. Braden, treas.; E. W. Griffin, mgr. and supt. Cap. stk. \$3,000,000. Buckeye and Diamond, bessemer. Open pit; steam.
" " "	Columbus Mining Co., St. Paul, Minn., 601 Pioneer Press Bldg. Allen W. Thurman, pres.; Frank Barrett, secy. and mgr.; W. W. Braden, treas. Cap. stk. \$2,000,000. Thurman, bessemer. Shaft; steam.

## IRON—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, BLAST FURNACES, ETC., AND NAME OF MINE SUPERINTENDENT.
La Prairie (Continued.)	Itasen	Hoch-Hoehing Iron Co., St. Paul, Minn., 601 Pioneer Press Bldg. J. H. Baker, pres.; C. F. Nester, secy. and treas. Cap. stk. \$1,000,000. Lancaster, bessemer. Steam. J. H. James, supt.
McKinley	St. Louis (P. O. Duluth) Ry. 230.	McKinley Iron Co., Duluth, Minn., 14 Exchange Bldg. Wm. McKinley, pres.; A. G. McKinley, secy. and treas.; Immanuel McKinley, mgr. and supt. Cap. stk. \$5,000,000. McKinley Mine, bessemer, soft hematite. Shaft, 100,000 tons.
Merritt	St. Louis Ry. 230.	Bessemer Iron Co., Duluth, Minn., 33 Exchange Bldg. Geo. H. Claypool, pres.; Edward C. Jones, secy.; Wm. B. Silory, treas.; L. J. Hopkins, mgr. Cap. stk. \$3,000,000. Bessemer. Shaft and tunnel (developing). E. H. Jones, supt.
"	"	Chicago Iron Co., Duluth, Minn., 703 Palladio Bldg. O. D. Kinney, pres.; P. S. Bemis, secy.; J. T. Hale, treas.; Jas. Billings, v.-pres. and mgr. Cap. stk. \$5,000,000. (Developing.) N. F. Johnson, supt.
"	"	Cincinnati Mining Co., Duluth, Minn., 605-610 Lyceum Bldg. Jas. T. Hale, pres.; Frank Cox, secy.; Morris O. Brooks, treas. Cap. stk. \$3,000,000. Cincinnati, bessemer. Open pit; steam (developing). F. Florida, supt.
"	"	Hale Iron Co., Duluth, Minn., 211 Chamber of Commerce. Jas. T. Hale, pres. and mgr.; Jesse Norton, secy.; B. T. Hale, treas. Cap. stk. \$3,000,000. Hale, bessemer. Open pit (developing). E. Florida, supt.
"	"	Iron Cliff Mining Co., Duluth, Minn., 292 Palladio Bldg. Henry Keller, pres. and treas.; John R. Homes, secy.; Edgar Brown, mgr. Cap. stk. \$3,000,000. Iron Cliff, red hematite. Shafts; steam. Edgar Brown, supt.
"	"	P. L. Kimberly, Sharon, Pa. Biwabik, bessemer. Open pit; steam.
"	"	Towanda Iron Co., Duluth, Minn., 217 Chamber of Commerce. J. T. Hale, pres.; C. S. Morrow, secy.; B. T. Hale, treas.; John Sullivan, mgr. and supt. Cap. stk. \$3,000,000. Towanda, bessemer. Open pit; hand.
Mesaba	St. Louis Ry. 230.	Aurora Iron Co., Duluth, Minn., 703 Palladio Bldg. Geo. N. Bissell, pres.; P. S. Bemis, secy. and treas.; James Billings, mgr. Cap. stk. \$3,000,000. Aurora, W. A. Brandorf, supt.
"	"	Biwabik Mountain Iron Co., Duluth, Minn., Fargusson Bldg. Leonidas Merritt, pres.; E. H. Hall, secy. and treas.; John E. Merritt, mgr. Cap. stk. \$3,000,000. Biwabik, bessemer. Open pit. John G. Cohe, supt.
"	"	Great Northern Mining Co., Duluth, Minn., 503 and 504 Palladio Bldg. Alfred Merritt, pres.; G. L. Robbins, secy.; E. T. Merritt, treas.; J. A. Nichols, mgr. and supt. Cap. stk. \$3,500,000. Shaft and open pit; steam (developing).
"	"	Iron Belt Mining Co., Duluth, Minn., 419 Lyceum Bldg. Cap. stk. \$1,000,000. (Developing.)
"	"	Lake Superior Iron Co., Duluth, Minn., 419 Lyceum Bldg. W. F. Mattes, pres.; A. J. Trimble, secy.; Peter Deys, treas.; Frank Hibbing, mgr. Cap. stk. \$5,000,000. (Developing.)
"	"	Little Mesaba Iron Co., Minneapolis, Minn., 422-425 Lumber Exchange. R. W. Cavenaugh, pres.; E. F. Dodge, secy. and treas.; Geo. H. Dodge, mgr. Cap. stk. \$3,000,000. Red hematite, bessemer (developing).
"	"	Mesaba Iron Co., Duluth, Minn., 462 W. Superior st. Alex. Ramsey, pres.; W. W. Spalding, secy. and treas. Cap. stk. \$3,000,000. Magnetic and hematite (developing).
"	"	Oneota Iron Mining Co., Duluth, Minn., 302 Palladio Bldg. F. W. Merritt, pres.; Grant Wyatt, secy.; E. F. Clarke, treas.; John Fraser, mgr. and supt. Cap. stk. \$1,500,000. Oneota, red hematite. Shaft; hand (developing).
"	"	Republic Iron Co., Duluth, Minn., 45 Fargusson Bldg. P. M. Graff, pres.; F. W. Eaton, secy.; John G. Brown, treas. Cap. stk. \$3,000,000. Republic, hematite. Open pit. R. H. Fagan, supt.
"	"	Shaw Iron Co., Duluth, Minn., 518 Chamber of Commerce. Alfred Merritt, pres.; A. J. Talcom, secy.; A. R. Merritt, treas.; Capt. J. Carbis, mgr. and supt. Cap. stk. \$3,000,000. Shaw, red hematite, soft (developing).
"	"	The Swedish-American Iron Co., Duluth, Minn. C. A. Smith, pres.; N. A. Linderberg, secy.; John Peterson, treas. and mgr. Cap. stk. \$2,000,000. (Developing.)
Morse (Not a P. O.)	St. Louis Ry. Ely 230.	Central Vermillion Iron Co., St. Paul, Minn. Albert Scheffer, pres.; C. W. Cox, secy. and mgr.; Edward J. Hodgson, treas. Cap. stk. \$800,000. Central Vermillion. Shaft, 70,000 tons; steam.
Tower	St. Louis Ry. 230.	Nebewa Iron Co., Duluth, Minn., 115 and 117 E. Superior st. Christian H. Oppel, pres., mgr. and supt.; Herman H. Oppel, secy. and treas. Cap. stk. \$2,000,000. Nebewa, hard ore. Shaft and tunnel (developing).

## MANGANESE

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, BLAST FURNACES, ETC., AND NAME OF MINE SUPERINTENDENT.
Monticello	Wright Ry. 293.	J. N. Stacy & Co., J. N. Stacy, pres. and mgr.; Arthur S. Stacy, secy. and treas. Cap. \$5,000. Monticello, black oxide of manganese. Open pit (developing).

## STONE, MARBLE, GRANITE AND ONYX

LOCATION OF MINE OR QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE OR QUARRY, KIND OF STONE, KIND OF MINE OR QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STONE OR MARBLE MILLS, LIMEKILNS AND CAPACITY, ETC., AND NAME OF MINE SUPERINTENDENT.
Duluth Ry. 386.	St. Louis	Duluth Brown Stone Co., Room 7 Exchange Bldg. John H. Crowley, pres. and mgr.; W. W. Davis, secy. and treas. Cap. stk. \$30,000. Sandstone, open pit, 17,500 tons; horse. Peter Chefbred, supt. (Quarry in Douglas county, Wis.)
Jasper Ry. 87, 293, 143.	Pipe Stone	Sioux Valley Stone Co., J. M. Poorbaugh, pres. and mgr.; J. M. Bickel, secy.; C. L. Joy, treas. Cap. stk. \$1,000,000. Jasper, Pipestone, Galletson and Bayfield Quarries, gray granite. Slopes, 40,000 tons; steam; polisher and crusher. C. W. Douglas, supt.
Kasota Ry. 143, 150.	Le Sueur	C. W. Babcock & Co. Cap. \$75,000. Kasota, pink limestone. 35,000 tons; mill.
"	"	Matt. Breen Stone Works, St. Paul, Minn., 64 and 65 Germania Life Ins. Bldg. Thos. M. Breen, propr. Cap. \$50,000. Kasota, limestone. Open pit, 30,000 tons; steam; mill. David O. Alexander, supt.
Little Falls Ry. 529.	Morrison	Fordis Averill. Little Falls Granite Quarry, granite. Horse; mill.
N. Sioux Falls Ry. 87, 134.	Pipe Stone	North Sioux Falls Stone Co., Sioux Falls, S. Dak., Mulhall Bk. T. B. McMartin, pres.; W. G. McKennan, secy., treas. and mgr. Cap. stk. \$100,000. North Sioux Falls Stone Quarry, jasper. Open pit; steam. E. H. Gates, supt.
"	"	Northern Stone Co., Chicago, Ill., 505 Chamber of Commerce Bldg. Wm. F. Reynolds, pres.; Lewis Reynolds, secy.; Chas. Reiterman, treas. Cap. stk. \$80,000. Northern, jasper stone. Open pit and slope, 30,000 tons; steam.
Ortonville Ry. 141.	Big Stone	James Baxter & Son, Minneapolis, Minn., 2845 Aldrich av. S. Cap. \$50,000. Ortonville Red Granite Quarry, red granite. Slope, 10,000 tons; steam; mill.
Pipe Stone Ry. 87, 141, 143, 293.	Pipe Stone	Pipe Stone Quarry Co., L. H. Moore, pres.; H. E. Corbett, secy. and treas.; L. Moore, mgr. Stone. Open pit, hand and horse.
Red Stone P. O. and Ry. New U'm 150.	Nicollet	New U'm Stone Co., Otto Shell, secy.; Jacob Pfenniger, treas.; Werner Bosch, mgr. Cap. stk. \$10,000. Red Stone Quarry, granite. Open pit, 800 tons; hand. Christ Holzenberg, supt.
St. Cloud Ry. 293, 529, 721.	Stearns	Anderson & Co., John Anderson, pres.; Emil Borwig, secy.; Louis Hundstad, treas.; Bent Borwig, mgr. Cap. stk. \$85,000; Indv. cap. \$5,000. Gray granite. 1,000 tons; horse.
"	"	Drake Co., St. Paul, Minn., 359 Drake Block. Drake's, red granite. Open pit; steam and horse; mill.
"	"	A. Gustafson. Granite. Open pit; horse.
"	"	G. J. Hilder, P. O. Box 1001. Cap. \$5,000. Granite. Open pit, 8,000 tons; steam, horse.
"	"	Holes Bros. Cap. \$7,500. Red Block Granite Quarry, red granite. Open pit, horse.
"	"	Matt. Breen Stone Works, St. Paul, Minn., 64 and 65 Germania Life Ins. Bldg. Thomas M. Breen, propr. Cap. \$50,000. St. Cloud, granite. Open pit, 30,000 tons; steam, mill. John Clark, supt.
"	"	Minnesota Granite & Polishing Co., Minneapolis, Minn., 335 Boston Block. Cap. \$25,000. Granite. Steam; mill.
"	"	Minnesota State Reformatory. D. E. Myers, supt. Minnesota State Reformatory Quarry, red and gray granite.
"	"	St. Cloud Granite Co., 507 Nineteenth av. N. Daniel Fearon, secy.; Samuel T. Doyle, treas. Cap. stk. \$7,000. St. Cloud Granite Co.'s Quarry, pink granite. Open pit, slope, 999 tons; horse.
Smedes Forest P. O. and Ry. Belview 456.	Redwood	Rock Valley Granite Co., Minneapolis, Minn., 21 Chamber of Commerce Bldg. L. D. Welsh, mgr. Rock Valley, granite. Open pit, mill.
Wassioja Ry. 144.	Dodge	Wassioja Stone Co., Dodge Centre, Minn. Frank A. Day, pres.; W. B. Parsons, secy. and treas.; J. A. Green, mgr. Cap. stk. \$60,000. Limestone. Slope, 10,000 tons; horse. C. W. Harter, supt.

SEE ALSO SUPPLEMENTARY LIST

## MISSISSIPPI

## STONE, MARBLE, GRANITE AND ONYX

LOCATION OF MINE OR QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE OR QUARRY, KIND OF STONE, KIND OF MINE OR QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STONE OR MARBLE MILLS, LIMEKILNS AND CAPACITY, ETC., AND NAME OF MINE SUPERINTENDENT.
Vicksburg Ry. 406, 458, 533.	Warren	Gunning Gravel Paving Co., J. H. Gumbatz, pres.; Geo. H. Rigby, secy. and treas.; Jos. P. Roach, v.-pres. Cap. stk. \$100,000. Gunning, gravel. Open pit; steam and hand (developing).

## MISSOURI

## BARYTES

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, BLAST FURNACES, ETC., AND NAME OF MINE SUPERINTENDENT.
Blackwell . . . . . St. Francois Ry. 714.		Hawkins & McGready, Cap. \$10,000. Barytes.
Osage City . . . . . Cole Ry. 461.		R. M. Marshall, Tusculumbia, Mo. Barytes. Slope, 2,000 tons; hand.
Spring Garden . . . . Miller Ry. 490.		E. A. Becker. Barytes. Open pit, 2,500 tons; horse; hand. T. Gaither, supt.

## COAL—BITUMINOUS

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, COKE OVENS, AND NAME OF MINE SUPERINTENDENT.
Amoret . . . . . Bates Ry. 352.		Blue Lick Coal Mining Co., Kansas City, Mo., 5 Bunker Bldg. Cap. \$1,000. Crescent, Oak Ridge. Slope, open pit, 60,000 tons; horse. George W. Bozzell, supt.
" . . . . . "		Hocker Co. Brayton. Open pit, 1,700 tons; horse, steam. I. B. S. Dunn, supt.
Arcadia . . . . . Iron Ry. 460.		S. E. Marshall (local). Cap. \$300. Peacock coal. Open pit; hand.
Arrow Rock . . . . . Saline Ry. 461.		Frank Alexander (local). Flat Creek. Open pit, 200 tons.
Arthur . . . . . Vernon Ry. 460.		Frank Williams & Co. Cap. \$8,000. Arthur. Open pit, drift, 11,000 tons; horse. Frank Williams, supt.
Aullville . . . . . La Fayette Ry. 460.		E. P. Crumply. Cap. \$1,000 (local). Aullville. Slope, 240 tons; hand.
" . . . . . "		S. J. Fitzgerald. Cap. \$1,000. Slope, 300 tons; horse.
Bevier . . . . . Macon Ry. 305.		Bevier Black Diamond Coal Co. W. H. Loomis, prest. and mgr.; W. S. Watson, treas. and mgr. Cap. stk. \$100,000. Bevier Black Diamond. Shaft, 9,500 tons; steam. L. Bradford, supt.
" . . . . . "		Loomis Coal Co. W. H. Loomis, prest. and mgr.; L. J. Loomis, secy. and treas. Cap. stk. \$500,000. Shaft, 200,000 tons; steam. Thomas Francis, supt.
" . . . . . "		Oakdale Coal & Mining Co., St. Joseph, Mo., 108 S. Seventh st. J. W. Atwill, prest., treas. and mgr.; C. F. Atwill, secy. Cap. stk. \$15,000. Oakdale. Shaft, 51,550 tons; steam. J. D. Collins, supt.
" . . . . . "		Watson Coal Mining Co. W. S. Watson, prest. and treas.; E. F. Bennett, secy.; J. W. Watson, mgr. and supt. Cap. stk. \$25,000. Watson. Shaft, 36,000 tons; steam.
Birch City (P.O. Amoret) Ry. 352.	Bates	Bates County Cooperative Coal Co., Amoret, Mo. N. Wallace, prest.; S. P. Demming, secy.; J. C. Rankin, treas. Cap. stk. \$10,000. Birch City. Shaft, 30,000 tons; steam. W. H. Grisehele, supt.
Blackbird . . . . . Putnam Ry. Unionville 133.		Blackbird Coal Co. C. W. Lane, prest.; Geo. W. Jordan, secy. and treas.; Wm. Love, mgr. and supt. Cap. stk. \$20,000. Shaft, 8,400 tons; steam.
Boonville . . . . . Cooper Ry. 459, 460.		Missouri Valley Coal & Mining Co. C. E. Andrews, prest.; C. J. Burger, secy., treas. and mgr. Cap. stk. \$250,000. Missouri Valley. Shaft, 8,000 tons; steam. J. Reih, supt.
Boston . . . . . Barton Ry. 490.		Ephraim Strukey (local). Open pit, 60 tons; hand, horse.
Bronaugh . . . . . Vernon Ry. 460.		J. C. Lucas. Cap. \$2,000. Vernon. Open pit, 3,500 tons; horse, hand. L. M. Lucas, supt.
Brookfield . . . . . Lim Ry. 305.		Bernard Schaefer (local). Cap. \$1,200. Schaefer. 1,515 tons; horse.
Brownington . . . . Henry Ry. 353.		Dunlap Coal Co. R. P. Dunlap, secy. Shaft, open, 350,000 tons; horse. John White, supt.
Brown's Station . . . . Boone Ry. 784.		Isaac R. Davy (local). Open pit, 100 tons; hand.
Brush Hill . . . . . Johnson (P. O. Dunksburg) Ry. La Monte 400.		George W. Strickland (local). Tunnel, 102 tons; hand.
Bumerton . . . . . Copper Ry. 460.		A. Palmberg (local). Cap. \$10,000. Stephens. Shaft, 3,000 tons; horse.
Calhoun . . . . . Henry Ry. 460.		Baldwin & Fonda. A. P. Fonda, prest.; James Lenartz, secy.; Henry Baldwin, treas. Cap. stk. \$40,000. Gedney. Shaft, 50,000 tons; steam. John Cobal, supt.
Camden . . . . . Ray Ry. 26, 784.		Bovard-Brown Coal Co., Kansas City, Mo., 2114 Grand av. Benjamin Lusk, prest. and treas.; J. Q. Brown, secy.; Geo. H. Lockwood, mgr. Cap. stk. \$18,000. No. 3. Shaft, 1,500 tons; steam. W. H. Teegardin, supt.
" . . . . . "		William Hensley (local). Cap. \$300. Craven. Shaft, 500 tons; steam.
" . . . . . "		Richmond Coal Co., Richmond, Mo., J. S. Hughes, prest.; H. M. Hughes, secy.; G. A. Hughes, treas. Cap. stk. \$100,000. Camden. Shaft, 75,000 tons; steam. John Gibson, supt.

## COAL BITUMINOUS (CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, CORE OVENS, AND NAME OF MINE SUPERINTENDENT.	
TOWN	COUNTY.		
Carbon Center	Vernon	E. N. Hurst (local). Cap. \$1,500.	Banyham. Open pit, 50 tons; hand. J. B. Salsman, supt.
			Ry. 348.
		Salsman & Scott. Cap. \$1,000.	Carbon. Open pit, 6,000 tons; hand. J. B. Salsman, supt.
Cedarville	Dade	William Brown (local). Cap. \$1,000.	Shoemaker. Slope, open pit, 200 tons; hand.
			Ry. Golden City 348.
Centralia	Boone	Henry Oldham. Scullick. Shaft, 500 tons; horse.	
			Ry. 145, 784.
		Wiley & Sons (local). Shaft, 400 tons; horse.	Frank Wiley, supt.
Clinton	Henry	B. L. Owen. Cap. \$300.	Shaft, 1,250 tons; horse.
			Ry. 348, 353, 450.
Contsville	Schuyler	W. F. James, P. O. Box 775. Cap. \$10,000.	Slope. C. C. Cox, supt.
			Ry. 784.
		A. Mock & Bros. (local). Cap. \$200.	Tunnel, 320 tons; hand.
Columbia	Boone	B. S. Benefield (local). Slope, 1,200 tons; hand; horse.	
			Ry. 784.
		James W. Gaither. Cap. \$1,000.	Drift, open pit, 500 tons; hand.
		W. A. Goodling (local). Cap. \$1,000.	Shaft, 4,800 tons; horse. Enoch Morgan, supt.
		D. W. B. Kurtz (local). Slope, 800 tons; horse.	
Concordia	La Fayette	A. F. Kresse (local). Slope, 500 tons.	
			Ry. 460.
Corder	La Fayette	Corder Coal & Coke Co. P. M. Gaw, prest.; H. G. Smith, secy., mgr. and supt.; A. E. Alsbury, treas.	
		Cap. stk. \$5,000.	Corder. Shaft, 30,000 tons; steam.
Cretcher	Saline	Esther Pittman (local). Slope; hand.	
			Ry. Marshall 145.
		A. Van Buskirk (local). Tunnel.	
Danforth	Adair	Pennsylvania Coal Co., Kirksville, Mo. H. C. McCahan, mgr. Danforth. Shaft, 10,000 tons; steam.	
		John Dawson, supt.	
Deepwater	Henry	W. S. Dickey Clay Mfg. Co., Kansas City, Mo., 800 New York Life Bldg. W. S. Dickey, prest.; K. L. Dickey, secy.; A. E. Dickey, mgr.	Slope, 30,000 tons; steam, electricity.
			Ry. 348.
		J. W. Hurst. Cap. \$2,000.	Cooper Creek. Slope, shaft, 3,000 tons.
		Keith & Perry Coal Co., Kansas City, Mo., 208 Walnut st. R. H. Keith, prest.; E. E. Riley, secy.; David Mackle sr., treas. and supt.; John Perry, v.-prest. and mgr. Cap. stk. \$800,000.	Shafts, 150,000 tons; steam.
Dover	La Fayette	Dover Coal Co., Lexington, Mo. Tilton Davis, prest., treas. and mgr.; H. McLaughlin, secy. Cap. stk. \$100,000.	Dover. Drift, 20,000 tons; hand.
Dunksburg	Pettis	Thomas Searam (local). Open pit, 200 tons; hand.	
			Ry. La Monte 460.
Eldon	Miller	C. B. Burnham (local), St. Louis, Mo., 620 North 8 second st. Eldon. Slope, 138 tons; horse. Louis Rusk, supt.	
			Ry. 460.
Elko	Putnam	Martin Pierigo (local). Tunnel, 82 tons; hand.	
			Ry. Unionville 133.
Elston	Cole	George H. Leach. Cap. \$1,500.	Elston. Shaft, 2,000 tons; horse.
			Ry. 460.
Esrom	Barton	O. C. Blacker (local). Open, 500 tons; horse.	
			Ry. Lamar 348, 460.
Foster	Bates	A. Skillman. Open pit, 7,500 tons; horse and hand.	
			Ry. 460.
		Western Coal & Mining Co., St. Louis, Mo., Sixth and Locust sts. Edwin G.uld, prest.; D. S. H. Smith, secy. and treas.; R. M. McDowell, v.-prest. and gen. mgr. Cap. stk. \$1,000,000.	No. 3. Shaft, slope, 150,000 tons; steam. W. B. Williams, supt.
Fulton	Callaway	Wm. Castle (local). Cap. \$1,000.	Slope, 1,000 tons; hand.
			Ry. 145.
		A. Harris & Co. Cap. \$1,000.	Crews. Shaft, 4,272 tons; horse.
		John Harris. Cap. \$1,000.	Shaft, 20,000 tons; horse.
		A. Holmes (local). Cap. \$300.	Tunnel, 2,000 tons.
		Samuel Maycock (local). Cap. \$200.	Carbon Valley. Drift, 1,000 tons; horse.
		James Smith. Cap. \$15,000.	Tunnel, 4,000 tons; horse.
Guthrie	Callaway	R. M. Henderson (local). Criswell. Tunnel, 60 tons; hand.	
			Ry. 145.
Hamilton	Caldwell	Caldwell Coal Co. E. B. Hayden, prest.; C. A. Dedrick, secy. and treas.; Wm. Hall, mgr. and supt. Cap. stk. \$700,000.	Caldwell. Shaft, 24,000 tons; steam.
			Ry. 303, 305.
		Hamilton Coal Co. R. S. Cash, prest.; Ralph Booth, secy.; John N. Morton, treas. Cap. stk. \$25,000.	Tom Creek. Shaft, 18,000 tons; steam. Joseph McCourt, supt.
Hardin	Ray	Fred Buehlinger (local). Kellenburger. Tunnel, 88 tons; hand.	
			Ry. 26, 784.
		H. A. Dickson & Son (local). Northern. Shaft, 10,900 tons; horse.	

## COAL—BITUMINOUS—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, COKE OVENS, AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Hardin..... Ray (Continued.)	Joseph Huston (local). Hardin. Drift, 261 tons; hand.
"..... "	William Phillips (local). Drift, 152 tons; hand.
Harrisburg..... Boone Ry. Sturgeon 784.	T. H. Blakeman (local). Open pit, 120 tons; hand.
Higbee..... Randolph Ry. 145, 459.	Higbee Coal & Mining Co. A. J. Lessley, prest.; S. Lessley, secy. and treas.; Wm. Walton, mgr. and supt. Cap. stk. \$50,000. Shaft, 51,000 tons; steam.
"..... "	Interstate Mining Co. John S. Elliott, prest.; Wm. Walton, secy. and supt.; John Cosgrove, treas. Cap. stk. \$50,000. Shaft, 100,000 tons; steam.
Higginsville, La Fayette Ry. 440.	J. D. Bruce, Kansas City, Mo., 1304 W. Eleventh st. Cap. \$5,000. Planters. Shaft, 12,000 tons; horse. Matthew Breckenridge, supt.
"..... "	Excelsior Coal & Coke Co. S. B. Whiting, prest.; A. E. Asbury, secy. and treas.; J. H. Campbell, mgr. and supt. Cap. stk. \$5,000. Shaft, 15,240 tons; steam.
"..... "	Hagood Coal Co. J. B. Hagood, prest.; J. E. Gann, mgr. Cap. stk. \$1,800. Hagood. Shaft, 6,000 tons; horse. James Gilkey, supt.
"..... "	Hawkins & Smith. Cap. \$3,500. Shaft, 4,000 tons; horse. John Hughes, supt.
"..... "	E. Huffman (local). Slope, 900 tons; hand.
"..... "	Steady & Fowler Coal Co. Shaft, 20,000 tons; horse.
"..... "	J. E. Wilks. Cap. \$3,000. Hawkins. Shaft, 4,000 tons; horse. John Hughes, supt.
"..... "	Winsor Coal Co., Lexington, Mo., 100 Main st. Cap. \$80,000. Winsor. Shaft, 25,000 tons; steam. H. W. Winsor, mgr. and supt.
Hume..... Bates	E. H. Thurman (local). Open pit, 2,200 tons; horse.
Huntsville..... Randolph Ry. 784.	J. S. Burk (local). Slope; horse.
"..... "	E. Edwards (local). Drift; hand.
"..... "	T. M. Elmore. Cap. \$7,000. Shaft, 20,000 tons; steam.
"..... "	John Lowes. Tunnel, 1,965 tons; hand.
"..... "	Randolph County Coal Co. John Breckenridge, propr. Cap. stk. \$30,000. Shaft, drift, 100,000 tons; steam. J. W. Pattimore, supt.
"..... "	James B. Reach. West End. Slope, 455 tons. J. W. T. Rucker, supt.
"..... "	Woodard Coal & Mining Co. G. H. Shields, prest.; E. J. Bedford, mgr. and supt. Cap. stk. \$50,000. Woodard. Shaft; steam.
Jerico..... Cedar Ry. Fair Play 348.	John S. Cole (local). Cap. \$1,000. Drift, 1,000 tons; hand.
"..... "	A. B. Davis (local). Tunnel, 150 tons; hand.
Kansas City..... Jackson Ry. 26, 145, 141, 142, 305, 348, 351, 352, 353, 354, 355, 460, 461, 776, 784.	Kansas City Clay & Coal Co., Room 301 American Bank Bldg. William Vineyard, prest.; J. W. Perry, secy. and treas.; John A. Gallaher, v.-prest., mgr. and supt. Cap. stk. \$100,000. Shaft; steam, electricity (developing).
Kirksville..... Adair Ry. 613, 784.	D. C. Scott (local). Hazel Creek. Shaft, 900 tons; horse.
Knobnoster..... Johnson Ry. 460.	Thomas H. Boyd & Sons. Cap. \$10,000. Shaft, 7,000 tons; steam.
"..... "	John F. House. Cap. \$5,000. Boise Clearfork. Slope, 200 tons; horse.
Ladsonia..... Audrain Ry. 145.	C. P. Easton (local). Shaft, 75 tons; horse.
"..... "	Owen Lynch (local). Shaft, 160 tons; horse.
Lamar..... Barton Ry. 348, 460.	Wilson Clark. Cap. \$1,500. Slope, 10,350 tons. J. H. Beker, supt.
"..... "	George Glaze (local). Open pit; horse, hand.
"..... "	Kimball & Geivett (local). Open pit, 200 tons.
"..... "	Basli D. Hays (local). Cap. \$200. Tunnel, 80 tons; horse.
"..... "	O. Peterson (local). Drift, open pit, 50 tons; horse.
"..... "	M. M. Spear (local). Open pit, 450 tons; horse, hand.
"..... "	Mattie B. Spring (local). Tunnel, open pit, 30 tons; hand.
"..... "	J. C. Stardevant. Cap. \$6,000. Open pit, 250 tons; horse, hand.
Lewis Station..... Henry	Coöperative Coal & Mining Co. L. W. Good, prest. and mgr.; John Good, secy.; H. F. Faris, treas. Cap. stk. \$10,000. Coöperative. Shaft, 20,000 tons; steam. J. A. Johnson, supt.
"..... "	D. B. Pigz Coal & Mining Co. Cap. stk. \$5,000. Drift, 5,000 tons; hand.
"..... "	Tebu Coal Co. W. C. Bronaugh, prest.; John Bowen, secy.; F. W. Bronaugh, treas.; R. Bowen, mgr. and supt. Cap. stk. \$5,000. Shaft, 15,000 tons; steam.
Lexington..... La Fayette Ry. 26, 460.	Bell & Greer. Cap. \$10,000. Tunnel, 4,000 tons; hand. W. H. Greer, supt.
"..... "	Thomas Clark (local). Cap. \$2,000. Clark. Drift, 1,800 tons; hand. Thomas Kelley, supt.



## COAL—BITUMINOUS—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, CORE OVENS, AND NAME OF MINE SUPERINTENDENT.
TOWN	AND COUNTY.	
Lexington	LaFayette (Continued.)	Kelley Coal Co. (local). Slope, 500 tons; horse. F. G. Kelley, supt.
"	"	Joe Kist (local). Kist. Tunnel, 1,000 tons; hand.
"	"	Lexington Coal Mining Co., St. Louis, Mo., Equitable Bldg. Edwin Gould, pres.; D. S. H. Smith, secy. and treas.; R. M. McDowell, mgr. Cap. stk. \$300,000. McDowell, Riverton and 4 others. Shaft, drift, 150,000 tons; steam, horse, hand. M. W. Serat, supt.
"	"	J. C. McGrew. Cap. \$100,000. Drift, shaft, 20,000 tons; steam. Wm. Parks, supt.
"	"	Henry Macey, Kansas City, Mo., 1619 Baltimore av. Cap. \$200,000. Tunnel, 17,500 tons; hand. Joseph Perry, supt.
"	"	Missouri River Coal Mining Co. J. B. Silver, pres., treas., mgr. and supt. Cap. stk. \$30,000. Silver mine. Shaft, 1,000 tons; steam.
"	"	Morrison Bros. (local). Cap. \$1,000. Drift, 3,500 tons.
"	"	Thomas Walton. Cap. \$3,000. Walton. Drift, 4,000 tons; hand. Samuel Spruce, supt.
Liberal Ry. 348, 460.	Barton	Liberal Coal Co., J. G. Todd, pres., mgr. and supt.; J. H. Todd, secy.; Wm. D. Thompson, treas. Cap. stk. \$15,000; indy. cap. \$1,000. Liberal. Tunnel, 12,000 tons; horse.
"	"	M. H. Lucas (local). Drift, 80 tons; hand.
"	"	H. J. Whitesell. Cap. \$20,000. Open pit, 15,000 tons.
Lingo Ry. 305.	Macon	Little Pittsburg Coal Co., Kansas City, Mo., New York Life Bldg. O. D. French, pres.; J. H. Owens, secy. and treas. Cap. stk. \$30,000. Shaft. A. G. French, supt.
McCredie Ry. 145.	Callaway	J. S. Henderson (local). Henderson. Shaft, 100 tons; horse. Phillip Reynolds, supt.
"	"	Reynolds & Allen (local). Shaft, 400 tons; horse.
Mayview Ry. 145.	La Fayette	Mayview Coal Co. Cap. stk. \$6,000. Strasburg. Shaft, 5,000 tons; steam. T. C. Wilson, mgr. and supt.
Mendota Ry. 133.	Putnam	Mendota Coal & Mining Co., P. H. Ketchum, pres.; H. B. Scott, secy. and treas. Cap. stk. \$100,000. Mendota. Slope, 150,000 tons; steam. B. H. Johnson, supt.
"	"	Pearl Coal & Mining Co., St. Joseph, Mo., 1101 Frederik av. Cap. stk. \$5,000. Pearl. Shaft, 10,000 tons; horse. Howell Price, mgr. and supt.
Milan Ry. 135, 613.	Sullivan	Milan Land & Coal Mining Co., E. Ritze, pres.; George F. Collins, secy.; John S. Poole, treas. Cap. stk. \$5,000. Milan. Shaft, 15,000 tons; steam. Daniel Ruckman, supt.
Milford Ry. Lamar 348, 460.	Barton	J. W. Dixon. Dixon. Tunnel, 300 tons; hand, horse.
"	"	W. H. Perry (local). Tunnel; hand.
"	"	G. G. Ryan (local). Tunnel; hand.
Milo Ry. 460.	Vernon	W. T. & B. E. Ferry (local). Open pit, 3,000 tons; horse. B. E. Ferry, supt.
Minden Mines Ry. 348, 460.	Barton	Wear Coal Co., Topeka, Kan., 110 W. Sixth st. T. E. Wear, pres.; T. G. Wear, v.-pres.; N. S. Wear, secy. Cap. stk. \$50,000. No. 1. Shafts, 90,000 tons; steam. A. B. Kirkwood, supt.
"	"	Western Coal & Mining Co., St. Louis, Mo., Sixth and Locust sts. Edwin Gould, pres.; D. S. H. Smith, secy. and treas.; R. M. McDowell, v.-pres. and gen. mgr. Cap. stk. \$1,000,000. Minden, Nos. 1 and 4. Shaft, slope, 125,000 tons; steam. Josiah Lane, supt.
Moundville Ry. 460.	Vernon	John Brown. Open pit, 1,600 tons.
"	"	J. M. Devore & Co. Cap. stk. \$1,500. Shaft, 100 tons; horse. J. M. Devore, supt.
"	"	John Moore (local). Moore. Open pit, 200 tons; hand.
"	"	W. T. Powell (local). Powell. Shaft; horse.
Mt. Carmel Ry. Vandalla 145.	Audrain	O. J. Detienne (local). Shaft, 400 tons; horse.
Napoleon Ry. 460.	La Fayette	Napoleon Coal & Mining Co., T. L. Williamson, pres.; S. Gates, treas.; J. H. Duffendaek, mgr. Cap. stk. \$8,000. Gates. Shaft, 12,800 tons; horse.
Nashville Ry. Opolis, Kan. 720.	Barton	John C. Ferguson. Open pit, 100 tons; horse. Fred Ferguson, supt.
Norborne Ry. 26, 784.	Carroll	Hartwel, Arnold & Co. (local). Cap. stk. \$50,000. Rushville. Slope, 5,000 tons; hand. J. W. Turner, mgr. and supt.
North Ry. Clinton 348, 353, 450.	Henry	Woods & North Coal Co., Kansas City, Mo., Twentieth st. and Lydia av. M. G. Manley, pres.; W. S. Woods, secy. and mgr.; F. J. Tygard, treas. Cap. stk. \$125,000. Jordan. Shaft, steam. Roland Thomas, supt.
Oscola Ry. 348, 353.	St. Clair	William Watkins (local). Johnson. Slope, 18 tons; hand.
Perche Ry. Sturgeon 784.	Boone	J. W. Stone (local). Open pit, 50 tons.
Perry Ry. New London 719.	Balls	E. S. Boulware (local). Open pit, 280 tons; hand.
"	"	J. S. Evans (local). Tunnel, open pit; horse, hand.
"	"	John Russell (local). Russell. Open pit, 240 tons; hand.
Persia (P. O. Harrisburg) Ry. Sturgeon 784.	Boone	W. A. Stidham (local). Slope, 200 tons; hand.

## COAL—BITUMINOUS—(CONTINUED)

LOCATION OF MINE. RAILWAYS, WATER ROUTES AND SHIPPING POINT.			NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, COKE OVENS, AND NAME OF MINE SUPERINTENDENT.	
TOWNS	AND	COUNTY.		
Persinger		Boone	Columbia Coal Mining Co., Columbia, Mo.	A. Rees, pres.; M. W. Rees, secy. and treas. Cap. stk. \$10,000
			Persinger. Shaft, 12,000 tons; horse.	T. Ross, supt.
Quitman		Nodaway	R. Harris. Cap. \$5,000. Shaft, 175 tons; horse.	
"		"	W. R. Holt and others. Slope, tunnel; horse, hand.	
"		"	Kessinger Co. Cap. stk. \$5,000. Farmer. Shaft, 1,200 tons; horse.	
"		"	G. W. Nelson (local). Collins. Slope, 100 tons.	
"		"	Nicholas Bros. (local). Shaft, 1,200 tons; horse.	
"		"	Pearson Bros. Cap. \$1,000. Pearson. Slope, 1,000 tons; hand.	
"		"	N. Roberts. Quitman. Shaft; horse.	
Randolph		Clay	Randolph Coal & Gas Co., Kansas City, Mo., Seventh and Wyandotte sts.	E. L. Martin, pres.; Oliver C. Hutchinson, secy. and mgr.; M. B. Wright, treas. Cap. stk. \$200,000. Randolph. Shaft, 52,500 tons; steam; hand. Morgan Meredith, supt.
Renick		Randolph	Renick Coal Co., S. M. Forrest, pres.; J. A. Maxwell, secy.; J. R. Miles, treas.; E. L. Hubbard, mgr. and supt. Cap. stk. \$10,000. Renick. Shaft, 5,500 tons; steam, hand.	
Rich Hill		Bates	R. E. Allen. Cap. \$3,000. Slope, 4,570 tons; hand.	
"		"	Wallace Bruce. Cap. \$10,000. Slope, 20,000 tons; horse.	
"		"	Keith & Perry Coal Co., Kansas City, Mo., 906 Walnut st.	R. H. Keith, pres.; E. E. Riley, secy.; David Markie st., treas. and supt.; John Perry, v.-pres. and mgr. Cap. stk. \$800,000. Shafts, 150,000 tons; steam.
"		"	Rich Hill Coal Mining Co., St. Louis, Mo., Sixth and Leunst sts.	Edwin Gould, pres.; D. S. H. Smith, secy. and treas.; R. M. McDowell, v.-pres. and gen. mgr. Cap. stk. \$50,000. Rich Hill. Shaft, drift, 550,000 tons; steam. Joseph T. Reavley, supt.
"		"	J. M. Seawell & Co., Kansas City, Mo., Eighth and Wyandotte sts.	J. M. Seawell, pres. and mgr.; M. Allen, secy. and treas. Cap. stk. \$20,000. McComb. Open pit, 12,000 tons; hand. S. M. Talbot, supt.
Richmond		Ray	Barnal Coal Co. Cap. \$15,000. No. 10. Shaft, 24,000 tons; horse. John W. Hubbell, supt.	
"		"	William Pence. Cap. \$800. Black Diamond. Shaft, 2,300 tons; horse.	
"		"	A. F. Rankin & Co. Cap. stk. \$5,000. Slope, 11,520 tons; horse.	
"		"	Richmond Coal Co. J. S. Hughes, pres.; H. M. Hansen, secy.; G. A. Hughes, treas. Cap. stk. \$100,000. Richmond. Shaft, 75,000 tons; steam. John Gibson, supt.	
Sedalia		Pettis	Sedalia Mining & Prospecting Co. Room 27 Dempsey Bldg. J. G. White, pres.; Jonathan Myers, secy.; F. W. Shultz, treas.; G. M. Babcock, mgr. and supt. Cap. stk. \$50,000. Bushy Valley. Shaft, slope, 2,000 tons; steam.	
Sheldon		Vernon	W. G. Gonterman (local). Little Black Diamond. Slope, 320 tons; horse.	
Slater		Saline	Isaac Breggs (local). Cap. \$750. Slope, 200 tons; hand. Robert Murphy, supt.	
"		"	Wm. S. Hedger (local). Open pit, 200 tons; hand.	
"		"	Barney Hunter. Slope, 40 tons; hand.	
"		"	R. P. Thompson (local). Cap. \$2,500. Slope, 160 tons; hand.	
Stahl		Adair	Harriott Bros. (local). Drift; hand.	
"		"	Jacob Ledford. Cap. \$500. Drift, 900 tons; hand.	
Stephens' Store		Callaway	W. M. Guy (local). Shaft, 250 tons; horse.	
"		"	William Oldham. Shaft, 340 tons; horse.	
Swanwick		Ray	Williams Coal Co., St. Joseph, Mo., cor. Sixth and Anguille sts.	R. J. Williams, pres., mgr. and supt.; John A. Ross, secy. and treas. Cap. stk. \$5,000. Swanwick. Shaft, 10,000 tons; horse.
Sweet Springs		Saline	H. H. Marmaduke. Cap. \$1,500. Shaft, 4,000 tons; horse. Sherman Hersley, supt.	
Sylvania		Dade	A. Leonard (local). McGarvey. Slope, 6,000 tons; horse.	
"		"	Robert McCluey (local). McCluey. Set-tons. Slope, tunnel, 800 tons; horse, hand.	
"		"	R. W. Sharp (local). Star. Slope, 600 tons; horse.	
Thomas Hill		Randolph	Joseph Milburn & Sons. Cap. stk. \$2,000. Milburn. Shaft, 760 tons; horse.	
Vandalia		Andrain	Vandalia Coal Co. William Bevan, pres.; W. K. Williams, secy.; R. W. Fryar, treas.; D. L. Stacy, mgr. and supt. Cap. stk. \$15,000. Shaft, 30,000 tons; steam.	
"		"	Vandalia Fire Brick Co. S. D. Ely, pres.; J. E. Conzly, secy.; C. G. Daniels, treas. Cap. stk. \$10,000. Shaft, 5,000 tons; steam. John Dabston, mgr. and supt.	
Verdelia		Barton	William Jones (local). Open pit, 800 tons.	
Versailles		Morgan	Davidson & Neilson (local). Slover. Tunnel. A. F. Davidson, supt.	
"		"	Samuel Martin (local). Martin. Shaft, 200 tons; steam.	

## COAL—BITUMINOUS (CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, CORE OVENS, AND NAME OF MINE SUPERINTENDENT.
TOWN	AND COUNTY.	
Victor	Monroe Ry. Mexico 145, 784.	L. Hughes (local). Cap. \$6,000. Open pit, 1,000 tons.
Vista	St. Clair Ry. 348.	G. A. Vannice, Vista. Slope, 1,200 tons; horse.
Walkor	Vernon Ry. 459.	C. B. Crawford. Cap. \$4,000. Open pit, 800 tons; horse.
"	"	Hunter Bros. (local). Open pit, 100 tons.
"	"	W. H. Prewitt (local). Open pit, 150 tons; horse, hand.
Warrensburg	Johnson Ry. 469.	D. A. Bullock (local). Slope, 1,000 tons; hand.
"	"	A. W. MacEae. Slope, 1,800 tons; hand.
"	"	M. B. Melly (local). Cap. \$1,000. Melly. Slope, 1,600 tons; hand. Henry Allen, supt.
"	"	Warrensburg Electric Street Co. Slope, 2,000 tons; hand. A. S. Kenyon, supt.
"	"	Benjamin F. Wood. Slope, 1,500 tons; hand.
Waverly	La Fayette Ry. 469.	Waverly Coal & Mining Co. James Grant, pres., J. H. Crosswhite, secy. and treas., F. E. Downs, mgr. Cap. stk. \$5,000. Shaft; steam (developing).
Wellington	La Fayette Ry. 469.	Andrew Carter (local). Cap. \$2,500. Draft, 500 tons.
"	"	Wellington Coal Co. M. V. L. McIelland, pres. and mgr.; J. J. Andrew, secy. and treas. Cap. stk. \$100,000. Shaft, 5,000 tons; steam, horse. M. V. L. McIelland, supt.
Wellsville	Montgomery Ry. 784.	Henry Whitehead (local). Shaft, 300 tons; horse.
Windsor	Henry Ry. 459.	J. W. Shook (local). Hines. Shaft, 240 tons; horse. Jesse Dodson, supt.
Worcester	Andrain Ry. Mexico, 145, 784.	Robbins-Matthew (local). Cap. \$3,000. Range. Open pit, 200 tons; hand.
World	Bates Ry. 352-469.	L. Baldwin (local). Cap. \$500. Live Oak. Open pit, 800 tons; hand.
"	"	Kincaid & Co., Pleasanton, Kan. Cap. \$1,000. Kincaid. Slope, open pit, 3,000 tons; horse. J. Johnson, supt.
"	"	F. A. Raney (local). Raney. Slope, 40 tons; horse.

## COPPER

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, FURNACES, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN	AND COUNTY.	
Dry Branch	Franklin Ry. 729.	W. B. Shotwell, St. Clair, Mo. Copper Hollow, copper, iron. Tunnel, steam.

## FIRE CLAY

LOCATION OF MINE OR BANK, RAILWAYS, WATER ROUTES AND SHIPPING POINT.		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE OR BANK, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, ETC., AND NAME OF SUPERINTENDENT.
TOWN	AND COUNTY.	
Christy	Howell Ry. 469.	Christy Fire Clay Co., St. Louis, Mo., Levele Bldg. C. M. Christy, pres., W. C. Morris, secy. and treas., J. B. Clements, mgr. Cap. stk. \$100,000. Christy, fire clay. Shaft, 25,000 tons; steam. Fred. Bayless, supt.
Fulton	Callaway Ry. 115.	Fulton Fire Brick & Mining Co. S. Thrickeld, pres.; L. U. Nickell, secy., P. S. Adams, treas. Cap. stk. \$75,000. Fire clay. Shaft, 25,000 tons; steam. David Jones, supt.

## IRON

LOCATION OF MINE, OR BANK, RAILWAYS, WATER ROUTES AND SHIPPING POINT.		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, BLAST FURNACES, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN	AND COUNTY.	
Condriy	Dent Ry. Avery 729.	Midland Blast Furnace Co., St. Louis, Mo., 411 Olive St. W. H. Lee, pres., T. F. Fisher, secy. Cap. stk. \$80,000. Hawkins, red hematite, blue specular. Open cut, tunnel, 8,149 tons; steam. T. H. Condriy, supt.
Cuba	Crawford Ry. 729.	Cuba Iron & Paint Mining Co., St. Louis, Mo., 429 Market St. F. W. Wessler, pres.; M. S. Barnell, secy. and treas., James A. Groch, mgr. and supt. Cap. stk. \$39,000. Varris, Walters and others, blue specular, red hematite. Open pit, hand, horse.

## IRON (CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.			NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, BLAST FURNACES, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN	AND	COUNTY.	
Pilot Knob, Ry. 714.		Iron	St. Louis Ore & Steel Co., St. Louis, Mo., Fourth and Market sts. E. A. Hitchcock, pres.; O. L. Garrison, secy. and treas.; George W. Crahan, mgr. and supt. Cap. stk. \$3,500,000. Pilot Knob, specular ore, shaft, tunnel; steam, compressed air; furnace.
St. James, Ry. 720.		Phelps	E. W. James. Reed, red hematite. Open pit, 1,000 tons; hand. Henry Crawley, supt.
Salmon, Ry. 720.		Dent	A. C. & J. S. Causey. Cap. \$500. Causey. Shaft, 100 tons hand. A. C. Causey, supt.
"		"	Missouri Iron Co., St. Louis, Mo., 411 Olive st. H. A. Crawford, pres. and mgr.; Emerson L. Foote, secy. and treas. Simons Mountain, red hematite. Slope; steam. E. B. Sankey, supt.
Stone Hill, Ry. Salem 720.		Dent	W. T. Daugherty. Steam; blast furnace. E. L. Foote, supt.
West Plains, Ry. 348.		Howell	D. Carson Iron Co. Cap. \$5,000. Carson, brown hematite. Tunnel, open pit, 12,000 tons; horse. David Carson, supt.

## LEAD AND ZINC

LOCATION OF MINE RAILWAYS, WATER ROUTES AND SHIPPING POINT.			NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, SMELTERS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN	AND	COUNTY.	
Alba, Ry. Carthage 490, 720.		Jasper	Alba Co., Carthage, Mo. Geo. Dennison, pres.; W. H. Bradley, v.-pres.; Bartlett Palmer, treas.; W. H. Seamon, mgr. Cap. stk. \$100,000. Alba, lead, zinc. Slope; steam. R. R. Allen, supt.
Ash Grove, Ry. 348.		Greene	Pennsylvania Mining Co. Charles S. Green, pres.; D. P. Hobart, secy.; G. A. Tuisman, treas.; E. A. Hurt, mgr. and supt. Cap. stk. \$50,000. Pennsylvania, lead, zinc. Shaft; horse.
"		"	Ash Grove Lead & Zinc Mining Co., St. Louis, Mo., cor. Eleventh and Walnut sts. Charles W. Goetz, pres. Cap. stk. \$12,000. Lead, zinc. Shaft, 50 tons; hand.
"		"	Golden Eagle Mining Co. Golden Eagle, lead. 38 tons; horse.
"		"	North & Murray. Ash Grove, lead, zinc. 160 tons; horse, steam.
Aurora, Ry. 720.		Lawrence	Anchur Mining Co., Kansas City, Mo., cor. Seventh and Wyandotte sts. H. C. Lindsley, pres.; L. W. Hubbell, mgr. Cap. stk. \$20,000. Anchor, zinc. Shaft, drift, 300 tons; steam.
"		"	M. M. Apple & Sons. Apple, lead, zinc. Shaft; horse.
"		"	Berry & Co. R. A. Berry, pres., mgr. and supt.; A. R. Moore, secy.; E. Jordan, treas. Jayhawker, lead, zinc. Shaft, tunnel, 100 tons; horse.
"		"	Brinkerhoff Mining Co. Cap. stk. \$25,000. Zinc. Shaft, 300 tons; steam.
"		"	T. A. Byres. Midland, lead, silicate. Shaft, 200 tons; horse.
"		"	Casey & Co. Lead. Shaft, drift; 160 tons; hand.
"		"	Cleveland & Aurora Mineral Land Co., Cleveland, Ohio. W. W. Baldwin, pres. and mgr.; H. J. Baldwin, secy. and treas. Cap. stk. \$100,000. Lead, zinc. Shaft, 750 tons; steam, horse. C. F. Johnston, supt.
"		"	Wm. Coats & Co. Cap. \$1,000. Fountain Head, zinc. Shaft; steam.
"		"	John N. Dalby, Sedalia, Mo., care of Third National Bank. Cap. \$100,000. Little Bonanza, lead, zinc, tunnel, 1,544 tons; steam. A. R. Dalby, supt.
"		"	Dillard & Co. Cap. \$40,000. Dillard, lead, zinc. Tunnel, shaft; horse.
"		"	Eaton & Co., P. O. Box 603. Cap. \$100. Tuff Nut, lead, zinc. Shaft, 231 tons; horse. A. C. Eaton, supt.
"		"	Goodman & Co. Cap. \$1,000. Goodman, lead, zinc. Shaft, 480 tons; horse. — Johnston, supt.
"		"	Harry Wood Mining Co., St. Joseph, Mo. J. M. Street, pres.; H. Wood, secy. and treas.; L. D. Kelly, mgr. and supt. Cap. stk. \$10,000. Harry Wood, zinc. Shaft, drift, 1,000 tons; hand.
"		"	Johnston Bros. & Co. Cap. \$3,000. Turkey Track, lead, zinc and blende. Shafts, 550 tons; horse.
"		"	T. J. Liles. Cap. \$50,000. Liles, lead, zinc. Shaft, 1,700 tons; steam. G. W. Liles, supt.
"		"	Little Rustler Mining Co. John L. Hall, pres. and mgr.; J. E. Hill, secy. and treas. Cap. stk. \$25,000. Little Rustler, zinc. Shaft, tunnel; steam. F. Fitzpatrick, supt.
"		"	Louisville Lead & Zinc Co., Louisville, Ky., 140 Second st. J. M. Clark, pres.; T. L. Jefferson, secy. and treas. Cap. stk. \$400,000. Orchard, zinc, blende, lead. Shaft, 1,500 tons; horse, steam. W. M. Johnston, mgr. and supt.
"		"	McCullah Mining Co., Marionville, Mo. John A. McCullah, pres., mgr. and supt.; Belle B. McCullah, secy.; D. D. Seaman, treas. Cap. stk. \$30,000. McCullah, lead, zinc. Shaft, 600 tons; steam.
"		"	Mogul Mining Co. S. Ritter, pres.; Jacob Nathan, secy. and treas. Cap. \$2,000. Mogul, lead, zinc. Shaft, 500 tons; steam. John A. Cook, supt.
"		"	E. Nathan, E. Ogbisly & S. Cohn. Cap. \$2,500. Little Rina, zinc, lead. Shaft, 100 tons; steam.
"		"	Nickel Plate Mining Co. F. H. Brinkerhoff, pres.; Chase Palmer, secy. and treas. Cap. stk. \$20,000. Nickel Plate, zinc, blende. Shaft; steam.
"		"	Ozark Range Mining Co., Louisville, Ky., 521 Third av. C. W. Gheens, pres.; C. D. Mooly, secy., and mgr. Cap. stk. \$40,000. Lead, zinc. Shaft, 200 tons; steam. C. F. Johnston, supt.
"		"	James Ratliff. Bloch, lead, silicate. Shaft, 20 tons; horse.
"		"	Rinker Lead & Zinc Co. George W. Rinker, pres.; J. C. Plumb, secy.; W. B. Booth, treas.; S. H. Minor, mgr. Cap. stk. \$60,000. Rinker, zinc, lead. Shaft, 4,000 tons; steam, horse. J. L. Rinker, supt.

## LEAD AND ZINC (CONTINUED)

LOCATION OF MINE			NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, SMELTERS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN	AND	COUNTY.	
Aurora	Lawrence	Robertson & Co. Cap. \$10,000. Big Bonanza, zinc. Shaft, 1,000 tons; steam. W. H. Robertson, supt.	
"	"	H. C. Ruly. Cap. \$1,500. Tri-Weekly, lead, zinc. Shaft, 150 tons; steam.	
"	"	St. Louis Aurora Mining Co. H. H. Wernise, prest.; James Abbott, v.-prest.; H. M. Nodt, treas.; H. G. Noel, secy. Cap. stk. \$100,000. St. Louis Aurora, lead, zinc. Shaft, drift, 1,000 tons; steam. L. W. Hubbell, supt.	
"	"	Seamon Mining Co., Rolla, Mo. D. W. Malcolm, prest.; S. B. Rowe, secy.; A. S. Long, treas.; Charles A. Reed, mgr. and supt. Cap. stk. \$100,000. Seamon, lead, zinc. Shaft, 25 tons; steam, horse.	
"	"	Smith & Co. Cap. \$500. Louisville, lead and zinc. Shaft and tunnel, 5 tons; free; horse and steam.	
"	"	Spell & Scott. Cap. \$2,500. Patrossa, lead, zinc. Steam.	
"	"	Valley Queen Mining Co. Valley Queen, lead and zinc. Shaft, tunnel; steam. M. Hudson, supt.	
"	"	E. H. Williams. Independent, zinc. Shaft; steam.	
Belleville	Jasper	Knoble Mining Co., Chicago, Ill. S. Dearborn st. A. M. Knoble, prest.; L. S. Baker, secy.; A. C. Swanson, treas. Cap. stk. \$50,000. Holden, lead, zinc. Shaft, 2,088 tons; steam. C. M. De Grall, supt.	
(F. O. Zineite) Ry. 348.			
"	"	St. Charles Lead & Zinc Co., St. Charles, Mo. J. W. Bergfield, prest.; J. F. Hackmann, v.-prest.; N. G. Douglass, secy. mgr. and supt.; H. D. Bruns, treas. Cap. stk. \$100,000. Murphy, zinc, lead. Shafts, 5,000 tons; steam.	
"	"	Standard Lead & Zinc Mining Co., Joplin, Mo., 504 Morlett av. E. W. Johns, prest.; Arthur Spencer, secy.; J. H. Dangerfield, treas. and mgr. Cap. stk. \$48,000. Standard, zinc, blende. Shaft, 450 tons; steam. H. E. Dangerfield, supt.	
Blackwell	St. Francois	Thomas Welch. Cap. \$15,000. Pionycune, barytes, lead. Shaft, 200 tons; hand. Wm. Welch, supt.	
Ry. 714.			
Blendsville	Jasper	Josiah Stum. Lead, zinc. Shaft, horse. W. S. Craine, supt.	
Ry. Joplin 348, 349, 360, 720.			
Bonne Terre	St. Francois	St. Joseph Lead Co., St. Louis, Mo., 166 Laclede Bldg. J. Wyman Jones, prest.; Hugh N. Camp, secy. and treas. Cap. stk. \$3,000,000. St. Joseph, lead. Shaft, 13,000 tons; water, furnace, Charles B. Parsons, supt.	
Ry. 457.			
Bourbon	Crawford	F. W. Linn, St. Louis, Mo., 2300 Helbert st. Cap. \$5,000. Salamanka, lead. Shaft; steam. G. L. W. Smith, supt.	
Ry. 720.			
Cartersville	Jasper	G. W. Binsley. Cap. \$20,000. Beasley, lead, zinc. Shaft, 2,000 tons; steam.	
Ry. Webb City 348, 460, 720.			
"	"	Blanton & Wyatt. Cap. \$20,000. Blende. Open pit, 1,000 tons; steam. S. B. Wyatt, supt.	
"	"	Daugherty, Davy & Daugherty. W. A. Daugherty, prest.; W. A. Daugherty jr., secy.; J. A. Daugherty, treas. and supt.; T. W. Oylor, mgr. Cornfield, zinc, lead. Shaft, 2,500 tons; steam, horse.	
"	"	Grubb & Stamp. Zinc, lead. Shaft, 100 tons; horse.	
"	"	M. L. Harden & Co. M. L. Harden, prest. and supt.; Freeman Row, mgr. Cap. \$40,000. Zinc, lead. Shaft, 2,000 tons; steam.	
"	"	Lamar Mining Co. Lead, zinc. Shaft, steam (developing). J. K. Anderson, mgr. and supt.	
"	"	Landreth & Paten. Lead, zinc. Shaft, 600 tons; steam. G. W. Landreth, supt.	
"	"	Lehtlitter & Page, Joplin, Mo. Zinc. Shaft; steam.	
"	"	Lost Hope Mining Co. W. H. Stevenson, prest., mgr. and supt. A. T. Fountain, secy. and treas. Lost Hope, lead, zinc. Shaft, horse, steam. W. H. Stevenson, supt.	
"	"	Minneapolis & Webb City Mining Co., Minneapolis, Minn., 224 Boston Block. F. A. Fisher, prest.; S. A. Reed, secy. and treas.; D. G. Mitchell, mgr. and supt. Cap. stk. \$100,000. Minneapolis, lead, zinc. Shaft, steam.	
"	"	North Cartersville Draining Co. Lead, zinc. Shaft, 1,500 tons. Steam, horse, hand. Paul N. Davey, supt.	
"	"	Ozark Mineral Land and Mining Co., Carthage, Mo. S. W. Pierce, prest.; J. W. Pentzer, secy.; T. T. Laiscombe, treas.; T. J. Campbell, mgr. and supt. Cap. stk. \$100,000. Lead, zinc. Steam.	
"	"	Sadtler Lead & Zinc Co., Bethlehem, Pa. Samuel P. Sadtler, prest.; Josiah Bachman, secy. and treas. Cap. stk. \$68,300. Sadtler, lead and zinc. Shaft; steam (developing).	
"	"	Schoenberger & Zogg Mining Co. Matt Zogg, prest. and secy.; F. Zogg jr., treas. and mgr. Cap. stk. \$65,000. Lead and zinc. Shaft, 2,000 tons; steam. R. L. McGee, supt.	
"	"	Troup Mining Co. Joseph H. Clark, prest.; Charles F. Robbins, secy. and treas.; S. H. Cobb, mgr. Cap. stk. \$100,000. Troup, lead, zinc. Shaft, 7,397 tons; steam.	
"	"	Vernon Mining Co., Nevada, Mo. M. T. January, prest.; A. L. Davis, secy.; F. E. Carr, treas. Cap. stk. \$20,000. Vernon, lead, blende. Shaft; steam. J. H. Eslinger, supt.	
Carthage	Jasper	Myers & Jemison. Zinc. Shaft, 1,200 tons; steam.	
Ry. 460, 720.			
"	"	Pacific Mining Co. B. P. Waggoner, prest.; W. P. Waggoner, secy. and treas.; Wm. B. Myers, mgr. and supt. Cap. stk. \$24,000. Pacific, blende. Shaft, 1,500 tons; steam.	
Cave Springs	Jasper	Banner Mining & Milling Co., St. Louis, Mo., care Simmons Hardware Co. John E. Pflieger, prest.; George W. Wilson, secy.; F. M. Shaw, treas.; Daniel Dyer, mgr. and supt. Cap. stk. \$60,000. Banner, zinc, blende. Open pit, 1,000 tons.	
(P. O. Joplin) Ry. 348.			
Chadwick	Christian	Armstrong Mining Co., Springfield, Mo., First National Bank, Public Square, R. L. McElhany, prest. and treas.; Homer McElhany, secy.; J. A. Hammond, mgr. and supt. Cap. stk. \$50,000. Armstrong, lead, zinc. Shaft, pit, slope; steam.	
Ry. 720.			

## LEAD AND ZINC (CONTINUED)

LOCATION OF MINE RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, SMELTERS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Chadwick . . . . . Christian (Continued.)	Easley Mining Co., Springfield, Mo., Baker Block, Rooms 19 and 21. Wood Bouldin jr., prest.; R. P. Bowyer, secy. and treas.; J. A. Hammond, mgr. Cap. stk. \$100,000. Easley, lead. Tunnel and shafts, 600 tons; steam. A. Nail, supt.
Cruise . . . . . Washington Ry. Blackwell 490.	Washington Land & Mining Co., St. Louis, Mo. C. S. Gruly, prest.; Dwight Treadway, secy. and treas.; R. T. Brown, mgr. and supt. Cap. stk. \$90,000. Washington, lead, zinc. Shaft, tunnel, 400 tons; water, hand.
Doc Run . . . . . St. Francois Ry. 457.	Doc Run Lead Co., Bonne Terre, Mo. J. Wyman Jones, prest.; F. P. Grayes, secy.; Hugh N. Camp, treas.; C. B. Parsons, mgr. Cap. stk. \$750,000. Doc Run, lead. Shaft, 4,000 tons; steam; blast furnace, 6,000 tons.
Fairfield . . . . . Benton Ry. Warsaw 460.	Tecumseh Mining Co. W. P. Wright, prest.; W. D. Cox, mgr. and supt. Cap. stk. \$7,000. Tecumseh, lead and zinc. Shaft; horse (developing).
Fertile . . . . . Washington Ry. Blackwell 490.	Z. F. Higginbotham. Cap. \$60,000. Lead. Shaft, 150 tons; horse, hand.
Granby . . . . . Newton Ry. 729.	Barnett Mining Co. Woodland, lead. Shaft, drift; hand. J. McKeel, mgr. and supt.
" . . . . . "	Ben Harrison Mining Co. Cap. \$3,000. Ben Harrison, zinc, lead. Shaft, 1,440 tons; steam. Louis J. Love, supt.
" . . . . . "	Benjamin F. Butler Mining Co. W. H. A. Green, prest.; C. H. K. Kugel, secy.; Henry Meadow, treas.; John Blank, mgr. and supt. Benjamin F. Butler, lead, zinc. Shafts, 800 tons; steam, hand.
" . . . . . "	Capps, Wood and others. Barnett, lead. Shaft, tunnel; hand (developing).
" . . . . . "	Frost & Co. E. M. Frost, prest.; W. S. Frost, secy.; Ed. Stamford, mgr. Cap. stk. \$2,500. White Rock, zinc, lead. Shaft, tunnel; steam. C. E. Parker, supt.
" . . . . . "	Granby Mining & Smelting Co., St. Louis, Mo., Equitable Bldg. John P. Neville, prest.; A. G. Trevor, secy. and treas. Granby, lead, zinc. Shaft, steam; furnace. John Kingstoun, supt.
" . . . . . "	Johnson, Mesplay & Co. A. J. Johnson, gen. mgr. Cap. \$2,500. Starcher, lead, zinc, silicate. Shaft; horse. Ed. Mesplay, supt.
Gregg . . . . . Newton Ry. Joplin 348, 460, 729.	Scotia Mining Co., Joplin, Mo. H. H. Gregg, prest. and mgr.; T. J. Gregg, secy. Corinne, zinc, blende. Shaft; steam. Tom J. Gregg, supt.
Joplin . . . . . Jasper Ry. 348, 460, 729.	Barbee Mining Co. James Campbell, prest.; J. L. Briggs, secy. and treas. Cap. stk. \$100,000. Lead, zinc. Shaft; steam. Matt. Coyle, supt.
" . . . . . "	Brewer Bros. & Parks. H. M. Brewer, prest., mgr. and supt.; W. Brewer, secy.; F. Brewer, treas. Cap. stk. \$10,000. Brewer Bros., lead, jack. Shaft, 2,000 tons; steam.
" . . . . . "	Carlisle, Gobar & Tomlinson, 900 W. Second st. Cap. \$16,000. Carlisle, jack, lead ore. Shaft, tunnel, 155 tons; horse. Jack McCurdy, supt.
" . . . . . "	Cave Spring Mining Co. Wm. E. Brinkerhoff, prest.; Victor A. Wallace, secy. and treas.; Philip J. Pfennig, mgr. Cap. stk. \$30,000. Cave Spring, zinc, blende. Open pit, shaft, 1,000 tons; steam. Daniel Dwyer, supt.
" . . . . . "	Columbian Lead & Zinc Co., Chicago, Ill., 85 Dearborn st. L. Weinschenk, prest.; S. E. Magill, secy. and treas. Cap. stk. \$1,500,000. Lead, zinc.
" . . . . . "	Cottonwood Mining Co. Cap. \$25,000. Cottonwood, lead, zinc. Shaft, 600 tons; steam.
" . . . . . "	Crossman Mining Co. H. B. Crossman, prest.; P. L. Crossman, v.-prest.; J. E. Stillwell, secy., treas. and supt.; E. D. Porter, mgr. Cap. stk. \$300,000. Crossman, zinc, lead. Shaft; steam.
" . . . . . "	Emille Zinc Co., St. Louis, Mo., 24 N. Third st. Frank Carter, prest.; I. Shreve Carter, secy. and treas.; A. W. Sewall, mgr. and supt. Cap. stk. \$300,000. Lead, zinc. Shaft, drift, 700 tons; steam, electricity.
" . . . . . "	Empire Zinc Co., Philadelphia, Pa., 925 Chestnut st. John Price Wetherill, prest.; T. Lewis Thomas, secy.; J. H. Troutman, treas.; W. C. Wetherill, mgr. Cap. stk. \$750,000. Lead, zinc. Shaft, 5,800 tons; steam, electricity, horse; zinc smelter, 2,700 tons. Pope Yeatman, supt.
" . . . . . "	Great Western Mining Co., Kansas City, Mo. Great Western. Shaft, 10,500 tons; steam. Robert Ries, supt.
" . . . . . "	Gretchen Lead & Zinc Co., St. Louis, Mo., Bank of Commerce Bldg. M. Greenwood jr., prest.; M. Greenwood sr., secy. and treas. Lead, zinc. Shaft; steam. S. Morrison, supt.
" . . . . . "	M. E. Hubbard, cor. Broadway and Missouri sts. Hubbard, lead, zinc. Shaft, 1,500 tons; steam. Jacob Fanning, supt.
" . . . . . "	Jacobs Bros., Carthage, Mo., care of First National Bank. Pineard, lead, zinc. Shaft; steam. W. Hogue, supt.
" . . . . . "	King Solomons Mining Co., Kansas City, Mo., 508 Shields Bldg. Thomas H. Mastin, prest.; John C. Tate, secy. and treas. Cap. stk. \$5,000. Tanyard Hollow, lead, zinc. Shaft; steam.
" . . . . . "	Lee Taylor & Co. Lead, zinc. Shaft, drift; steam. Lee Taylor, supt.
" . . . . . "	Little Nellie Zinc Co., St. Louis, Mo., 619 Chestnut st. B. F. Webster, prest.; Geo. B. Webster, secy. and treas.; J. A. Stanton, mgr. and supt. Cap. stk. \$50,000. Little Nellie, zinc, lead. Shaft; steam, horse.
" . . . . . "	Little Nugget Mining Co. L. Henon, prest.; M. C. Proudford, secy., treas. and mgr. Cap. stk. \$25,000. Little Nugget, lead, zinc. Shaft, 200 tons; steam. T. Henon, supt.
" . . . . . "	D. C. McConey. Ford, Owen, lead, zinc. 2,000 tons; steam.
" . . . . . "	F. G. McCoy. Cap. \$15,000. Possum Hollow, lead, zinc. Shaft, 33 tons; steam.
" . . . . . "	Manhattan Zinc Co., St. Louis, Mo., 417 Pine st. Walter Taylor, prest.; D. G. Taylor, secy. and treas. Cap. stk. \$15,000. Manhattan, lead, zinc. Shaft, 845 tons; steam. T. Henon, mgr. and supt.
" . . . . . "	Mittleberg Lead & Zinc Mining Co., St. Louis, Mo., 6 N. Seventh st. Thomas W. Crouch, prest.; Arthur Mittleberg, secy. and treas.; Wm. A. Reed, mgr. Cap. stk. \$12,000. Mittleberg, lead, zinc. Shaft, 225 tons; steam. James M. Reed, supt.
" . . . . . "	E. R. Monet jr. Cap. \$40,000. Lead, zinc. Shaft, 4,000 tons; steam.

## LEAD AND ZINC (CONTINUED)

LOCATION OF MINE RAILWAYS, WATER ROUTES AND SHIPPING POINT.			NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, SMELTERS, ETC., AND NAME OF MINE SUPERINTENDENT.		
TOWNS	AND	COUNTY.			
Joplin,	Jasper	Monkey Hill Mining Co.	Cap. \$15,000.	Monkey, zinc, lead. Shaft, 2,000 tons; steam. J. P. Wheeler, supt.	
"	"	Moonshine Mining Co.	L. C. Wilmoth, prest.; W. S. Paul, secy. and treas. Cap. stk. \$65,000.	Moonshine, lead, zinc. Shaft: steam, horse.	
"	"	Oswego Lead & Zinc Co.	Samuel C. Cook, prest. and mgr.; George Shaw, secy. and treas. Cap. stk. \$50,000.	Oswego, lead, zinc. Shaft, 3,700 tons; steam.	
"	"	"	W. S. Paul.	Lead, zinc. Shaft: horse.	
"	"	Petrij Zinc Mining Co., St. Louis, Mo.,	16 N. Eighth st., M. Greenwood, prest.; J. M. Crouch, secy. and treas. Cap. stk. \$24,000.	Petrij, blende, lead. Shaft, 1,000 tons; steam. Geo. W. Ketter, supt.	
"	"	Randall & Co.	Cap. \$5,000.	Randall, lead, jack. 25 tons; steam. T. S. Lowry, supt.	
"	"	Rice & James.	Malaska, lead, zinc. Shaft, drift, 60 tons; steam, electricity. J. M. James, supt.		
"	"	Roaring Springs Land & Mining Co.,	Ebensburg, Pa. D. W. Luke, prest.; Alvin Evans, secy. and treas.; D. C. Hoover, mgr. Cap. stk. \$100,000.	Lead, zinc. Shaft, 2,500 tons; steam. E. Hedburg, supt.	
"	"	"	Charles E. Rose.	Cap. \$20,000.	Moonshine, lead, zinc. Shaft, 255 tons; steam.
"	"	Ruby Mining & Smelting Co., St. Louis, Mo.,	503 Olive st., Room 41, C. C. Higham, prest.; Henry Digby, secy. and treas. W. S. Higham, mgr.	Ruby, zinc. Shaft, steam (developing).	
"	"	Rusk Mining Co., Kansas City, Mo.,	202 New York Life Bldg. L. W. McCullum, prest.; N. A. Dickey, treas. Cap. stk. \$10,000.	Lead, zinc. Shaft, steam.	
"	"	Snyder Bros. Mining & Smelting Co.,	F. L. Snyder, prest.; H. K. Snyder, secy. and treas. Cap. stk. \$35,000.	Snyder Bros., zinc, lead. Shafts, 8,000 tons; steam, electricity. John C. Snyder, supt.	
"	"	South Joplin Lead & Zinc Mining Co.,	Kansas City, Mo., 207 East Twelfth st. T. A. McClelland, prest.; Robert Moody, secy.; J. T. Harwood, treas.; J. Myers, mgr. and supt. Cap. stk. \$10,000.	Lead and zinc. Shafts, 800 tons; steam.	
"	"	Standard Lead & Zinc Mining Co.,	E. W. Johns, prest.; Arthur Spencer, secy.; J. H. Dangerfield, treas. and mgr. Cap. stk. \$48,000.	Standard, zinc, blende. Shaft, 3,700 tons; hand, steam. H. E. Dangerfield, supt.	
"	"	Sterling Lead & Zinc Co.,	New York City, 52 Broadway. G. N. Bacon, prest.; P. S. Swann, secy. and treas. and mgr.	Sterling, lead, zinc. Shaft, 370 tons; steam. T. Hemon, supt.	
"	"	Weinrich Lead & Zinc Co., Mansfield,	Ohio, 512 N. Main st. W. L. Sewell, prest.; H. P. Sewell, secy.; S. P. Eckl, treas. Cap. stk. \$150,000.	Weinrich, lead, zinc. Shaft, tunnel; steam. D. K. Weinrich, supt.	
"	"	West Hollow Lead & Zinc Co., St. Louis,	Mo., Washington av. J. Sella, prest. Cap. stk. \$50,000.	Star, lead, blende. Shaft, 1,000 tons; steam. A. Sautner, mgr. and supt.	
"	"	"	E. J. Williams & D. Hamill.	Big Run, zinc. Shaft, 1,300 tons; steam, horse. J. W. Orr, supt.	
"	"	Windsor Mining Co., Kansas City, Mo.,	16 E. Sixth st. B. Robertson, prest.; J. L. Norman, secy. and treas.; Ernest L. Robertson, mgr. Cap. \$80,000.	Lead, zinc.	
Lehigh	Jasper	Franklin Zinc Co., F. L. Johnston,	prest. and treas.; T. S. Hayton, secy.; J. B. Johnston, mgr. and supt. Cap. stk. \$40,000.	Lehigh, zinc, lead. Shaft, slope, 5,700 tons; steam.	
"	"	St. Louis Zinc Mining Co., St. Louis,	Mo., 317 and 319 N. Third st. J. E. Lawton, prest., secy. and treas. W. A. Irwin, mgr. and supt. Cap. stk. \$100,000.	Nickel Plate, zinc. Shaft, open pit, 1,000 tons; steam.	
"	"	White Elephant Zinc Co., A. H. Rogers,	prest.; C. S. Thomas, mgr. Cap. stk. \$40,000.	White Elephant, zinc. Open pit. L. Evans, supt.	
Mansfield,	Wright	Dodson Lead & Zinc Co., Bethlehem,	Pa. Truman M. Dodson, prest.; Josiah Bachman, secy. and treas. Cap. stk. \$100,000.	Zinc, lead. Shaft: steam (developing).	
Mine La Motte,	Madison	Rowland Hazard.	Mine La Motte, lead. Shaft, steam; furnace. J. D. Sanders, supt.		
Mineral Point,	Washington	J. F. Richardson.	Walton, Mesplay and others, lead. Shaft: furnace.		
Mumfords,	Greene	Gumbo Mining Co.	Cap. \$80.	Gumbo, lead, zinc. Shaft, 630 tons; steam. S. D. Ramsey, supt.	
Old Mines,	Washington	Union Mining & Smelting Co., St. Louis,	Mo., C. B. Burdham, prest.; W. H. Davis, secy.; G. W. Chadbourne, treas.; Alex. Harrison, mgr. and supt. Cap. stk. \$80,000.	Old Mine, lead. Shaft, 300 tons; steam; blast furnace, 1,000 tons.	
Oronogo,	Jasper	John Lowry & Co.	Sunshine, lead, zinc. Shaft, tunnel, 120 tons; horse, hand. John Lowry, supt.		
"	"	Margerum Mining Co., Geo. J. Margerum,	prest., treas. and mgr. Chas. M. Reynolds, secy. Cap. stk. \$30,000.	Margerum, lead and zinc. Shafts; steam (developing).	
"	"	Peak Mining Co., Webb City, Mo.,	L. R. Read, prest.; S. S. Rice, secy.; James Gammon, treas.; A. L. Henderson, v.-prest. and mgr. Lead, zinc. Shaft, drift, steam (developing).		
Palmer,	Washington	Palmer Level Co., J. H. Ainsworth,	prest. and secy.; P. J. Cummings, treas.; T. P. Blount, mgr. and supt. Cap. stk. \$10,000.	Lead. Shaft, 600 tons; horse; furnace.	
Persinger,	Boone	Fort Smith Mining & Smelting Co.,	Fort Smith, Ark., 104 Hickory st. D. J. Young, prest.; S. A. Williams, secy.; Charles Hall, treas.; R. H. Edwards, mgr. and supt. Cap. stk. \$50,000.	Upper Ten, lead, zinc. Shaft, drift, 30 tons; steam.	
Potosi,	Washington	F. A. & P. McArthur,	Toronto, Canada. Lead, zinc. Surface; air furnace. Hugh McGregor, mgr.		
Prosperity,	Jasper	Troup Mining Co., Webb City,	Joseph H. Clark, prest.; Charles F. Robbins, secy. and treas.; S. H. Cobb, gen. mgr. Cap. stk. \$100,000.	Troup, lead, zinc. Shaft, 7,350 tons; steam.	
Scotland,	Jasper	Speed Bros., Joplin, Mo.	Cap. \$10,000.	Speed Bros., lead, zinc. Shaft, 1,000 tons; steam. Sidney Speed, supt.	

## LEAD AND ZINC—(CONTINUED)

LOCATION OF MINE RAILWAYS, WATER ROUTES AND SHIPPING POINT.			NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, SMELTERS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN	AND	COUNTY.	
Steelville	.....	Crawford	Star Mining Co. H. S. Walbridge, pres.; J. F. Evans, secy.; Thos. R. Gibson, treas.; W. A. Metcalf, mgr. Cap. stk. \$50,000. Courtois, lead, zinc. Shaft; steam; air furnace. B. W. Nethlington, supt.
Webb City	.....	Jasper	A-sheroff-Reynolds Co. John R. Reynolds, pres.; C. M. Reynolds, secy. and treas.; G. P. Asheroff, mgr. and supt. Cap. \$80,000. Asheroff-Reynolds, lead, zinc. Shaft, 300 tons; steam.
"	.....	"	Bair & McLelland. Lead and zinc. Shaft, 520 tons; horse. J. W. Bair, supt.
"	.....	"	Caddwell & Co. Zinc, blende. Shaft; steam.
"	.....	"	Center Creek Mining Co., St. Louis, Mo., 213 N. Eighth st. B. F. Hammett, pres.; J. C. Stewart, secy. and mgr.; W. C. Stewart, treas. Cap. stk. \$1,500,000. Center Creek, lead, zinc. Shaft, 18,147 tons; steam.
"	.....	"	Chatham Mining Co., Chatham, N. Y. A. E. Tracy, pres.; James Smith, secy. and treas.; J. A. Hewitt, mgr. and supt. Cap. stk. \$10,000. Chatham, zinc, lead. Shaft, tunnel, 6,500 tons; hand.
"	.....	"	Columbia & Gammon. No. 5, lead, zinc. Shaft, tunnel, 7,500 tons; steam. James B. White, supt.
"	.....	"	W. G. Davison. Cap. \$10,000. Lead, zinc. Shaft, 4,000 tons; steam, horse, hand. J. R. Seay, supt.
"	.....	"	Dayton Mining Co. H. W. Fullerton, mgr. Cap. \$15,000. Dayton, lead, zinc. Shaft, 2,500 tons; steam. I. M. Tabor, supt.
"	.....	"	Eleventh Hour Mining Co. J. W. Aylor, pres.; H. H. Aylor, secy.; A. W. Aylor, treas.; F. Brunnerman, mgr. and supt. Cap. stk. \$300,000. Eleventh Hour, lead, zinc. Shaft, drift, 15,900 tons; steam, horse.
"	.....	"	Garrison Lead & Zinc Co. O. P. Garrison, pres. and mgr.; Thornton Ware, secy.; Geo. W. Ware, treas. Cap. \$30,000. Garrison, zinc, lead. Shaft, 2,100 tons; steam. I. H. Schalk, supt.
"	.....	"	Home & Co. Tenderfoot, lead, zinc. Shaft, 400 tons; steam. C. C. Home, supt.
"	.....	"	Horton & Co. Zinc, lead. Shaft, 600 tons; steam, hand. Monroe Horton, supt.
"	.....	"	A. W. Hough. Lead, zinc. Shaft, drift, 600 tons; steam.
"	.....	"	Houghton & Son. Cap. \$5,000. Zinc, lead. Shaft, 1,000 tons; steam. Joseph Houghton, supt.
"	.....	"	Keller Mining Co. E. L. Martin, pres.; W. F. Duval, secy.; H. B. High, treas.; J. K. Krugler, mgr. and supt. Cap. stk. \$80,000. Keller, lead, zinc. Steam.
"	.....	"	J. F. Lewis. Sucker Flat, zinc, lead. Shaft, 550 tons; steam.
"	.....	"	F. E. Martin & Co. Martin Bird, lead, zinc. Shaft, 1,000 tons; steam. F. E. Martin, supt.
"	.....	"	Missouri & Illinois Lead & Zinc Mining Co. F. S. Bennett, pres.; A. P. Charles, v.-pres.; G. M. Overhiser, secy. and supt.; J. M. O'Brien, treas. and mgr. Cap. stk. \$800,000. Lead, zinc. Shaft; steam (developing).
"	.....	"	Morning Star Mining Co., Joplin, Mo., 306 Sargent st. Monroe Clark, pres.; S. C. Price, secy.; John F. Wise, treas.; J. A. Hewitt, mgr. Cap. stk. \$10,000. Morning Star, zinc. Shaft, 1,000 tons; steam. Wm. Cornine, supt.
"	.....	"	Mound City Mining Co., St. Louis, Mo. Louis Grund, pres.; A. H. Brueggeman, secy.; Phil. H. Lenz, treas.; Louis Helm, mgr. and supt. Cap. stk. \$100,000. Mound City, lead, zinc, blende. Shaft.
"	.....	"	Nevada Mining Co., A. L. Hazleton, pres.; W. H. Keeler, secy. and supt.; E. F. Clark, treas. Cap. stk. \$30,000. Nevada, lead, zinc, blende. Shaft, 1,310 tons.
"	.....	"	Noble Mining Co., Joplin, Mo., 816 Pearl st. W. E. Campbell, pres.; W. D. Campbell, secy.; Webb City Exchange Bank, treas.; W. R. Duncan, mgr. and supt. Noble, lead, zinc. Shaft; steam.
"	.....	"	D. M. Page, Joplin, Mo. Zinc. Shaft; steam.
"	.....	"	Perkins & Co. Cap. \$10,000. Carthage, zinc. Shaft, 3 tons; horse. Isaac Perkins, supt.
"	.....	"	Riedland Mining Co., Mansfield Ohio. B. F. Crawford, pres.; J. M. Waugh, secy. and treas. Cap. stk. \$100,000. Riedland, lead, zinc. Shaft, 3,500 tons; steam. J. A. Hardy, supt.
"	.....	"	A. T. Strehman. Cap. \$20,000. Buck Horn, zinc, lead. Shaft, 58 tons; steam. H. W. Bowman, mgr. and supt.
"	.....	"	Stevison, Wampler & Co. Cap. \$80,000. Lead, zinc. Shaft, 3,600 tons; steam. L. J. Stevison, supt.
"	.....	"	Victor Mining Co. Monroe P. Welton, pres.; Thomas R. Cobb, secy.; John W. Arnold, treas. Cap. stk. \$100,000. Victor, zinc. Shaft, 8,000 tons; steam. E. L. Schuoler, supt.
Zweitz	.....	Jasper	Alvey & Chvenger. Alvey Discovery, zinc, lead. Shaft; steam.
Ry. Belleville 348.	.....	"	J. Copley. Cap. \$18,000. Zinc, blende. Shaft, 800 tons; steam.
"	.....	"	Gold Button Mining Co. C. C. Wheeler, pres.; John N. Burgess, secy., treas., mgr. and supt. Cap. stk. \$1,300. Gold Button, zinc, blende, lead. Shaft, 104 tons; horse.

## MINERAL PAINT

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.			NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF PRODUCT, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, PAINT MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN	AND	COUNTY.	
Dry Branch	.....	Franklin	Robert Heyms. White barytes, ore paint. Shaft, hand.
"	.....	"	Hibbard & Pickles. Booth, iron paint ore, lead. Hand.
Mineral Point, Washingt'n	.....	"	Mrs. L. D. Bone. Boaz. 2,334 tons.
Ry. 714.	.....	"	



## STONE, MARBLE, GRANITE AND ONYX

LOCATION OF MINE OR QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT.			NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK.
TOWN	AND	COUNTY.	NAME OF MINE OR QUARRY, KIND OF STONE, KIND OF MINE OR QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STONE OR MARBLE MILLS, LIMESTONES AND CAPACITY, ETC., AND NAME OF MINE SUPERINTENDENT.
Becker	Franklin	Ry. 715.	Tavern Rock Sand Co., St. Louis, Mo., 316 Commercial Bldg. L. C. Garrett, pres.; W. H. Garrett, secy.; A. T. Lamb, mgr. Cap. \$50,000. Tavern Rock, white sandstone. Open pit, 120,000 tons; steam; sand mill. Tom Fracy, supt.
Bourbon	Crawford	Ry. 720.	F. W. Linn, St. Louis, Mo., 2,300 Hebert st. Salamanka, sandstone. Steam.
"	"	"	Moore & Richards. Cap. \$1,200. Onyx. Shaft, tunnel; hand. E. B. Moore, mgr. and supt.
Cape Girardeau	Cape Girardeau	Ry. 713.	Cape Lime & Marble Co. Marble. Open pit; horse; limekiln, 2,000 brls.
Carthage	Jasper	Ry. 460, 720.	Carthage Marble & White Lime Co., St. Louis, Mo., 361 Olive st., Room 51. Geo. T. Riddle, pres.; H. F. Gruetzmacher, secy. Cap. \$25,000. Carthage, marble, limestone. Open pit, 6,000 tons; steam; mill. Mich. (T) Torphy, supt.
"	"	"	Carthage Quarry & Construction Co., Box 301, G. M. Mernow, pres.; J. R. S. Nichols, secy.; Luke McLaughlin, treas.; M. F. Mernow, mgr. and supt. Cap. \$25,000. Limestone, 5,000 tons; steam; mills.
De Witt	Carroll	Ry. 784.	Carroll County Sand Stone Co. Cap. \$10,000. Carroll County Quarry, white sandstone. Open pit, 3,000 tons; steam; mill. L. H. Smith, supt.
Glen Park	Jefferson	(P. O. Sulphur Springs Landing) Ry. 460.	Lime Co. of St. Louis, St. Louis, Mo., 1136 Chestnut st. Charles W. S. Cobb, pres.; Theo. W. C. Bohn, secy.; P. J. Damonchin, treas. Cap. \$25,000. Glenwood, limestone, 12,000 tons. Peter McLoon, supt.
Graniteville	Iron	Ry. 460.	Schneider Granite Co., St. Louis, Mo., Emille Bldg., 902 Olive st. P. W. Schneider, pres.; Julius A. Schneider, secy. and treas.; P. W. Schneider jr., mgr. Cap. \$150,000. Schneider, granite. Open pit, 2,000 tons; steam; mill. John Hughes, supt.
"	"	"	Syenite Granite Co., St. Louis, Mo., 125 S. Fourth st. Wm. R. Allen, pres.; J. W. Wallace, secy.; Thomas F. Walsh, treas.; E. M. Smith, V. pres.; mgr. and supt. Cap. \$300,000. Granite, 11,300 tons; steam; mill.
Knob Lick	St. Francois	Ry. 460.	Skrainka Construction Co., St. Louis, Mo., Granite Bldg., 404 Market st. Louis Skrainka, pres.; Morris Skrainka, secy. and treas.; James Thurlby, mgr. and supt. Cap. \$2,400; indy. \$25,000. Skrainka, granite. Open pit, slope, 12,000 tons; steam; horse.
Rolla	Phelps	Ry. 720.	J. I. Baskett. Fire clay, 3,000 tons.
Ste. Genevieve	Ste. Genevieve	Ry. 458.	Jules Boyer. Cap. \$7,000. Limestone. Open pit; hand; limekiln, capacity 1,500 tons.
"	"	Ry. 461.	Ferdinand Moser. Cap. \$10,000. St. Genevieve, oolitic limestone. Slope, 3,000 tons; horse, hand, lime kiln, capacity 3,000 tons.
Sedalia	Pettis	Ry. 450, 460.	Sedalia Mining & Prospecting Co., 27 Dempsey Bldg. J. G. White, pres.; Jonathan Myers, secy.; F. W. Shultz, treas.; G. M. Batecock, mgr. Cap. \$20,000. Sedalia, stone, gravel. Open pit, steam; mill.
South Greenfield	Dade	Ry. 348.	Hinckley Stone Co., J. F. Hinckley, pres.; R. W. Jay, secy. and treas.; J. M. Deiges, mgr. Cap. \$25,000. South Greenfield Quarry, limestone. Open pit, steam, mill, kiln, 7,200 tons.
Sullivan	Franklin	Ry. 720.	Meramec Onyx & Metal Co., Boston, Mass., 116 Bedford st. Walter L. Church, pres.; E. F. Myers, secy. and treas. Cap. \$20,000. Hamilton, onyx, lead, red ochre. Shaft, open; steam.
Vicks Station	St. Louis	(Not a P. O.) Ry. 715.	Crystal Springs Quarry Co., St. Louis, Mo., 410 1/2 Market st. Charles G. Meyer, pres. and treas.; A. B. Hopkins, secy. Cap. \$25,000. Crystal springs, limestone, 10,000 tons; hand, mill.
Warrensburg	Johnson	Ry. 460.	Lawrence Bruce, St. Louis, Mo., Jefferson av. and Mo. P. Ry. Jas. B. Miller, mgr. and supt. Cap. \$100,000. Warrensburg, blue and white sandstone. Open pit, 10,000 tons; steam; mill.

SEE ALSO SUPPLEMENTARY LIST

## MONTANA

## ASBESTOS

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Bozeman ..... Gallatin Ry. 529.	Gallatin Asbestos Mining Co. Theo. Schweitzer, prest. and mgr.; E. D. Ellis, secy.; Geo. W. Ellis, mgr. Cap. stk. \$50,000. Junjo and Little Kid. Shaft and tunnel, 15,000 tons.

## COAL-BITUMINOUS

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, COKE OVENS, AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Blossburg ... Deer Lodge Ry. 529.	Mullan Pass Coal Co. Mullan Pass. Shaft and slope; steam (developing).
Castle ..... Meagher Ry. Livingston 529 (4 miles).	Black Diamond Coal & Coke Co. (local). Daniel Sharp, prest. and treas.; Burt Marsh, secy. and mgr. Cap. stk. \$750,000. Black Diamond. Shaft and tunnel, 10,000 tons; steam; 4 coke ovens.
" ..... "	R. F. Carney (local). Black Giant. Tunnel, 3,000 tons; horse and hand.
" ..... "	Castle Coal & Coke Co. O. P. Dalney, prest.; Mrs. Lottie Donovan, secy.; Mrs. Mary Doncet, treas.; David Doncet, mgr. Cap. stk. \$500,000. Castle. Shafts and tunnels; water (developing).
Cokevale ..... Park Ry. Livingston 529.	Livingston Coke & Coal Co. Helena, Mont. S. T. Hauser, prest.; A. J. Seligman, treas.; O. R. Allen, mgr. Lexington. Tunnels and slopes, 30,000 tons; steam; washer and crusher, 100 coke ovens, 30- 000 tons. Geo. T. Wickes, supt.
Hort ..... Park Ry. 529.	Park Coal & Coke Co. J. H. Conrad, prest.; F. A. Krieger, secy.; S. C. Hunter, treas. and mgr. Cap. stk. \$1,000,000. Hort. Tunnel and slope, 41,000 tons; steam; washer, 40 coke ovens, 18,000 tons.
Lewistown ..... Fergus Ry. Billings 529.	Conway & Shales (local). W. A. Shales, mgr. Cap. \$10,000. Democrat. Tunnels, 400 tons; hand. William Alfred, supt.
Park City ... Yellowstone Ry. 529.	C. M. O'Flaherty. Valley Creek. Tunnel, 1,300 tons; horse.
Red Lodge ..... Park Ry. 529.	Rocky Fork Coal Co. C. A. Spofford, prest.; Edward Edes, secy.; J. M. Fox, mgr. Cap. stk. \$2,000,000. Rocky Fork. Tunnels and slope, 225,000 tons; steam, electricity and horse. Wm. O'Connor, supt.
Sandcoulee ... Cascade Ry. 293.	Sandcoulee Coal Co., St. Paul, Minn., Great Northern Ry. Bldg. Henry R. Crocker, prest.; W. B. Roberts, secy.; C. C. Hussey, treas.; Henry Burrell, mgr. and supt. Cap. stk. \$500,000. Sandcoulee. Tunnel, 300,000 tons; hand and compressed air.
Timberline ..... Gallatin Ry. 529.	C. W. Hoffman. Timberline. Tunnel and slopes, 45,000 tons; steam. Jas. Anderson, supt.

## COPPER

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, FURNACES, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Butte City ... Silver Bow Ry. 239, 529, 776.	Parrot Silver & Copper Co. Franklin Farrel, prest.; J. E. Gaylord, secy., treas. and mgr. Cap. stk. \$1,800,000. Parrot, copper. Shaft; refractory; steam. Benj. Tibby, supt.
White Sulphur Springs ... Meagher Ry. Townsend 529 (50 miles).	Spencer, Mayn & Heitman. North Pacific, Heckla, Jamison and Copper Duke. Shafts, hand.

## FIRE CLAY

LOCATION OF MINE OR BANK, RAILWAYS, WATER ROUTES, AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE OR BANK, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, ETC., AND NAME OF SUPERINTENDENT.
TOWN AND COUNTY.	
Abraconia ... Deer Lodge Ry. 403.	Lost Creek Fire Brick & Silica Co. South Gate, Mont., 300 Utah av. Onslow Peters, prest.; John McMurry, secy.; Wm. Layton, treas.; George Fairweather, mgr. and supt. Cap. stk. \$500,000. Mountain Boy and White Mountain. Open pit, 2,000 tons; water and steam; stone crusher.
Blossburg ... Deer Lodge Ry. 529.	Mullen Fire Brick & Tile Co., Helena, Mont. T. C. Power, prest.; J. R. Whitmire, secy., treas. and mgr. Cap. stk. \$25,000. Open pit, 5,000 tons; steam.

## GOLD AND SILVER

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Amaconda . . . Deer Lodge Ry. 463 114 miles.)	Gunn & Todd. Mountain Vein and Caraboo, gold and silver. Shafts; refractory; hand.
Argenta . . . Beaver Head Ry. Dillon 736 (20 m.).	St. Louis & Argenta Mining Co., St. Louis Mo., 1431 N. Fifteenth st. Jos. Peters, prest. and treas.; J. Sturtz, secy. Cap. stk. \$1,000,000. Dexter and Snowdrift, gold, silver and lead. Shaft; refractory; steam. W. H. Dudley, supt.
Augusta Lewis and Clarke Ry. Great Falls 243.	L. S. & G. C. Goss. Silver King, silver and lead. Tunnel, 2 tons; han l.
Avalanche . . . Meagher (P. O. Canyon Ferry) Ry. Helena 329.	Wesley Basye. Avalanche Gulch, gold. Placer, slope; hydraulic (developing).
Avon . . . Deer Lodge Ry. 529.	R. W. V. Mueller, Washington Gulch, Mont. Little Chief, gold, silver, copper and lead. Shaft; hand.
Baker City . . . Deer Lodge (P. O. Drummond) Ry. 776 (12 miles.).	Forest Queen Mining Co. W. Boddig, prest.; M. H. Keith, secy.; J. E. Pausz, treas.; Thomas Irvin, mgr. and supt. Cap. stk. \$250,000. Forest Queen, gold, silver and lead. Tunnel; free (developing).
Bald Butte . . . Deer Lodge Ry. Marysville 529.	Bald Butte Mining Co., Helena, Mont. Wm. Chumaseo, prest.; B. H. Tatem, secy., treas. and mgr. Cap. stk. \$250,000. Bald Butte Group, 5 mines, gold and silver. Shaft and tunnel, 12,000 tons; free; steam; 20 stamps. Thomas Simeov, supt.
Bannack City . . . Beaver Head Ry. Red Rock 776 Ry. Dillon 776 (30 m.).	Bannack Ditch & Mining Co. F. L. Graves, prest. and treas.; J. F. Graeter, secy., mgr. and supt. Cap. stk. \$100,000. Gold. Placer; hydraulic. Dyer Creek Placer Mining Co. W. Fischer, prest.; John C. Clarkson, secy. and mgr.; A. H. Lapham, treas. and supt. Cap. stk. \$30,000. Dyer Creek, gold. Open pit; water.
Barker . . . Meagher Ry. 283.	Fred North & Co. P. Dark, gold, silver and lead. Shaft, 150 tons. Fred North, supt. Etina Mining Co., Great Falls, Mont. E. L. Bishop, prest.; James Lawler, secy. and treas.; Alex. Anderson, mgr. and supt. Cap. stk. \$750,000. Etina, silver and lead. Shaft and tunnel; refractory; steam.
" . . . "	Alice Mining Co. C. J. Heidenreich, prest., mgr. and supt.; Adolph Heidenreich, treas. Alice, silver and lead. Shaft and tunnel, 50 tons; refractory; steam. Atlantic Milling & Mining Co., P. O. Box 625. Matthias Galitzewek, prest.; Chas. Willing, v.-prest.; H. C. Shipkey, secy. and treas.; Henry Vorherr, mgr. and supt. Cap. stk. \$1,000,000; indiv. cap. \$80,000. Gulf of Barker, gold, silver and lead. Shaft and tunnel; free; land (developing).
" . . . "	Barker Mining Co. T. C. Power, prest.; J. L. Townsend, secy.; A. Johnson, treas.; A. J. Cowin, mgr. and supt. Cap. stk. \$2,500,000. Black P's, silver and lead. Shaft and tunnel; refractory; steam.
" . . . "	Black Hawk Mining Co., Great Falls, Mont., Central av. Jesse L. Henry, prest.; Geo. W. Taylor, secy. and treas.; John Williams, mgr. Cap. stk. \$500,000. Black Hawk, Palmetto and Black Hawk No. 2, gold, silver, galena. Shaft and tunnel, 50 tons; refractory; hand. M. C. Larkin, supt.
" . . . "	Dry Fork Mining Co. C. H. Benton, prest.; A. E. Diekerman, v.-prest.; T. W. Thomson, secy.; Will Hawks, treas.; S. J. Merritt, mgr. and supt. Cap. stk. \$1,000,000. Etta, silver and lead. Shaft; free; horse. H. C. Foster & Co. Silver Bell, silver and lead. Shaft and tunnel, 15,000 tons; steam.
" . . . "	Galena City Consolidated Mining Co., Great Falls, Mont., 230 Central av. R. R. Ortman, prest.; W. B. Burleigh, secy. and treas. Cap. stk. \$1,000,000. Wild Bill, Riverside, Snowslide and Queen of the Gulch, silver. Shafts and tunnel; free and refractory; hand (developing).
" . . . "	Idyl Gold & Silver Mining Co., Great Falls, Mont. T. E. Collins, prest.; E. A. Ringwald, secy. and treas.; Peter Harrison, mgr. and supt. Cap. stk. \$1,200,000. T. W., silver and lead. Shaft and tunnel, 100 tons; refractory; hand.
" . . . "	Magnolia & St. Louis Mining Co. Jessie Henry, prest.; James Marr, secy.; Louis Goslin, treas.; Michael C. Larkin, mgr. and supt. Magnolia, St. Louis, gold, silver, copper and lead. Shaft and tunnel; refractory and free; hand.
" . . . "	May & Edna Mining Co., Arminston, Mont. J. T. Arminston, prest., treas. and mgr.; Wm. McQueen, secy. May, Edna, Annie May and Smelter, gold and silver, 4,000 tons; free, refractory. Geo. E. Price, supt.
" . . . "	Silver State Mining Co., Great Falls, Mont., 100 Central av. L. Schmidt, prest.; Wm. Albrecht, secy., treas. and mgr. Cap. stk. \$500,000. Lookout, silver and lead. Shaft and tunnel; free; hand.
" . . . "	Silver Tip Mining Co., Great Falls, Mont., 110 Central av. Thos. W. Thomson, prest.; Thos. Gabagan, secy. and treas.; John L. Lee, mgr. and supt. Cap. stk. \$500,000. Silver Tip, gold, silver and lead. Shaft and tunnel, 3,000 tons; free; hand.
" . . . "	Waters, Northan & Wilson, Barker, Mont. Perry Lode, silver and lead. Tunnel and shaft; hand (developing).
Basin . . . Jefferson Ry. 293, 329.	Basin Mining & Concentrating Co., Helena, Mont. A. N. Spratt, prest.; F. N. Fletcher, secy. and treas.; H. W. Child, mgr. Cap. stk. \$300,000. Hope, gold, silver and lead. Shaft, 20,000 tons; refractory; steam. E. C. Gilbert, supt. Kane, Potting & Judge. Thomas Kane, mgr. Deer Lodge, gold, silver and lead. Tunnel, 600 tons; horse. John C. Hand & Co. Red Rock, gold, silver and lead. Shaft and tunnel, 365 tons; free and refractory; horse. Smith & Moore. Cap. \$5,000. Black Rock, gold, silver and lead. Tunnels and shafts, 20 tons; refractory; hand. Weser Mining Co. Henry Bratnoben, prest.; David Marks, secy.; L. G. Phelps, treas.; H. E. G. Winter, mgr. Cap. stk. \$400,000. Weser, gold, silver and lead. Shaft and tunnel; refractory.
Bear Park . . . Meagher (P. O. Utica) Ry. Bar- ker 223 (20 miles.).	Bear Park Mining Co., Great Falls, Mont., 312 Central av. J. E. Stellen, prest.; John Connolly, secy.; Edward O'Reilly, treas.; Edgar Boling, mgr. and supt. Cap. stk. \$1,000,000. Hindson, Bellevue, Broncho and Utica, gold, silver, lead and copper. Shaft and tunnel; free; hand.
Beartown . . . Deer Lodge Ry. Bear's Mouth 529.	Loomis & Stone. Cap. \$5,000. Chemmantha, gold. Placer, 200 tons; steam; mill.

## GOLD AND SILVER (CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINTS	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Big Timber . . . . . Park Ry. 529 (60 miles).	Crown Mining Co., Billings, Mont. Samuel F. Mitchell, mgr. Crown, gold and silver. Shaft; free; hand; 3 stamps.
" " " "	Hicks Park Mining Co. C. S. Busha, pres.; Benj. Umer Jr., secy. and treas.; John Renfro, mgr. and supt. Cap. stk. \$25,000. Hicks Park, gold. Placer (developing).
" " " "	Mamie Mining Co. A. D. Sidle, pres.; Geo. R. Urner, secy. Cap. stk. \$1,000,000. Mamie and Hoodle, gold and silver. Shaft; free; steam; 5 stamps.
" " " "	Pony Man's Mining Co. A. N. Hawley, pres., mgr. and supt.; H. M. Albin, secy. and treas. Cap. stk. \$2,500,000. Poorman, gold and silver. Shaft; free; steam; 8 stamps.
Birch Creek . . . . . Meagher (P. O. White Sulphur Sprgs.) Ry. Helena 529.	Birch Creek Mining Co. J. C. Downton, pres. and supt.; A. Bomgard, secy. and treas.; J. G. Pickering, mgr. Cap. stk. \$300,000. Cleveland, Carrie and Ready Cash, gold and silver. Tunnel and shafts; free and refractory; horse.
Blackhawk . . . . . Meagher Ry. Livingston 529.	Alice Mining Co., Martinsdale, Mont. J. M. Smith, pres.; J. A. McNaught, secy.; John Palter, treas.; W. A. Smith, mgr. and supt. Cap. stk. \$500,000. Alice, Bondholder, Alvona and Annie Maud, silver and lead. Shaft; free; steam.
" " " "	Black Hawk Mining Co., Martinsdale, Mont. J. M. Smith, pres.; N. B. Smith, secy.; James T. Wood, treas.; W. A. Smith, mgr. Cap. stk. \$500,000. Blackhawk, Mohawk and Altha, silver and lead. Shaft; free; horse (developing).
" " " "	Donnan & Fitzpatrick, John Donnan, mgr. and supt. Cap. \$10,000. Como and Tiger, silver and lead. Shaft; free; hand.
" " " "	Grant Mining Co., Bozeman, Mont. E. E. Fowler, pres. and mgr.; F. S. Webster, secy.; W. H. Poorman, treas. Cap. stk. \$3,000,000. Waterloo and International, silver and lead. Shaft; free; horse and water. J. M. Lyons, supt.
" " " "	Legal Tender Mining Co., White Sulphur Springs, Mont. Wm. Parberry, pres.; D. E. Folsom, secy.; John A. Woodson, treas.; V. J. McPherson, mgr. and supt. Cap. stk. \$5,000,000. Legal Tender and Aurora, silver. Slope and shaft; steam; free.
" " " "	Triumvirate Mining Co. N. B. Smith, pres.; John L. Fraser, secy. and treas.; Elmer E. Phillips, mgr. and supt. Cap. stk. \$600,000. Big Mogul, Little Mogul and Hodges Faction, silver, lead and iron. Shaft; hand (developing).
Boulder . . . . . Jefferson (P. O. Boulder Valley) Ry. 529, 293.	Finney & Bedell, Wm. T. Sweet, pres.; Will E. Bedell, secy.; Hon. Judge Buck, treas.; Frank L. Finney, mgr. and supt. Cap. \$60,000. Scioto, gold, silver and lead. Shafts, 50 tons; hand; refractory.
" " " "	Rocky Mountain Mining Co. Jesse Patterson, pres. and mgr.; Frank Bernatz, secy.; W. P. Hoopes, treas. Cap. stk. \$300,000. Hoosier Boy, silver and lead. Shaft; steam.
Butte City . . . . . Silver Bow Ry. 529, 293, 403.	Amy & Silversmith Consolidated Mining Co. George W. Irvin, pres. and mgr.; Joseph V. Long, secy.; M. B. Brownlee, treas. Cap. stk. \$2,000,000. Amy, gold and silver. Shaft, 1,000 tons; refractory; steam.
" " " "	Anaconda Mining Co. J. B. Haggin, pres.; F. E. Sargeant, secy.; Marcus Daly, mgr. Cap. stk. \$25,000,000. Anaconda Mine and 65 other claims, silver and copper. Shafts, 1,200,000 tons; refractory; steam, water and electricity; mill. Patrick Kane and Joseph Laird, supts.
" " " "	Arlington Mining Co., New York City, 15 Wall st. Geo. C. Magoon, pres.; Geo. F. Crane, secy. and treas.; C. W. Goodall, mgr. and supt. Cap. stk. \$300,000. Star West and Mountain Boy, gold and silver. Shaft, 2,000 tons; refractory; steam.
" " " "	Blue Bird Mining Co., Ltd., F. Van Zandt, pres.; W. G. Didrichsen, secy. and treas.; W. H. Keller, mgr. Cap. stk. \$1,000,000. Blue Bird, silver. Shaft, 50,000 tons; refractory; steam; 80 stamps. W. W. Adams, supt.
" " " "	Boston & Montana Consolidated Copper & Silver Mining Co., Boston, Mass., Sears Building. A. S. Bigelow, pres.; Thos. Neelson, secy. and treas.; Thos. Couch, mgr. and supt. Cap. stk. \$3,125,000. Mount-ain View, East and West, Colusa and 3 others, silver and copper. Shaft, 150,000 tons; steam, furnaces.
" " " "	Butte & Boston Mining Co., Boston, Mass., Sears Bldg. S. M. Crosby, pres.; A. S. Bigelow, secy. and treas.; C. H. Palmer, mgr. Cap. stk. \$5,000,000. Butte and Boston, silver and copper. Shafts, 162,000 tons; free and refractory; steam; 40 stamps. Jas. Hootson, supt.
" " " "	W. A. Clark, cor. Broadway and Main sts. R. G. Brown, mgr. and supt. Black Rock, silver. Shaft, 1,600 tons; refractory; steam.
" " " "	Colorado Smelting & Mining Co., Denver, Colo., Boston Block, Seventeenth st. N. P. Hill, pres.; H. R. Wolcott, secy. and treas.; Henry Williams, mgr.; C. W. Goodale, supt. Cap. stk. \$1,000,000. Gagnon, Caledonia, Nettle, Burlington and others, gold, silver and copper. Shaft, 60,000 tons; free and refractory; steam.
" " " "	Comanche Mining Co., 29 W. Broadway. P. A. Largey, pres.; Chas. S. Warren, secy.; L. A. Mantle, treas.; Geo. H. Tong, mgr. and supt. Cap. stk. \$3,000,000. Comanche, silver and copper. 60,000 tons; refractory; steam.
" " " "	Electric Mining & Reduction Co., 16 N. Main st. B. C. W. Evans, pres.; Ben. F. Orndt, secy. and treas.; J. H. Cradlebaugh, mgr. Cap. stk. \$450,000. Electric Nos. 1, 2, 3 and 4, gold. Shaft; free; hand.
" " " "	L. Frudenstine, 403 W. Mercury st. Germania, gold and silver. Shaft, 5,000 tons; refractory; steam.
" " " "	Glenegarry Mining & Milling Co. W. R. Kenyon, pres.; H. C. Caney, secy. and mgr.; J. V. Long, treas. Cap. stk. \$1,000,000. Glenegarry, gold and silver. Shaft, 1,500 tons; refractory; steam.
" " " "	John A. Leggat, 207 Montana st., P. O. Box 115. Cap. \$100,000. Gambetta, Victoria, Eureka and Collins, gold, silver and copper. Shafts, tunnels and slopes, 25,000 tons; free, refractory; steam, water, horse and hand.
" " " "	Montana Mining, Loan & Investment Co., cor. Park and Main sts. Henry L. Haupt, pres., treas. and mgr.; Chas. J. Stevenson, secy. Cap. stk. \$12,000,000. Fourteen claims, gold, silver and copper (developing).
" " " "	The Ophir Mining Co., P. O. Box 427. F. G. Lamson, pres. and mgr.; H. R. Mills, secy.; W. C. King, treas. Cap. stk. \$1,500,000. Ophir, gold and silver. Shaft, 4,000 tons; refractory; steam. W. C. Kifo, supt.

## GOLD AND SILVER (CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Butte City..... Silver Bow (Continued.)	Original Mining Co., Broadway and Main sts. W. A. Clark, prest.; Bryan Irvin, secy.; A. J. Johnson, treas.; R. G. Brown, mgr. and supt. Cap. stk. \$150,000. Original silver and copper. Slope, 4,000 tons; refractory; steam.
" " " "	Vanore Mining Co., 16 N. Main st. B. C. W. Evans, prest. and mgr.; Ben. F. Orenti, secy. and treas. Cap. stk. \$1,000,000. Golden Crown, gold. Shaft; free; hand.
Cable, Deer Lodge Ry., Anaconda 409 (15 miles).	Cable Mining Co. James C. Savery, prest. and supt. Cap. stk. \$200,000. Cable, gold. Tunnel, free, steam; 30 stamps.
Canyon Ferry, Meagher Ry., Helena 263, 529.	Hell Gate Mining Co., Helena, Mont., 100 Butte av. W. H. Mackey, prest.; W. R. Barnes, secy.; John Oaks, treas.; S. Barnes, mgr. Cap. stk. \$50,000. Hell Gate, gold. Placer.
" " " "	Van Camp Mining Co. Henry Van Camp, prest., secy. and mgr.; John S. Buswell, treas. Cap. stk. \$75,000. Cooper Gulch, gold. Placer; hydraulic.
Carter, Missoula Ry., Spring Gulch 529.	El Dorado Mining Co., Missoula, Mont. M. G. Rutherford, prest., mgr. and supt. H. R. Heacock, secy. and treas. Cap. stk. \$200,000. El Dorado and Harrison, silver and lead. Shaft and tunnel, 3,000 tons; hand.
" " " "	Silver Galena Mining Co., Missoula, Mont. J. H. B. Foster, prest.; E. A. Winstanley, secy. and treas.; J. M. Hargrave, mgr. and supt. Cap. stk. \$1,000,000. Silver Galena, silver and lead. Tunnel; refractory; hand.
Castle, Meagher Ry., Livingston 529 (60 miles).	Alco Mining Co., Martinsdale, Mont. John M. Smith, prest.; J. A. McNaught, secy.; John Potter, treas.; W. A. Smith, mgr. Cap. stk. \$5,000,000. Bombholder, Alco, Annie Maud and Alvina, silver and lead, Shaft; refractory; steam (developing). W. A. Smith, supt.
" " " "	American Mining Co. I. M. Hensley, prest.; J. P. Rhoads, secy.; J. A. Hensley, treas.; J. E. Hensley, mgr. Cap. stk. \$5,000,000. American, Chatter and Vera, gold, silver and lead. Tunnels and shafts; refractory.
" " " "	Anna C. Mining Co., Livingston, Mont. J. C. Savage, prest.; J. C. Vilas, secy. and treas.; J. V. Nye, mgr. and supt. Cap. stk. \$1,000,000. Anna C., silver and lead. Tunnel, 200 tons; refractory; steam.
" " " "	Armada Mining Co. J. H. Kane, prest.; L. Peavoy, secy.; W. H. Barnes, treas.; W. H. Metcalfe, mgr. and supt. Cap. stk. \$250,000. Armada, smuggler, Little and Sleeper, silver and lead. Shafts; steam (developing).
" " " "	Baleock & Miles. Silver Eagle, lead and silver. Shaft; horse (developing). P. H. Tooly, supt.
" " " "	California & Hendrix Mining Co. F. L. Hensley, prest.; N. E. Benson, secy.; J. E. Hensley, treas. and mgr. Cap. stk. \$5,000,000. California, silver and lead. Shaft, 1,000 tons; refractory; steam. T. W. Stewart, supt.
" " " "	Cumberland Mining and Smelting Co. Chas. E. Severance, prest.; R. H. Minty, secy.; Jas. L. Fraser, treas.; A. J. Humeke, mgr. and supt. Cap. stk. \$5,000,000. Cumberland and others, silver and lead, shafts, 15,000 tons; refractory; steam; smelter, 2 stacks.
" " " "	Granite Castle Mining Co., White Sulphur Springs, Mont. Louis Rotwitt, prest.; John Rees, secy. Cap. stk. \$500,000. Granite Castle No. 2, silver. Shaft, hand (developing).
" " " "	Hensley Bros. Morning Star, Belle of the Castles and Lamar, gold, silver, copper and lead. Shafts and tunnels; refractory; steam (developing).
" " " "	Lenox Mining Co., Livingston, Mont. W. D. Ellis, prest., treas. and mgr.; Geo. A. Ellis, secy. Golden Eagle, gold, silver and lead. Shafts; horse. S. T. Simonsen, supt.
" " " "	Little Dot Mining Co. J. M. Kumppe, prest.; N. E. Benson, secy.; Mrs. Dottie Donovan, treas., mgr. and supt. Cap. stk. \$500,000. Little Dot, lead and silver. Shafts, free smelting, hand.
" " " "	Mary Anderson Mining Co. H. W. Rowlen, prest.; H. Burton, prest.; C. A. Wastum, treas.; W. A. Boots, mgr. and supt. Cap. stk. \$2,500,000. Mary Anderson, gold. Shaft, free.
" " " "	Elmer E. Phillips. Gold, silver and copper. Shaft and tunnel; refractory; hand (developing).
" " " "	Joe Reed. Missouri, gold and silver. Shaft; refractory, hand.
" " " "	Solid Silver Mining Co., Melville, Mont. Mr. Barry, prest.; P. Van T lead, secy. and treas.; Thos. Hughes, mgr. and supt. Cap. stk. \$2,500,000. Solid silver, silver and lead. Shaft; refractory; horse.
" " " "	Winged Crescent Mining Co. P. O. Box 9. Lee Simonsen, prest.; S. T. Simonsen, secy. and treas.; O. Hooda, mgr. Cap. stk. \$500,000. Winged Crescent, gold, silver and lead. Shaft and tunnel; free smelting; horse.
" " " "	Yellowstone Mining Co. Wm. Parberry, prest.; J. E. Hensley, secy. and treas.; R. W. Peters, mgr. Cap. stk. \$2,500,000. Yellowstone, silver and lead. Shaft, refractory; steam, blast furnace, 12,000 tons. N. J. Fredinich, supt.
Cavendish, Beaver Head Ry., Red Rock 776 (25 miles).	Bon Avord Placer Mining Co., J. Stewart Wallace, prest.; P. L. Ball, secy. and treas.; Matthew L. Comiskey, mgr. and supt. Cap. stk. \$50,000. Bon Avord, gold. Placer; water; elevators (developing).
" " " "	Golden Leaf, Ltd., London, Eng., 29 Martha's lane, E. C. J. S. Wallace, prest.; H. C. Richardson, secy. and treas.; J. H. Longmaid, mgr. Cap. stk. \$1,550,000. Golden Leaf, gold and silver. Tunnel, shaft and placer, 13,000 tons; free; steam; 20 stamps. Thos. Williams, supt.
Champion, Deer Lodge Ry., Deer Lodge 439.	Champion Mining Co., Deer Lodge, Mont. N. J. Rielenberg, prest. and mgr.; Lew. Coleman, secy.; H. H. Zoner, treas. Cap. stk. \$1,000,000. Lillie, Mary, Augusta and Champion, silver. Shaft, 14,000 tons; free; steam; 20 stamps. E. T. Stoughton, supt.
" " " "	New Silver Crown Mining Co., Chicago, Ill., 806 Tacoma Bldg. I. Galitzki, prest.; J. C. Shanlit, secy.; R. T. Kemm, treas.; Edwin Simpson, mgr. and supt. Cap. stk. \$500,000. New Silver Crown, silver. Shaft, free and refractory; steam.
Chico, Park Ry., Emigrant 529 (10 m.).	John C. Caldwell. North Star, gold. Shaft (developing).
" " " "	Wm. F. Gray. Back Pay Mines 1, 2 and 3, Butte and Gopher Mines, gold and silver. Free; hand and horse (developing).
" " " "	W. T. Hobbs. St. Julien, gold, silver and bismuth. Tunnel; refractory.

## GOLD AND SILVER—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
Chico	Park (Continued.)	Hudson & Blair, Granite, Mont. Cap. \$10,000. Morning Star, gold, silver and lead. Tunnel, 5 tons; free; S. R. Hudson, mgr. and supt.
"	"	Krippner, Hoopes & Stands. Cap. \$30,000. Old Faithful, Gertie G. No. 2, Lilly, Moonlight and Cora K., gold, silver and lead. Shaft and tunnels, 15 tons; refractory; hand. Jas. M. Krippner, supt.
"	"	Montana Bismuth Mining & Milling Co., Helena, Mont. M. W. Johnson, pres.; J. W. Eddy, secy.; Thos. Goodwin, treas.; W. J. Hobbs, mgr. and supt. Cap. stk. \$2,500,000. Queen Bee, Mimic and Tippecanoe, gold. Tunnels; refractory.
"	"	Six Mile Placer Co., Livingston, Mont. Marchington & Dyer, proprs. Cap. \$10,000. Six Mile, gold. Placer; water.
Clancy	Jefferson Ry. 293, 529.	Bookeye Gold & Silver Mining Co., Helena, Mont. A. J. M. Hosom, pres.; Olof W. Anderson, secy. and treas.; R. E. De Camp, v.-pres. Cap. stk. \$500,000. Government Bond, Gold and Dan Tucker, gold and silver. Shafts and drifts; free; steam (developing).
"	"	E. Redding. King Solomon, silver and lead. Shaft; refractory; horse.
"	"	George Strobel, Cap. \$2,000. Blue Rock, silver and copper. Shaft and tunnel, 100 tons; free; horse.
Clarke	Deer Lodge P. O. and Ry. Phillips- burg 529.	Bi-Metalle Mining Co., St. Louis, Mo., 116 LaCade Bldg. M. Rumsey, pres. and treas.; F. J. Casey, secy. Cap. stk. \$5,000,000. Bi-Metalle, silver. Shaft, 61,000 tons; refractory; steam; 100 stamps, 34 pans, 17 rollers, 8 roasters, 4 dryers. W. Thomas Hart, supt.
Clinton	Missoula Ry. 529.	Chester Mining Co., R. J. Womysy, pres. and treas.; W. A. Logne, secy., mgr. and supt. Cap. stk. \$500,000. Chester, silver. Shaft; refractory; steam.
Combination	Deer Lodge Ry. Phillipsburg 529 (3 miles).	Combination Mining & Milling Co., St. Louis, Mo., 132 LaCade Bldg. C. D. McLaure, pres.; J. B. McElroy, secy.; A. Herscheid, treas.; F. W. Sherman, mgr. and supt. Cap. stk. \$300,000. Combination, silver. Shaft and slope, 24,000 tons; free; steam; 20 stamps.
Comet	Jefferson Ry. Wickes 293, 529.	Erickson & Ortling, Helena, Mont. Independent, gold, silver and lead. Shaft, 100 tons; refractory; horse.
Cooke	Deer Lodge Ry. Chinaburg 529 (30 mi.).	Catherine Noble Mining Co., Minneapolis, Minn., 427 Nicolet av. C. P. Lise, pres.; C. P. Sutherland, secy.; Wm. Z. Mead, treas.; David Noble, mgr. Cap. stk. \$1,500,000. Solid Silver, Rich Strike, Treadwell, Lady Elgin, Arabian and Alaska Diamond, gold, silver and lead. Shaft, tunnel; refractory; hand (developing). David Noble, supt.
"	"	General Office Mining and Reduction Co., St. Paul, Minn. S. L. Moore, pres.; T. S. Woodruff, secy.; C. A. Clark, treas.; David Noble, mgr. Cap. stk. \$2,000,000. Mountain View and 9 other mines, gold, silver and lead. Tunnels and shafts; refractory.
"	"	Vinnedge Mining Co. Wm. J. Vinnedge, pres.; Mrs. Belle V. Drake, secy.; Alvin P. Vinnedge, mgr. Cap. stk. \$3,000,000. Silver King, Little Kid and 3 others. Tunnel (developing).
Deerfield	Fergus Ry. Big Sandy 293 (100 miles).	Bayles, Riser & Arnold. Anderson and Union, gold, silver, lead, copper. Shaft and tunnel, 100 tons; free; hand.
"	"	North Moccasin Mining Co., Lewistown, Mont. J. L. Harmon, pres. and supt.; W. G. Norman, secy. and treas.; J. H. Norman, mgr. Cap. stk. \$200,000. Gold, silver and lead. Shaft and tunnel; refractory; horse (developing).
Deer Lodge	Deer Lodge Ry. 469.	Emery Mining Co., X. J. Bielenberg, pres. and mgr.; H. H. Zenor, secy. and treas. Emery, gold and silver. Shaft, 3,000 tons, refractory; steam. A. C. Cabrel, supt.
"	"	Lion Mining Co., Jas. H. Mills, pres.; Geo. S. Miller, secy.; J. B. McMaster, treas.; Sam Taylor, mgr. and supt. Lion Mine, gold and silver. Shaft; free; steam.
Dewey	Beaver Head Ry. Divide 776 (6 m.).	Jay Hawk & Lone Pine Consolidated Mining Co., Ltd., London, Eng., Dashwood House, Old Broad St. The Hon. Ponsonby, pres.; W. J. Lavington, secy.; Henry Pridoux, mgr. and supt. Cap. stk. \$1,425,000. Lone Pine, Jay Hawk, silver. Shafts and slopes, 15,000 tons; free; steam; 2 mills, 25 stamps.
"	"	J. Benton Leggat. Argyle, silver. Shaft; free; steam and horse. James Gallogly, supt.
Diamond City	Meagher Helena, 293, 529.	John M. Norris. Montana Regent and 2 others, gold. Tunnels and shafts; free, refractory.
Dillon	Beaver Head Ry. 776.	Polaris Mining & Milling Co., Helena, Mont. J. E. Knapp, pres.; C. G. Carrier, secy.; O. T. H. Allen, mgr. and supt. Cap. stk. \$150,000. Polaris Mine, silver. Shaft and tunnel, 2,000 tons; steam.
Drummond	Deer Lodge Ry. 529 (40 miles).	Hercules Mining Co., Butte City, Mont. John P. Fitch, pres. and mgr.; G. H. Macdonough, secy. Cap. stk. \$2,000,000. Hercules, silver and copper. Tunnel; free and refractory (developing). A. H. Hartt, supt.
Dunsmuir	Gallatin Ry. Belgrade 529 (16 m.).	Alf Johnson. Black Hawk, silver and lead. Slope; refractory; hand (developing).
"	"	M. E. Strickler. Oro Grand and Jo Dandy. Shaft and tunnel; refractory.
Eddy	Missoula (P. O. Missoula) Ry. 529.	Black Bell & Quantrell Mining Co., D. D. Bogart, pres.; Frank Bogart, secy.; S. J. Myers, treas.; A. W. Moore, mgr. and supt. Cap. stk. \$250,000. Black Bell, Quantrell, Surprise and Fannie E., gold. Tunnel; refractory; water (developing).
Elkhorn	Jefferson Ry. 529.	Dunstone Mining Co., Helena, Mont. Chas. A. Clarke, pres.; John W. Eddy, secy.; Chas. W. Cannon, treas. Cap. stk. \$1,000,000. Dunstone Mine, gold, silver and lead. Slope, 200 tons; refractory; hand.
"	"	Elkhorn Mining Co., Ltd., London, Eng., 6 Drapers' Gardens, E. C. A. G. Brand, pres.; Chas. Pakeman, secy.; John W. Plummer, mgr. Cap. stk. \$1,000,000. Elkhorn, silver and lead. Shaft, Slope, 18,000 tons; free and refractory; steam; 25 stamps. Chas. A. Molson, supt.
Elk Park	Jefferson Ry. 293.	Larson, Talus, Hyman & Martinson, Butte, Mont. Silver King, gold and silver. Tunnel, 150 tons; refractory.
Elliston	Deer Lodge Ry. 529.	William Dyer, Helena, Mont. Ontario, gold and silver. Tunnel and shaft, 3,000 tons; refractory; steam. Wm. Job, supt.

## GOLD AND SILVER—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN	COUNTY.	
Elliston	Deer Lodge (Continued.)	Grand Republic Mining Co., Helena, Mont., 20 Pittsburg Block, J. C. Hallum, pres.; Chas. A. Cook, secy. and treas. Cap. stk. \$5,000,000. Lilly and Monarch, gold and silver. Shafts and tunnels, 10,000 tons; steam.
"	"	Will O'Keefe, Cap. \$75,000. Alma, Clan Alpine, Jennie Hatfield, Alice Cooper, Jessie Wear and Water Right Mines, gold and silver. Shafts and tunnels.
"	"	Richmond Mining Co., Miles City, Mont. C. B. Towlers, pres.; J. B. Collins, secy.; H. B. Wiley, treas.; Wm. O'Keefe, mgr. and supt. Cap. stk. \$1,000,000. Richmond, Nellie Blake and Eureka, gold and silver. Tunnel; free and refractory; hand (developing).
"	"	Wall Street Mining Co., Helena, Mont. Hiram E. Burch, pres. and treas.; John W. Eddy, secy. Cap. stk. \$1,000,000. Mary Ann, Racine and Rising Sun, gold and silver. Tunnel; refractory, hand (developing).
Empire	Lewis and Clarke Ry., Marysville 729.	Golden Leaf Co., Ltd., London, E. C., Eng., 29 Martin's lane, J. Stewart Wallace, pres.; J. Ball, secy. and treas.; J. Henry Longmaid, mgr. Cap. \$1,750,000. Empire, Smithville, Whip-poor-will, Bell Ray and Gleason, gold. Shafts and tunnels, 51,000 tons, free steam; 60-stamp mill. Henry Northey, supt.
Feeley	Silver Bow Ry., 776.	Kirley Bros. & Goodwin. Goodwin and Sage Hen, gold and silver. Shaft and tunnel; free; horse and hand (developing).
Fin	Jefferson Ry., 529.	Beattie, Harris & Toole, Helena, Mont., Merchants' National Bank Bldg., Room 2. Ida, gold, silver and lead. Shaft, 1,200 tons. Refractory, horse. Miles (Cavanaugh), supt.
Flint	Deer Lodge, (P. O., Deer Lodge City) Ry., 527 (12 miles).	Volcano Gold Mining Co., A. H. Mitchell, pres.; Lew Coleman, secy.; Willard Bennett, treas. Cap. stk. \$1,500,000. Volcano and Gold Leaf, gold and silver. Tunnel and shaft; free, steam (developing).
Florence	Missoula	Bitter Root Canal & Mining Co., Butte, Mont., 16 Main st. B. C. W. Evans, pres. and treas.; Ben F. Orent, secy.; Geo. H. Babcock, mgr. Cap. stk. \$5,000,000. Gold, Placer, water.
Forest City	Missoula Ry., Iron Mountain 529.	California Mining Co., California, gold. Placer. R. W. Martin, supt.
French Bar	Lewis & Clarke (P. O., Canyon Ferry) Ry., Helena 293, 529 (14 miles).	Joel Frakes. Frankie, silver. Shafts and tunnels, 10 tons; refractory, hand.
"	"	Missoula Gold & Sapphire Co., Missoula, Mont. J. H. B. Foster, pres.; F. T. Ellis, v.-pres.; George H. Clymick, secy. and treas.; T. D. Farrow, mgr. Cap. stk. \$2,500,000. Missoula, gold, sapphire. Placer (developing).
Galen	Meagher Ry., Great Falls 292, 293.	Dry Wolf Mining Co., Great Falls, Mont. Stephen Pierce, mgr. Gold Dust, silver and lead. Shaft and tunnel; free; hand.
"	"	More & Graham, Cap. \$50,000. Pateholas, Jay Bird and Queen, gold, silver and lead. Tunnel, 600 tons, free, hand. P. E. More, supt.
Gardiner	Park Ry., Cinnabar 320 (12 m.).	Crevasse Mountain Mining Co., Helena, Mont. P. F. Barr, pres.; Eugene Underwood Jr., secy.; E. D. Edgerton, treas.; W. E. Jewell, mgr. Cap. stk. \$5,000,000. Crevasse Mountain, gold. Shafts, tunnels and slopes, 10,000 tons; free; steam; 20-stamp mill. John Edgerton, supt.
"	"	John T. Knowles. Gold, Placer; hand.
"	"	W. J. Mallin & Co., St. Louis, Mo., 509 Washington av. Tower Grove and Pratt, gold and silver. Tunnel and shaft; free and refractory. W. J. Mallin, supt.
Glendale	Beaver Head Ry., Metrose 776 (20 m.).	G. B. Conway. Pedro, gold. Slope and tunnel, free; water (developing).
"	"	Hecla Consolidated Mining Co., Indianapolis, Ind., Wright's Block. John Thomas, pres.; J. C. McCutcheon, secy.; J. C. Wright, treas.; H. Knippenberg, mgr. Cap. stk. \$1,500,000. Elveng Mines, gold and lead. Slope, 18,000 tons; refractory; steam and water; 3 water jacket furnaces. Samuel A. Babour, supt.
"	"	Terry Bros. Park View, silver and lead. Tunnel, 2 tons; refractory; hand. David Terry, supt.
Granite	Deer Lodge Ry., Phillipsburg 529.	Granite Mountain Mining Co., St. Louis, Mo., Room 818 Security Bldg., L. M. Rumsey, pres.; Thos. O. Hyman, secy.; Paul A. Fesz, treas. Cap. stk. \$10,000,000. Granite Mountain, silver. Shafts and tunnels, 87,000 tons; refractory and free milling; steam; 4 mills, 180-stamps. Thos. Weir, gen. supt.; Werner Ziegler, asst. supt.
Grantsdale	Missoula Ry., 529.	Albert W. Bradford, Martha Glendaming, gold and silver. Open pit; refractory; hand (developing).
Great Falls	Cascade Ry., 293, 292.	Blue Dick & Cascade Gold and Silver Mining Co., P. H. Hughes, pres. and mgr.; G. W. White, secy. and treas. Cap. stk. \$1,000,000. Blue Dick and Manitoba, silver and lead. Tunnel, 200 tons. J. A. Garrier, supt.
"	"	Helena & Elma Mining Co., P. O. Box 500. Douglas Martin, pres.; G. D. Tallant, secy.; James Lawler, treas. Cap. stk. \$500,000. Helena and Elma, gold, silver and lead. Free (developing).
"	"	Queen Esther Mining Co., P. O. Box 67. S. P. Bowman, pres.; W. T. Houston, secy. and treas.; Oscar Ollinger, mgr. and supt. Cap. stk. \$10,000. Queen Esther, gold, silver, lead and iron. Tunnel; free, hand (developing).
Hackney Spur	Silver Bow (not a P. O.) Ry., 469 (11 miles).	Gilchrist, English & Fish, Anaconda, Mont. Levi P. Morton, gold, silver and lead. Shaft, free; hand (developing). Walter R. Fish, supt.
Helena	Lewis and Clarke Ry., 293, 529.	Good Luck Mining Co., P. O. Box 552. Geo. C. Swallow, pres.; John W. Eddy, secy. and mgr.; Albert S. Hovey, treas. Cap. stk. \$1,000,000. Good Luck, lead and silver. Shafts; refractory, horse (developing). H. K. Harvey, supt.
"	"	Meteor Mining Co., A. J. Seligman, pres.; John W. Eddy, secy.; A. M. Holt, treas. Cap. stk. \$1,000,000. Meteor and Star of the West, gold, silver and lead. Tunnel; refractory; hand (developing).
"	"	St. Helena Consolidated Gold & Silver Mining Co., Main st. John S. O'Brien, pres. and mgr.; E. W. Knight, v.-pres.; E. G. Norton, secy.; T. H. Kienzshmidt, treas.; Cap. stk. \$5,000,000. St. Helena, Alpine Chief, Yorktown, Cleveland and Lexington, Extension, gold, silver and copper. Shafts; free and refractory, hand (developing).

## GOLD AND SILVER (CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Helena, Lewis and Clarke (Continued).	Sapphire & Ruby Co. of Montana, Ltd., London, Eng. Placer, gold and gems. Capt. Wood, supt.
" " " "	Whitlatch Union & McIntyre Gold Mining Co., Journal Bldg. W. G. Bailey, pres.; G. E. Boos, secy.; W. H. Clark, treas.; Michael Cooney, mgr. and supt. Cap. stk. \$800,000. Whitlatch Union and McIntyre, gold. Shaft, 15,000 tons; free; steam; Huntington mill.
Helmville, Deer Lodge Ry. Avon 529 (35 m.).	American Silver, Copper & Refining Co., Chas. Cooper, pres. and mgr.; Jas. E. Marcum, secy.; Adrian Pritchard, treas. Cap. stk. \$10,000. Chance, silver and copper. Shaft; refractory.
" " " "	Best Bros., Northern View and 2 others, gold and silver. Slope, open pit, placer, 500 tons; refractory; steam; 5 stamps. Geo. W. Best, supt.
" " " "	Delamater & Odomego. Cap. stk. \$3,000; indy. cap. \$1,500. Hobby Horse, Lost Carbon and Delamater, gold, silver and copper. Shafts and slope; free and refractory; hand (developing).
Heron, Missoula Ry. 529 (3 miles).	Jules Norbee. Cabinet King, silver and lead. Tunnel (developing).
Hughesville, Meagher Ry. Barker 233 (1 1/2 m.).	Paris Gibson, Great Falls, Mont., First National Bank, Barker Mine, silver and lead. Shaft, 1,500 tons; refractory; steam. Wm. C. Stanley, supt.
" " " "	Loretta Gold & Silver Mining Co., Milwaukee, Wis., 462 Broadway. John M. Connolly, pres.; Chas. R. Groth, secy.; James Foley, treas.; M. J. Dunn, mgr. and supt. Cap. stk. \$600,000. Tiger Mine, gold, silver and lead. Tunnel, 7,000 tons; hand.
" " " "	Van Arsdale & Carpenter. Emerald, gold, silver and lead. Tunnels; refractory.
Independence, Park Ry. Big Timber 529 (50 miles).	Independence Mining Co., H. E. Leveaux, pres. and mgr.; Jas. H. Hoyt, secy.; Jas. Pickands, treas. Cap. stk. \$300,000. Independence, gold and silver. Shaft and tunnels; free; steam; mill. John Anderson, supt.
Jay Gould, Lewis & Clarke P. O. and Ry. Silver City 529 (20 miles).	Jay Gould Mining Co., Helena, Mont. John T. Murphy, pres.; R. O. Allen, secy.; Jos. P. Woolman, treas.; M. E. Downs, mgr. and supt. Cap. stk. \$2,000,000. Jay Gould, gold. Tunnel, 10,800 tons; free; steam; mill to stamps.
Kalspell, Missoula Ry. 233.	South Fork Mining & Milling Co., Chas. Burton, pres.; Henry W. Heidemann, secy. and treas.; P. Y. Smith, mgr. and supt. Cap. stk. \$1,000,000. Home-stake and Silver King, silver and copper. Tunnel; refractory and free; water (developing).
Lewistown, Fergus Ry. Billings 529.	North Moccasin Mining Co., J. L. Harmon, pres.; W. G. Norman, secy. and treas. Cap. stk. \$800,000. J. T. Mine, gold, silver, lead and copper. Tunnel and shaft; deep; free; hand (developing). J. H. Norman, supt.
Libby, Missoula Ry. Kootenai, Idaho, 529 (8 miles).	Ohio Mining Co., McAuley, Idaho. Thos. T. Cosgriff, pres.; Gurley Jones, secy.; Daniel Cosgriff, treas.; Jas. J. Ewing, mgr. Cap. stk. \$100,000. Uncle Sam and Companion, silver and lead. Tunnel, 6,000 tons; refractory; steam and hand. John Cosgriff, supt.
" " " "	Snow Shoe Mining Co., H. G. Longuee, pres.; B. Parmenter, secy.; A. F. Dunlap, treas.; J. G. Abbott, mgr. Snow Shoe, gold, silver and lead. Tunnel; refractory; hand (developing).
Lima, Beaver Head Ry. 775.	Red Rock Sand Stone Quarry & Mining Co., Edwin M. Jacobs, pres.; L. C. Ford, secy.; Lawrence Sell- strom, treas. Cap. stk. \$300,000. Red Star, silver and red sandstone. Open pit.
Livingston, Park Ry. 529 (13 miles).	Mill Creek & Emigrant Mining & Smelting Co., Geo. T. Chambers, pres. and mgr.; H. J. Miller, secy. and treas. Cap. stk. \$3,000,000. Wisconsin, Vinnie M., Sadié C. and Gertie G., silver. Tunnel, refrac- tory. W. P. Mutholland, supt.
Logging Creek, Meagher Ry. 233 (P. O. Morris).	Printers' Mining Co., Great Falls, Mont. S. J. Kinsey, pres. and mgr.; O. H. Perry, secy.; J. M. Patten, treas. Capital stk. \$300,000. Columbus, silver and lead. Tunnel; free; hand.
Lo Lo, Missoula Ry. 529 (5 miles).	Lo Lo Chickamaun Mining Co., L. M. Davis, pres. and treas.; Pleasant Davis, secy. and mgr. Cap. \$800,000. Lo Lo Chickamaun, gold, silver, copper and lead. Tunnel, 50,000 tons; water.
McKeen, Missoula P. O. Missoula Ry. 529.	Clift Mining Co., Wm. McKim, pres., mgr. and supt. S. F. Hodgson, secy. and treas. Cap. stk. \$1,000,000. Clift, silver and lead. Shaft and tunnel; refractory; water.
Maiden, Fergus Ry. Big Sandy 293 (90 miles).	Anderson & Rhodes. Northern Pacific and Iron Clad, silver, lead. Shaft and tunnel; refractory, hand (developing).
" " " "	Newton Cowan. Nellie Bly, gold. Tunnel; free; horse and hand.
" " " "	S. Hanson. Voltaire, gold. Tunnel and shaft; free; steam.
" " " "	Harman & Norman, Lewistown, Mont. New Year, gold and silver. Shaft; free milling; hand (develop- ing). A. D. Harman, supt.
" " " "	Thos. N. Kerr. Silver Chain, silver. Shaft and tunnel, 10 tons; free; hand.
" " " "	F. L. Kingsley. Evening Star, gold, silver, lead and copper. Shaft and slope; refractory; hand (develop- ing).
" " " "	R. B. Matthews. Yankee Girl, gold, silver, lead and iron. Shaft; refractory; hand; 10 stamps.
" " " "	William Maurer. Black Hawk, gold, silver, copper and iron. Tunnel; refractory.
Martha, Missoula Ry. Frenchtown 529 (25 miles).	Last Chance Mining Co., Robert Gay, pres., mgr. and supt.; Theo. Belard, secy.; John North, treas. Last Chance, silver and lead. Tunnel (developing).
" " " "	D. M. Power, Barrett, gold. Tunnel; free (developing).
Marysville, Lewis & Clarke Ry. 529.	Big O Mining Co., Helena, Mont., 21 and 22 Pittsburg Block. Carey Emerson, pres.; A. P. Dodge, secy., treas. and mgr. Cap. stk. \$1,000,000. Big O, gold, silver and lead. Tunnel and slope; refractory; steam; 10 stamps (developing).
" " " "	General Grant Mining Co., Helena, Mont. Henry Juergens, pres. and supt.; Frank Reece, secy. and treas.; John Rumping, mgr. General Grant and Earthquake, gold, silver, copper and lead. Shaft and tunnel; refractory (developing).
" " " "	Marysville Mining Co., Helena, Mont., 216 Power Building. Chas. A. Clarke, pres.; John W. Eddy, secy. and treas. Cap. stk. \$1,000,000. Jeanette, Redemption and Mexican Lode, gold and silver. Shaft and tunnel (developing).



## GOLD AND SILVER—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Marysville, Lewis & Clarke (Continued.)	Montana Co., Ltd., London, Eng., 42-47 Gresham House, Old Broad st., E. C. Stewart Pixley, chair- man; Thomas Neill, secy.; Geo. H. Robinson, mgr., Cap. stk. \$3,200,000. Drum Lumon, gold and silver. Tunnel and shaft, 85,000 tons; refractory; steam; 2 mills, 110 stamps. Jas. H. Henley, supt.
" " " "	St. Louis Mining & Milling Co., St. Louis, Mo., Room 412 Temple Bldg., Chas. T. Remme, pres.; Henry E. Barling, secy. and treas.; Wm. Mayer, mgr., Cap. stk. \$5,000,000. St. Louis, gold and silver. Shaft and tunnel; free; steam. Chas. F. Mayer, supt.
Meadow Creek, Madison Ry., Norris 529.	James McAllister, Grand Central, gold. Tunnel; refractory and free; hand.
Melrose, Silver Bow Ry., Norris 759.	McKeig & Morgan, Cap. stk. \$14,000. Volta, gold. Shafts; free; hand.
" " " "	Pandora Mining & Milling Co., Butte, Mont., Room 6 Silver Bow Block, C. H. Hand, pres. and mgr.; C. F. Chapin, v. pres.; Frank P. Gable, secy.; Andrew J. Davis, treas., Cap. stk. \$300,000. Pandora, gold and silver. Shaft and levels, free; steam; 5 stamps. J. G. Merrill, supt.
" " " "	Henry C. Stebbins, Mand S. and Belcher, gold, silver and lead. Slope and tunnel; refractory and free; horse.
Missoula Ry., 529.	Gowrie Mining Co., E. M. Tower, pres. t., Richard Marston, secy., J. M. Keith, treas., Cap. stk. \$500,000. Gowrie, silver.
" " " "	Granite Consolidated Mining Co., John F. Anderson, pres. and supt., Geo. F. Brooks, secy., treas. and mgr., Cap. stk. \$800,000. Gold, silver and copper. Shaft and tunnel; free; horse (developing).
" " " "	Landowner Mining Co., W. J. Stevens, pres.; Lee Worner, secy. and treas., Cap. stk. \$100,000. Land- owner, gold. Free; steam; 5 stamps (developing).
" " " "	Little Anaconda Mining Co., E. M. Tower, pres. and mgr.; J. M. Keith, secy. and treas., Cap. stk. \$1,000,000. Little Anaconda, silver and lead. Shafts and tunnels, 3,000 tons; refractory; steam. O. Jeldness, supt.
" " " "	Missoula Gold & Sapphire Co., Helena, Mont., J. H. B. Foster, pres.; J. H. Chizek, secy. and treas.; T. D. Farrow, mgr., Cap. stk. \$25,000. Gold and sapphires. Placer.
" " " "	Old Sierra Mining Co., E. W. Schilling, pres.; W. J. Stephens, secy. and treas., Cap. stk. \$100,000. Old Sierra, gold. Free; hand.
" " " "	San Martina Mining Co., Thos. C. Marshall, pres.; D. D. Bogart, secy., W. B. Parsons, treas., Cap. stk. \$500,000. San Martina, gold. Free; steam; 10 stamps (developing). John Schofield, supt.
" " " "	Silver Cable Mining Co., Wm. Criderman, pres. and supt.; J. L. Hart, secy., G. A. Wolf, treas., Cap. stk. \$3,000,000. Silver cable and Lost Cabin, silver and lead. Refractory (developing).
Montana City, Jefferson P. O. Marysville Ry., 293, 529.	Desrosier, Dulke & Scott, P. O. Box 15, Cap. stk. \$2,000. Blue Jay, gold and silver. Shaft and tunnel, 200 tons; free; hand.
Neilhart Ry., 293.	Meagher Cormucopa Mining Co., Great Falls, Mont., Hon. Paris Gibson, pres., John T. Maclay, secy. and treas.; P. H. Donovan, mgr., Cap. stk. \$1,000,000. Thirteen mines, gold and silver. Shafts (developing). P. H. Donovan, supt.
" " " "	Diamond R. Mining Co., Great Falls, Mont., Edgar T. Maclay, pres.; John T. Maclay, secy. and treas.; Robert M. Raymond, mgr., Cap. stk. \$1,000,000. Moulton and South Carolina No. 2, silver. Shafts, 82,000 tons; free and refractory; steam. R. B. Raymond, supt.
" " " "	Florence Mining Co., White Sulphur Springs, Mont., R. G. Wright, pres.; A. M. Henry, secy. and treas.; Geo. L. Johnston, mgr. and supt., Cap. stk. \$2,500,000. Florence, silver and lead. Tunnels and shafts, 500 tons; refractory; steam.
" " " "	Hornet Mining Co., Homer Thomas, pres.; Harry Powell, secy. and treas.; L. Fisher, mgr., Cap. stk. \$900,000. Hornet, gold, silver and lead. Shaft, hand.
" " " "	Ingersoll Mining Co., Great Falls, Mont., Allen Pierce, pres.; George Budge, secy. and treas.; Stephen Pierce, mgr. and supt., Cap. stk. \$1,000,000. Ingersoll, Vulture and 3 others; gold, silver and lead. Tunnel; refractory; steam.
" " " "	Keystone Mining Co., J. L. Adams, pres.; E. B. Nossel, secy. and treas., Cap. stk. \$500,000. Key- stone, Dalnogue and Monumental, gold, silver and lead. Shafts and tunnels; refractory; hand. F. Fisher, supt.
" " " "	Montana Gold, Silver, Platinum & Tellurium Mining Co., White Sulphur Springs, Mont., John C. E. Bar- ker, pres.; E. J. Anderson, secy. and treas.; David L. Barker, mgr. and supt., Cap. stk. \$1,500,000. Benton, gold, silver and platinum. Tunnel, 100 tons; free; hand.
" " " "	Queen of the Hills Mining Co., C. P. Downing, pres.; C. L. Parker, secy. and mgr.; C. E. Conrad, treas., Cap. stk. \$300,000. Homestake, Queen of the Hills and O'Brien, gold, silver, lead and copper. Shaft and tunnels; refractory; electricity. Rene Curin, supt.
" " " "	Savage Mining Co., Great Falls, Mont., Room 19 Cory Bldg., Will Hanks, pres.; W. H. Race, secy. and treas.; F. P. Atkinson, mgr., Cap. stk. \$500,000. Savage, silver and lead. Shaft; refractory; horse. F. P. Atkinson, supt.
" " " "	Silver Horn Mining Co., Allen Pierce, pres.; Richard Bennett, secy.; T. E. Healy, treas.; Thos. Roth- well, mgr. and supt., Cap. stk. \$1,000,000. Hawk Eye, Hatchet and Hatchet No. 2, gold and silver. Tunnel; free; hand (developing).
" " " "	Star Mining & Milling Co., Great Falls, Mont., Jas. A. Carrier, pres. and mgr.; H. W. Shearman, secy. and treas., Cap. stk. \$1,000,000. Evening Star and Morning Star, silver and lead. Shaft; refractory; hand (developing).
" " " "	Summit Mining & Milling Co., Geo. W. Brown, pres.; Isaac Mayer, v. pres.; Jas. S. Gordon, secy. and mgr.; A. G. White, treas., Cap. stk. \$500,000. Silver and lead. Shaft; free; horse. Hugh L. White, supt.
" " " "	Union Mining Co., F. W. Tombs, pres.; W. W. Hillis, secy.; A. Anderson, treas., mgr. and supt., Cap. stk. \$1,000,000. White Star and Blue Bell, silver. Tunnel; free; hand.
Pardee Ry., Iron Mountain 529 (6 miles).	Thomas Butler, May Day, Surplus and Butler, silver and lead. Tunnel, 1,200 tons; refractory; hand.

## GOLD AND SILVER—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINTS.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Phillipsburg Deer Lodge Ry. 529.	Bland Mining & Tunnel Co. Wm. Noble, prest.; Josiah Shull, secy.; Newt. Vaughn, treas.; B. L. Scott, mgr. Cap. stk. \$12,000. R. P. Bland and Pontine, gold and silver. Free (developing).
" " "	Combination Mining & Milling Co. Butte, Mont. C. D. McLure, prest.; J. H. Harper, secy.; A. Hirsfield, treas.; F. W. Sherman, mgr. Cap. stk. \$600,000. Combination, silver. Shaft, 20,000 tons; free; steam; 20 stamps.
" " "	Hope Mining Co. of St. Louis, St. Louis, Mo., Room 130 Laeale Bldg. John C. Porter, prest.; Chas. A. Cuno, secy.; G. A. W. Angus, treas.; N. B. Ringling, mgr. and supt. Cap. stk. \$1,000,000. Hope, silver. Shafts and tunnel, 7,000 tons; free; steam; 10 stamps.
" " "	Puritan Mining & Milling Co. John McKeelney, prest. and mgr.; John McKeelney jr., secy. and treas. Cap. stk. \$1,500,000. Puritan, silver. Shaft, 10,000 tons; free; steam; John Hird, supt.
Placer Jefferson Ry. 529 (3 miles).	Chisholm & Chisholm, Little Bonanza and Bed Rock, silver and lead. Shaft and tunnels, 400 tons; refractory; steam; J. P. Hardy, supt.
" " "	Custer Mining Syndicate, St. Louis, Mo., Room 134 Laeale Bldg. Charles Clark, mgr. Cap. \$75,000. Custer, gold and silver. Shaft and tunnel, 4,000 tons; refractory; steam. O. H. Tibbets, supt.
" " "	Jumbo Copper Mining Co., Helena, Mont., 24 Edwards st. F. J. Thomas, prest., mgr. and supt.; Chas. R. Sutton, secy.; L. W. Heath, treas. Cap. stk. \$300,000. Jumbo, Pine Tree and Pioneer, silver and copper. Shaft and tunnel; refractory; steam.
" " "	Winston & Kendrick, Minneapolis, Minn., Room 2 Union Depot. Cap. stk. \$300,000. East Pacific, gold, silver and lead. Tunnel, 2,000 tons; refractory; hand.
Pony Madison Ry. 529 (4 miles).	W. S. Duncan, Glen Addie, gold. Shaft, 15 tons; refractory; horse.
" " "	Duncan & Hallowan, Banker, Southern Gal. Stephanite and 6 other claims, silver. Shafts and tunnels; free; hand.
" " "	Garnet Gold Mining Co., St. Louis, Mo., 226 Walnut st. F. C. Wood, prest.; J. M. Durdy, secy.; Geo. A. Zeller, treas.; C. H. Wood, mgr. Cap. stk. \$75,000,000. Galena Group, gold. Shafts and tunnels, 500 tons; refractory; steam. John Ballaban, supt.
" " "	W. C. McKaskle, Belle, gold. Tunnel, 300 tons; free and refractory; water, 20 stamps.
" " "	Stock & Allen, Ticonderoga, silver. Tunnel; refractory.
" " "	Frank Walters, Sarah Bernhart and Buffalo Bill, gold, silver and copper. Shaft and tunnel, 500 tons; refractory; water; 20 stamps.
Princeton Deer Lodge Ry. Flint 529.	Royal Gold & Silver Mining Co., Deer Lodge, Mont. Willard Bennett, prest.; Lew Coleman, secy. and treas.; W. W. Turney, mgr. and supt. Cap. stk. \$1,750,000. Royal, gold and silver. Tunnel and shaft, 12,000 tons; free; steam; 10 stamps.
" " "	Voleano Gold & Silver Mining Co. A. N. Mitchell, prest.; Lew Coleman, secy.; W. Bennett, treas. Cap. stk. \$1,500,000. Voleano, gold. Tunnel; free; steam. W. W. Turnes, supt.
Quartz, Missoula Ry. 529.	Landowner Consolidated Mining Co., Missoula, Mont., 15 W. Main st. W. J. Stephens, prest.; L. J. Warner, secy. and treas.; Robert Childs, mgr. and supt. Cap. stk. \$2,000,000. Landowner and Sunday, gold. Tunnel, 20,000 tons; free; steam and water; 10 stamps.
Radersburg Jefferson Ry. Toston 529 (10 m.).	John A. Keating, Cap. \$100,000. Keating, Ohio and Leviathan, gold and silver. Shafts and tunnels; refractory; steam; 10 stamps (developing).
" " "	John M. Balls, Mountain Glen, gold, silver and lead. Shaft, free (developing).
Red Bluff Madison Ry. Norris 529 (10 m.).	Riverside Mining & Milling Co., Minneapolis, Minn., Corn Exchange. D. F. Morgan, prest. and mgr.; S. B. Lovejoy, secy. and treas. Cap. stk. \$500,000. Riverside, Katie and Hayward, gold, silver and lead. Tunnels; refractory; hand (developing). Thomas M. Park, supt.
Revenue Madison P. and Ry. Norris 529.	Plutus Mining & Milling Co., Bozeman, Mont., Room 5 Hotel Block. Archie G. Macdonald, prest.; F. B. Turner, secy. and treas.; Angus McMaster, mgr. Cap. stk. \$1,000,000. Highhill, East Highhill, Gold Dirt and 7 other mines, gold and silver. Shaft and tunnel; refractory; steam. Daniel McDonald, supt.
" " "	Revenue Consolidated Gold Mining Co., O. S. Sanders, M. D., prest.; H. L. White, secy.; Geo. H. Burt, treas.; R. B. Turner, mgr. Cap. stk. \$2,000,000. Revenue and Income, gold and silver. Shaft and slope, 6,000 tons; refractory; steam; 20 stamps. F. B. Turner, supt.
Rimini Lewis and Clarke Ry. 529.	Frederick A. Barnlund, Cap. \$10,000. Montezuma, gold, silver and lead. Shaft; refractory; horse.
" " "	Buffalo Mining Co., Helena, Mont. John F. Mulgren, prest.; James Cavenaugh, secy.; Bernard Mulgren, treas. and mgr. Cap. stk. \$500,000. Buffalo, Mulgren, Alice, Cavenaugh, Adam, Julia and Augusta, gold, silver and lead. Tunnel, 5,000 tons; refractory; hand. A. W. Foller, supt.
" " "	J. H. Conley, Nettie, gold and silver. Shaft; hand (developing).
" " "	A. F. Davis, Cap. \$5,000. Silver Reef, Virginia Belle, Mountain View, Jenette, A. F. Davis, Tiger, Mother and Ida Glenn, gold, silver and lead. Tunnels; refractory; steam (developing).
" " "	Dividend Mining Co., Helena, Mont., Sixth av. and Main st. W. E. Cox, prest.; John W. Eddy, secy. and treas.; Geo. B. Parker, mgr. and supt. Cap. stk. \$1,000,000. Katie Putnam, silver and lead. Tunnel; refractory.
" " "	Estella Mining Co., John Hell, prest.; J. J. Hennessy, secy.; Frank Hell, treas.; D. Hell, mgr. Cap. stk. \$500,000. Estella, gold and silver. Shaft and tunnels; 25,000 tons; refractory; horse and water. M. Dugon, supt.
" " "	Golden Gate Mining Co. John Hell, prest.; J. J. Hennessy, treas.; M. Dugon, mgr. Cap. stk. \$200,000. Golden Gate, gold, silver and lead. Shaft and tunnel, 5,000 tons; refractory; horse and hand. Geo. Ammery, supt.
" " "	Harrison & Co., Helena, Mont. Eureka, gold and silver. Shaft, 30,000 tons; steam. W. Coln, supt.
" " "	Win. H. Hartman, Blue Eyed Mollie and Gentle Annie, gold, silver and lead. Tunnels, 2,500 tons; free; hand.

## GOLD AND SILVER (CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWNSHIP AND COUNTY.	
Rimini Lewis and Clarke (Continued.)	Heil Bros., Mankato, Minn., 511 Frank st., Frank Heil, pres.; John Heil, mgr. Cap. stk. \$250,000. Golden Leaf, gold, silver and lead. Shaft, 2,000 tons; refractory; horse and hand. Joseph Stahl, supt.
" "	Heils Mining Co., John Heil, pres. and supt.; J. J. Hennessy, secy.; Frank Heil, treas.; Dominick Heil, mgr. Cap. stk. \$500,000. Peerless Kate, gold and silver. Shafts and tunnel, 2,500 tons; refractory; horse.
" "	Helena & Rimini Mining Co., Helena, Mont., R. S. Hale, pres.; W. E. Frederick, secy. and treas.; Wm. Coyne, mgr. Cap. stk. \$1,000,000. Eureka, silver, lead and iron. Tunnels and shaft, 2,000 tons; refractory; steam.
" "	J. J. Hennessy & Co., Gold Coin, gold, silver and lead. Shaft, 100 tons; refractory and free; horse. J. J. Hennessy, supt.
" "	Jackson & Gill, Cap. \$5,000. Black Warrior and Keystone, gold, silver and lead. Shaft, 3,000 tons; free, hand and horse. Wm. Jackson, supt.
" "	David Kirby, Walkerville, Mont., Cap. \$40,000. Monte Christo and Savannah, gold and silver. Tunnel and shaft, 300 tons; refractory; hand.
" "	Lohman & Dorabunt, Helena, Mont., S. Main st., Telegraph and Alexandria, gold, silver and lead. Placer and tunnel; refractory; steam and hand, 5 stamps (developing).
" "	Mammoth Mining Co., Council Bluffs, Iowa, 1030 Fifth av., J. J. Hennessy, pres.; S. J. Latham, secy. and supt.; Geo. Summers, treas.; S. H. McDonald, mgr. Cap. stk. \$500,000. Mammoth, gold, silver and lead. Tunnel, 20,000 tons; refractory; horse and hand.
" "	Manned & Davis, Peter Davis, mgr. Mette, gold, silver and lead. Slope, refractory; horse.
" "	Peerless Jennie Mining Co., Helena, Mont., Room 2 Merchants' National Bank Bldg., E. W. Beattie, pres. and mgr.; H. R. Conley, secy.; W. C. Childs, treas. Cap. stk. \$1,500,000. Peerless Jennie, gold, silver, lead and copper. Shafts and tunnels; refractory; steam (developing).
" "	Queen City Mining & Developing Co., Helena, Mont., John S. Miller, pres.; W. F. Cummins, secy.; W. F. Whitaker, treas. Cap. stk. \$2,000,000. Gold, silver, lead and copper. Tunnel (developing).
" "	Queen of the West Mining & Milling Co., Helena, Mont., 610 H. B. Hale st., J. M. Clements, pres.; John Shaw, secy. and mgr.; J. D. Lunsay, treas. Cap. stk. \$1,000,000. Queen of the West, gold, silver and lead. Shafts and tunnels; refractory; horse.
" "	Thomas Travis, Atlanta, gold, silver and copper. Shaft, 700 tons; refractory.
Robinson Meagher Ry., Townsend 529 (48 miles).	Bonanza Mining Co., White Sulphur Springs, Mont., John Ramsey, pres.; Abe Gibson, secy.; John O'Mara, mgr.; B. B. Tierney, mgr. and supt. Cap. \$200,000. ind. cap. \$100,000. Bonanza, gold, silver and lead. Shafts, refractory, hand (developing).
" "	Cheopatra Mining Co., Billings, Mont., G. Barth, pres.; F. H. Foster, secy.; A. E. Saxton, treas.; Arthur Pico, mgr. and supt. Cap. stk. \$5,000,000. Cheopatra, silver and lead. Shaft; free; horse.
" "	Col. Sellers Mining Co., Evan T. Bowen, pres. and mgr.; Morgan H. Bowen, secy. and treas. Cap. stk. \$2,500,000. Col. Sellers, silver and lead. Slope; free; horse.
" "	Elk Mining Co., White Sulphur Springs, Mont., John Ramsey, pres.; John Gibson, secy.; John O'Mara, treas.; J. M. Murphy, mgr. Cap. stk. \$300,000. Elk Mine, silver. Shaft, free; hand (developing). P. J. Murphy, supt.
" "	Hidden Treasure Mining Co., White Sulphur Springs, Mont., L. Heitman, pres.; A. M. Henry, secy.; Treas., mgr. and supt. Cap. stk. \$2,500,000. Hidden Treasure, silver and lead. Shaft and levels; refractory; horse (developing).
" "	Iron Chief Mining Co., Henry Kertz, pres.; Andrew Wennstrom, secy.; John E. Kertz, treas.; H. Kertz, mgr. Iron Chief, silver, copper and lead. Shaft; free; steam.
" "	Judge Mining Co., Wm. Farberry, pres.; E. J. Anderson, secy. and mgr.; Jas. T. Wood, treas. Cap. stk. \$500,000. Judge, silver and lead. Shaft; free; steam (developing).
" "	Maverick Mining Co., White Sulphur Springs, Mont., Wm. T. Ford, pres.; J. E. Calloway, secy.; S. M. Albarrach, treas.; H. H. Barnes, mgr. and supt. Cap. stk. \$500,000. Maverick, silver and lead. Shaft; refractory; hand (developing).
" "	T. V. Powderly Mining Co., Castle Mont., John A. Woodson, pres.; J. L. Fraser, secy. and treas.; Geo. N. Higgins, mgr. and supt. Cap. stk. \$500,000. T. V. Powderly and Jas. G. Blaine, silver and lead. Shafts and tunnel; free; hand.
" "	Roland Mining Co., Michael Cooney, pres.; C. A. Ben-on, secy. and treas.; John M. Murphy, mgr. Cap. stk. \$500,000. Roland and Treasure Fraction, silver. Shaft and tunnel; free; hand (developing). P. J. Murphy, supt.
" "	St. Genevieve Mining Co., Henry Kertz, pres.; John E. Kertz, secy.; Chas. H. Kertz, treas.; E. P. Soudan, mgr. and supt. Cap. stk. \$2,500,000. Top Lode, gold, silver and copper. Shafts; refractory and free; horse (developing).
" "	Wm. Sherwood & Co., Cap. \$2,000. Trinidad, silver and lead. Shaft, 3 tons; free; horse.
Rochester Deer Lodge Ry., Melrose 776 (70).	Melrose, Pond & Wells, Glendale, Mont., Emma, gold, silver and lead. Shaft, 100 tons; refractory; horse.
Running Wolf Meagher (P. O., Stanford) Ry., Barker 293.	Mountain Side Mining Co., Great Falls, Mont., 165 Central av., H. O. Chouen, pres.; F. B. Wiley, secy.; A. E. Dickerman, treas.; H. B. Chandler, mgr. Cap. stk. \$500,000. Last Chance and Mountain Side, silver and lead. Tunnels, 2,500 tons; free; horse. Jacob Jacobson, supt.
St. Louis Jefferson Ry., Bedford 529 (24 m.).	Comer & Gelloly, Townsend, Mont., Switzerland and New Era, gold, silver and lead. Tunnel and shaft, 500 tons; refractory and free; hand; 16 stamps. P. A. Comer, supt.
" "	Goodyear Mining Co., Helena, Mont., 43 Montana National Bank Bldg., T. Mackness, pres.; O. A. Southmayd, secy. and treas. Cap. stk. \$1,000,000. J. I. C., Jenny Lind, Hopeful and Gibraltar, gold, silver and lead. Shaft; refractory; horse (developing). John McConnel, supt.
" "	North Elkhorn Mining & Reduction Co., Townsend, Mont., Jos. A. Wood, pres.; J. P. Rhoads, secy. and treas.; Wm. Wood, mgr. Cap. stk. \$5,000,000. North Elkhorn Group, gold, silver, copper and lead. Tunnel, free and refractory (developing).

## GOLD AND SILVER—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWNS AND COUNTY.	
St. Louis Jefferson <i>(Continued.)</i>	West Buxton Mining Co. R. E. Cove, prest. and treas.; T. D. Farrow, secy.; Jas. Burke, mgr. and supt. Cap. stk. \$500,000. Mountain Key, gold and silver. Tunnel; refractory; hand.
Seven-Up, Deer Lodge (P. O. Stemple) Ry., Silver 293 (20 miles).	Evans & Howe, Helena, Mont., 822 Ninth av. W. F. Howe, mgr. and supt. Cap. stk. \$5,000. Last Chance, gold and silver. Shafts; refractory and free; hand (developing).
Sheridan Madison Ry. Dillon 776 (35 m.).	Noble Mining & Milling Co., St. Louis, Mo., 221 Chestnut st. S. M. Kennard, prest.; J. H. Wyeth, secy. and treas.; D. B. Noble, mgr. and supt. Cap. stk. \$2,000,000. Noble, gold, silver and lead. Tunnels; refractory and free; steam; 10-stamps (developing).
" " " "	Wisconsin Creek Mining Co. David McCranor, mgr. and supt. Wisconsin Creek, gold. Tunnel; free and refractory; hand; 10-stamps (developing).
Silver Star Madison Ry. White Hall 329 (18 miles).	Bush Gold & Silver Mining Co., Marinette, Wis., Room 3 Stephenson Block. H. E. Mann, prest.; L. K. MacNeil, secy. and supt.; W. A. Tammot, treas.; H. Bush, mgr. Cap. stk. \$600,000. Cyclone, Bull Dog and Marinette, gold and silver. Tunnel, 300 tons; free; hand.
" " " "	J. E. Woods & Co. Cap. stk. \$30,000. Cricket and Grasshopper, gold. Tunnel and shaft; free; steam; 5 stamps. J. E. Woods, supt.
Snow Creek, Meagher P. O. and Ry. Neilhart 233.	L. X. L. Consolidated Mining Co., Great Falls, Mont. H. O. Chown, prest.; F. B. Wilcox, secy. and treas.; Jas. Morr, mgr. and supt. Cap. stk. \$2,500,000. L. X. L. and Eureka, gold and silver. Shaft; refractory; horse (developing).
Spotted Horse Fergus (P. O. Maiden) Ry. Junction 529.	P. W. McAdow, Cap. \$100,000. Spotted Horse, gold. Shaft, 12,000 tons; free; steam; 20 stamps. J. M. Mallin, supt.
Spring Gulch Missoula (P. O. Carter) Ry. 529	Eastern Consolidated Mining Co., Missoula, Mont. T. M. Crouch, prest.; F. W. Cowan, secy., treas. and mgr. Cap. stk. \$600,000. Eastern Consolidated, silver. Tunnel (developing).
Stanford Fergus Ry. Barker 776.	O'Brien, Owens & Frizer. J. M. Owens, mgr. Cap. \$5,000. Alice, silver and lead. Shaft; free.
" " " "	Stough & Maitly, Forest Rose, gold, silver and copper. Shaft; refractory (developing).
" " " "	Wolf Butte Consolidated Mining Co., Great Falls, Mont., P. O. Box 133. Geo. X. Ator, prest.; H. C. Shipkey, secy. and treas.; Henry Skelton, mgr. and supt. Cap. stk. \$1,000,000; indy. cap. \$800,000. Lost Trail, silver, copper and lead. Shaft and tunnel, 1,800 tons; free; horse.
Stemple, Lewis and Clarke Ry. Silver 293.	Bachelor Mining Co., Helena, Mont., Aaron Hersfield, prest.; J. W. Chivers, secy.; P. J. Connor, mgr. and supt. Cap. stk. \$50,000. Bachelor, gold and silver. Tunnel, 2,000 tons; free; 10 stamps.
" " " "	Reed & Guillow, L. E. Guillow, mgr. Cap. \$50,000. Minnesota, gold. Tunnel, 500 tons; free; steam; 5 stamps.
Stevensville Missoula Ry. 529.	Claronut Consolidated Mining Co., John Dowling, prest. and supt.; Geo. A. Kahn, secy. and treas.; Louis McCaffry, mgr. Cap. stk. \$2,400,000. Claronut, silver and copper. Shaft and tunnels; steam (developing).
" " " "	Chft Mining Co., Missoula, Mont., cor. Main and Higgins sts. Wm. McKeen, prest.; S. Fred. Hodgson, secy.; First National Bank, treas.; Norman Diendorf, mgr. Cap. stk. \$1,000,000. Chft, Atlas and Blue Bird, gold, silver and lead. Shaft and tunnel; refractory; water (developing). Frank Schneider, supt.
" " " "	Victor & Burnt Fork Mining Co., Victor, Mont. T. H. Hambridge, prest.; A. Herbert, secy. and treas.; Tom J. Devault, mgr. and supt. Cap. stk. \$1,000,000. Burnt Fork, silver and lead. Slope; free; horse (developing).
Stone Station Deer Lodge Ry. 529.	Mount Powell Mining Co., Cleveland, Ohio, Perry-Payne Building. Joseph L. Colby, prest. and treas.; Charles F. Rand, secy. Cap. stk. \$1,500,000. Mount Powell, silver. Tunnel; free. Alton L. Dickerman, supt.
Sunset Deer Lodge Ry. Bonner 529 (33 m.).	N. H. Chamberlain, Clemantha, gold. Tunnel; free; Huntington mill (developing).
" " " "	Superior & Sunset Mining Co., West Superior, Wis. R. J. Wemyss, prest. and treas.; F. W. Downer, secy.; W. A. Logan, mgr. and supt. Cap. stk. \$60,000. Wallace, O. K., Florence and 5 others, gold. Placer; hydraulics.
Thompson Missoula Ry. Woodfin 529.	Lynch & Harrison, North Pacific, silver and copper. Tunnel, 6 tons; refractory.
Three Forks Gallatin Ry. 529 (3 mile s.).	Montana Mining Land & Investment Co., Bozeman, Mont. H. A. W. Tabor, prest. and treas.; W. N. W. Blaney, secy.; W. Berkin, mgr. and supt. Cap. stk. \$1,000,000. Placer, gold. Free; steam.
" " " "	Three Forks Mining Co., A. Harlebrook, prest.; John Thorn, secy.; J. O. Hopping, treas.; W. Berkin, mgr. and supt. Cap. stk. \$290,000. Burlington, gold and copper. Shafts; steam (developing).
Townsend Meagher Ry. 529 (Mines in Jef- terson County).	Mineral Hill Mining Co., J. R. Marks, prest.; E. H. Goodman, secy. and treas.; I. N. Thompson, mgr. Cap. stk. \$200,000. Corn Cracker, Hidden Treasure, Red Wing, Green Castle and Transverse, gold, silver and lead. Shaft; refractory; horse and hand.
" " " "	Union Mining Co., O. T. H. Allen, prest.; H. S. Hyatt, secy.; Samuel T. Green, treas. Cap. stk. \$350,000. Union mine, gold and silver. Shaft and tunnel; hand.
" " " "	Windsor Mining Co., Townsend, Mont. Saml. T. Green, prest. and treas.; A. B. Clements, secy. Cap. stk. \$2,500,000. Summit, silver and lead. Slope; free; horse (developing). O. T. H. Allen, supt.
Troy Missoula (P. O. Fry, Idaho) Ry. 293.	Idaho Development & Mining Co., Fry, Idaho. Wm. Rosegrant, prest.; Herbert S. Baines, secy.; Thos. J. Jones, treas.; Arthur B. Baines, mgr. Cap. stk. \$80,000. Neptune, Tough Nut, Ida. Mineral King, Kingston, Misphah, Charleston, Atlas, Monitor and New Castle mines (developing).
Twin Bridges Madison Ry. Whitehall 529.	Crumb & Pritchett, Tidal Wave, silver and lead. Tunnels and slopes, 50 tons; refractory; hand.
Unionville Lewis & Clarke Ry. 529.	Mac Mining & Milling Co., Helena, Mont. A. McLean, prest.; H. A. McLean, secy. and treas.; J. C. McCann, mgr. Cap. stk. \$1,200,000. Mac and Gold Bag, gold. Tunnel; free; steam; 20 stamps.
Utica Fergus Ry. Armington 293 (40 miles).	George Gram, Prairie Bell and Amazon, gold, silver and lead. Shaft; refractory; hand (developing).

## GOLD AND SILVER—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN	AND COUNTY.	
Victor	.....Missoula Ry. 529.	Helena & Victor Mining Co., Helena, Mont., 113 Main st., S. T. Hauser, pres.; A. P. Loberg, secy.; A. M. Hoffer, treas.; Geo. O. Kilbourn, mgr. and supt., Cap. stk. \$100,000. Curlew, silver and lead. Shaft, 3,000 tons; refractory, steam, concentrators.
"	"	Legal Tender Silver Mining Co., Missoula, Mont., Gust. Moser, pres.; J. H. Fairchild, secy. and treas.; J. A. Hickey, mgr. and supt., Cap. stk. \$800,000. Lion, Lioness and Homestead, silver and lead. Shaft, 11 tons; free; horse.
Vipond	Beaver Head (P. O. Dewey) Ry. Di- vide 776.	Great Western Mining Co., J. C. Friend, pres.; Edward Beattie, secy. and supt.; Otto Eckel, treas.; Peter Johnson, mgr. Cap. stk. \$5,000. Great Western, silver, 5,000 tons; free; horse.
Walkerville	Silver Bow Ry. Butte City 293, 529, 576.	Alice Gold & Silver Mining Co., Salt Lake City, Utah, care of Union National Bank. Jos. R. Walker, pres.; L. H. Farnsworth, secy.; M. H. Walker, treas.; Wm. E. Hall, mgr. and supt., Cap. stk. \$10,000,000. Alice, Magna Charta, Valdemere, etc. silver and gold. Shafts and tunnels, 45,000 tons; free; steam; 80 stamps.
"	"	Moulton Mining Co., Butte, Mont., W. A. Clark, pres.; Alex. J. Johnston, treas.; J. K. Clark, mgr. and supt., Cap. stk. \$2,000,000. Frank Moulton, silver. Shaft, 5,000 tons; free; steam; 40 stamps.
"	"	Société Anonyme des Mines de Lexington, Paris, France, 24 Rue Le Peltier, M. de Blancour, pres.; M. E. Steins, secy., Charles C. Kueger, mgr. and supt., Cap. stk. 15,000,000 francs. Lexington, gold, silver, copper and lead. Shaft, 15,000 tons; refractory; steam; 50 stamps.
Washington Bar	Madison Ry. Norris 529 (15 m.).	Bald Mountain Consolidated Mining Co., Oakland, Cal., 157 Broadway, C. W. Wilkins, pres.; M. C. Rigney, secy., Cap. stk. \$100,000. Bald Mountain, gold. Shaft and tunnel; free.
"	"	Butler & Levy, B. & L. and Jumbo, gold. Tunnels, refractory (developing).
"	"	James & Hedge, Gold, Placer; hydraulic.
"	"	Lamb & Mather, Cap. \$500,000. Mountain Queen, Braxy and Bonanza Chert, gold and silver. Tunnel, 30,000 tons; free; water; 60 stamps. Michael Lamb, supt.
"	"	Montana Hydraulic Mining Co., Helena, Mont., F. H. Nettleton, mgr. Gold, Placer (developing)
"	"	C. M. Puckney, Gold, Tunnel, refractory and free (developing).
"	"	Timberline Mining Co., Pittsburg, Pa., 135 Fourth st., Galen Wells, pres.; Geo. P. Murray, secy. and treas.; Herman Veeder, mgr. and supt., Cap. stk. \$100,000. Eurokat lampoon, gold and silver. Tunnel, free; water; developing.
"	"	Walton, Gleason & Hedge, Chance Mine, gold. Tunnel, 20 tons; free milling.
Washington Gulch	Deer Lodge Ry. Avon 529 (29 m.).	Battle & Deer Lodge Placer Mining Co., Deer Lodge, Mont., John P. Reims, pres.; W. F. Stanley, secy. and treas.; Julian Smith, mgr. and supt., Placer Mine, gold, Water.
"	"	Hackney, Bush & Dietrich, Nos. 1, 2, 3 and 4 claims, gold, Placer.
"	"	Kessinger, Dietrich & Hackney, Baccarat, gold, silver, copper and lead. Slope, 30 tons; refractory.
Whitehall	Jefferson Ry. 529.	W. Diller, Boulder, Mont., Gem, gold, silver and lead. Shaft, 150 tons; refractory, hand.
"	"	J. W. Gilkey, Butler, gold, silver, copper and lead. Slope, refractory horse (developing).
"	"	Hale, Boast & Brookway, Butte, Mont., 502 S. Montana st., John Symmonds, pres.; Wm. Boast, secy.; Edward Hale, treas.; H. L. Brookway, mgr., Cap. stk. \$50,000. Pine Tree, gold, silver and lead. Shaft, 2,000 tons; refractory, steam (developing); Wm. Johnston, supt.
"	"	J. E. Parrish, Gold, silver and lead. Shaft, 300 tons; free; horse.
"	"	Shott & Jordan, Old Jim, silver and lead. Shaft, refractory, horse (developing).
White's	Meagher Ry. Helena 293, 529.	John S. Bristol, Gold, Placer; hydraulic.
"	"	James Metabe, Helena, Mont., Gold, Placer, drifts, hydraulic (developing).
"	"	Stephen H. Senter, N. Monument, gold and silver. Drift, horse.
White Sulphur Springs	Meagher Ry. Townsend 529 (30 miles).	Castle Crescent Mining Co., J. W. Dunham, pres.; Lew L. Callaway, secy.; John Potter, treas.; George Waldrop, mgr., Cap. stk. \$500,000. Castle Crescent, silver and lead. Shaft, free, hand (developing); A. Niehiser, supt.
"	"	Grasshopper Mining Co., B. K. Sherman, pres. and mgr.; E. L. Anderson, secy.; John Potter, treas., Cap. stk. \$500,000. Grasshopper, silver. Shaft, free; horse.
"	"	Mountain Granite Mining Co., D. McH. McKay, pres.; Max Waterman, secy.; John O'Mara, treas., stk. \$400,000. Granite Mountain, silver and lead. Refractory.
"	"	Charles Stillier, Cap. \$100,000. Dead Certain, gold, silver and lead. Shaft, 3,000 tons; refractory; hand.
Wickes	Jefferson Ry. 293, 529.	Alayesko Mining Co., Red Jacket, Mich., Olof Parry, pres.; C. J. Sorenson, secy.; A. A. Bajori, treas.; J. Kouss, mgr. and supt., Cap. stk. \$800,000. Gopher and Black Bear, silver (developing).
"	"	Barta Bros., Cap. \$4,000. Uncle Sam, gold, silver and lead. Slope, refractory, horse (developing).
"	"	Blaine Mining Co., Helena, Mont., S. A. Swiggett, pres.; W. G. Gooding, secy.; treas. and mgr., Cap. stk. \$2,500,000. Blaine, gold, silver, copper and lead. Tunnel and shaft, 800 tons; refractory; Nelson Gibson, supt.
"	"	Bobbie Burns Mining Co., Helena, Mont., 11 and 12 Bailey Block, A. H. Nelson, pres.; W. M. G. Settles, secy.; George W. Pawley, treas.; J. W. Sheridan, mgr. and supt., Cap. stk. \$50,000. Bobbie Burns, gold, silver and copper. Tunnel, 6,000 tons; refractory, horse.
"	"	Claney Creek Mining Co., St. Paul, Minn., Fourth and Broadway, A. S. Morton, pres.; Charles P. Johnston, secy.; H. M. Hood, treas.; Cap. stk. \$750,000. Richmond, Lexington and Utopia, gold, silver and lead. Tunnel and shaft; refractory, hand and water (developing); H. C. Branch, supt.

## GOLD AND SILVER—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.			NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWNS	AND	COUNTY.	
Wickes	Jefferson	Charles H. Heuer, George Croghan and Cruiser, gold, silver and lead. Tunnel, 240 tons; refractory; hand.	
"	"	Jacob Kauf. Blizzard and Blizzard West, gold. Shaft and tunnel, 1,000 tons; refractory; horse and hand.	
"	"	James Thompson. Blue Eyed Nellie, Shepard, Mary Blackstalls, gold, silver and lead. Tunnel, 150 tons; refractory; hand.	
"	"	Two Cripples Mining Co. Thomas Williams, prest.; E. H. Rankin, secy. and treas.; John Bowden, mgr. Two Cripples, gold, silver, copper and lead. Shaft; refractory; horse.	
Woodhearth	Meagher (P. O. Great Falls) Ry. Barker 529 (20 miles)	Running Wolf Mining & Milling Co., Great Falls, Mont. Paris Gibson, prest.; Otto Schonfeldt, secy. and treas.; Charles S. Gibson, mgr. and supt. Cap. stk. \$1,000,000. Mortson, Woodhearth and Log Cabin, silver and lead. Shaft and tunnel, 500 tons; free; horse (developing).	
Woodville	Jefferson Ry. 293	John L. Ekstrom. Cap. \$18,000. Ekstrom and Otranto, gold and silver. Shafts and tunnels, 700 tons; free and refractory; hand. John Gilbert, supt.	
"	"	C. E. Kinman. Nellie Kinman, silver and copper. Shaft; refractory; steam.	
"	"	Leo Mining & Milling Co., St. Louis, Mo., 303 N. Third st. J. Freund, prest.; J. Meyer, secy.; J. Muecally, treas.; Samuel Schwalb, mgr. Cap. stk. \$2,500,000. Leo, gold and silver. Shafts and tunnels; free; steam. Adolph Zimmerman, supt.	
Yogo	Meagher Ry., Great Falls 292, 293	Aene Mining Co. H. F. Lockett, prest.; E. L. Lockett, secy. and treas.; Louis Pepin, mgr. and supt. Cap. stk. \$60,000. Aene Placer, gold. Hydraulic.	
"	"	Emmett R. Carroll. Cap. \$500,000. Placer Mines, gold. Free; water and steam.	
"	"	Gold Mining & Reduction Co., Utica, Mont. John D. Waite, pres.; Fred D. Warren, secy. and treas. Louis Pepin, mgr. and supt. Cap. stk. \$500,000. Climax, Tiger and Manganese Lode, gold and silver. Shaft and tunnel; free; hand.	
"	"	Judith Gold Mining Co. Judith, gold. Placer; hydraulic. Edgar Boling, supt.	
"	"	Fred Kensembach. Cap. \$500,000. Christopher Columbus, gold, silver and lead. Shaft and tunnel; refractory; hand. Louis Sarchletti, supt.	
"	"	Nelhart Gold, Silver & Lead Mining & Reduction Co., Great Falls, Mont. John A. Hay, prest.; James Donovan, secy.; F. E. Collins, treas.; Emmett R. Carroll, mgr. and supt. Cap. stk. \$1,000,000. Queen Melvina, Weather Wax, Mine Sloane and others, gold, silver, copper and lead. Shaft and tunnels, 50,000 tons; free and refractory; steam and water.	
"	"	New England & Belt Mountain Mining Co., Boston, Mass., 73 State st., Room 405. H. G. Parr, prest.; Otis M. Shaw, secy.; Geo. H. Appleton, treas.; Emmett R. Carroll, mgr. and supt. Cap. stk. \$1,000,000. Edith and Edza Mines, gold, silver and lead. Shafts and tunnel, 50,000 tons; free; steam and water.	
York	Meagher Ry. Helena 293, 529	Robertson & Kincaid. Gold Speck, gold. Shaft, 30 tons; refractory; hand. H. L. Kincaid, supt.	
"	"	R. C. Robinson. Cap. \$4,000. Golden Cloud, gold. Shaft, 500 tons; free; steam.	
"	"	S. A. Stevens. Last Rose of Summer, gold and silver. Shaft; free (developing).	

## IRON

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.			NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, BLAST FURNACES, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWNS	AND	COUNTY.	
Castle	Meagher Ry. Livingston 529	Compromise Mining Co., Billings, Mont. Henry W. Rowley, prest.; Geo. M. Hayes, secy.; Chas. A. Wustum, treas. Cap. stk. \$5,000,000. Compromise (developing).	
"	"	Merrimac Mining Co. (local). J. T. Westbrook, prest. and mgr.; L. Peavey, secy. and treas. Cap. stk. \$900,000. Merrimac, manganese iron. Shaft, 2,000 tons; horse. J. T. Westbrook, supt.	
Elkhorn	Jefferson Ry. 529	Benjamin Foster & Co. Monarch, brown hematite. 1,000 tons; hand.	
Wickes	Jefferson Ry. 529, 529	Dean & McArthur. Timberline, iron pyrites and bismuth. Shaft; hand.	
Willis	Beverhead Ry. Apex 576	Shelby Mining Co., Dillon, Mont. Guy C. Barton, prest.; B. F. White, secy. and treas.; Ozias Willis, mgr. and supt. Cap. stk. \$250,000. Iron City and Cumberland, magnetite ore. 800 tons.	

## STONE, MARBLE, GRANITE AND ONYX

LOCATION OF MINE OR QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT.			NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE OR QUARRY, KIND OF STONE, KIND OF MINE OR QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STONE OR MARBLE MILLS, LIMEKILNS AND CAPACITY, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN	AND	COUNTY.	
Bozeman	..	Gallatin	Potsdam Stone Co., R. B. Turner, propr., Room 5 Hotel Bk., Cap. \$50,000. Potsdam sandstone. Slope, 20,000 tons; horse and hand; mill.
Castle	..	Mengher	George Berry (local), Cornelius. Open pit; kiln, 80 tons.
Great Falls	..	Cascade	Edward J. Canary, Sixth st. and Second av. (local), Cap. \$10,000. Canary, red sandstone. Open pit, 10,000 tons; hand. Thos. Prince, supt.
"	..	"	Great Falls Quarry Co., M. S. Parker, pres't., mgr. and supt.; Edward W. Kelly, secy. and treas. Cap. \$100,000. Sand Coulee, sandstone. Open pit; hand; mill.
"	..	"	Riverside Stone Co. (local), J. D. Taylor, pres't. and mgr.; J. C. Oakland, secy.; M. C. Kelsing, treas. Cap. \$70,000. Riverside, lime and sandstone. Slope (developing).
Lime Spur	..	Jefferson	Jefferson Lime & Flux Co., Butte, Mont., 73 and 32 W. Granite st., F. T. McBride, pres't.; Geo. H. Casey, secy. and treas.; D. A. Morrison, mgr. Riverside, limestone and flux. Open pit, 17,000 tons flux, steam; kiln, 2,700 tons. D. A. Morrison, supt.
Livingston	..	Park	O. W. Mattson. Cap. \$90,000. Livingston, limestone, 1,500 tons, hand.

SEE ALSO SUPPLEMENTARY LIST.

## NEVADA

## ANTIMONY

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, AND NAME OF MINE SUPERINTENDENT.
Bethune . . . . .	Churchill Ry. Lovelocks 776.	W. A. Van Reed. Ruby and Wahoe. Tunnel; hand.
Lovelocks . . . . .	Humboldt Ry. 776.	James Sutherland, New York City, 16 Exchange pl. Cap. \$50,000. Black Knob. Shaft and tunnel, 1,000 tons; hoist. A. H. Hutchins, supt.
Peavine . . . . .	Nye Ry. Sodaville 108.	Peavine Antimony Mining Co. Anaconda and Ashley, antimony. Shaft.

## BORAX

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, AND NAME OF MINE SUPERINTENDENT.
Columbus . . . . .	Esmeralda Ry. Candelaria 108.	Columbus Borax Co., New York City, 10 Colfax st. Emil C. Calm, prest.; Edward Lampe, secy.; Charles E. Calm, mgr.; Cap. stk. \$100,000. Columbus, borate of lime and borate of soda. 600 tons; steam. Paul Hellman, supt.
" . . . . .	" Ry. Belleville 108.	Pacific Coast Borax Co., San Francisco, Cal., 230 Montgomery st. F. M. Smith, prest.; Alton H. Clough, secy. Borate and carbonate of soda, marsh. Steam and horse. C. B. Zabriskie, supt.
Tees Marsh . . . . .	Esmeralda P. O. and Ry. Candelaria 108.	Pacific Coast Borax Co., San Francisco, Cal., 230 Montgomery st. F. M. Smith, prest.; Alton H. Clough, secy. Borate and carbonate of soda, marsh. Steam and horse. C. B. Zabriskie, supt.
White Plains . . . . .	Churchill Ry. 692.	Desert Borax Co. Desert, borax. Walter Schmidt, supt.

## COPPER

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, FURNACES, ETC., AND NAME OF MINE SUPERINTENDENT.
Bullion . . . . .	Elko Ry. Elko 692.	Blue Bell Mining Co., San Francisco, Cal., 212 Sansome st. S. W. Levy, prest.; H. P. Bush, secy.; Anglo- Californian Bank, treas. Cap. stk. \$100,000. Blue Bell, copper. Shaft and tunnel.

## GOLD AND SILVER

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
Arabad . . . . .	Humboldt (P. O. Lovelock's) Ry. Orama 692.	Stone, Trimlow & Co., Stege, Cal. War Eagle, gold, silver, lead and antimony. Shaft and drift, 9,000 tons; refractory; horse. Geo. Lovelock Jr., supt.
Aurum . . . . .	White Pine Ry. Tonia 692 (120 m. l.).	Davis & Sanford. Lucky Deposit and Argenta, gold, silver, lead and iron. Shaft and tunnel, 500 tons, re- fractory; hand. Simon Davis, supt.
" . . . . .	" (110 miles).	W. B. Lawler. Grizzly, Free Coinage, Double Standard and Bullion, gold and silver. Shaft and cuts, 10 tons; free; hand (developing).
Bald Mt. . . . .	White Pine (P. O. Cold Creek) Ry. Eureka 253.	Charles Born. Lady of the Lake, gold and silver. Slope, 20 tons; free; hand.
Belmont . . . . .	Nye Ry. Austin 489 (85 m. l.).	Barcelona Mining Co., New York City, 31 and 33 Broadway. Geo. Doyle, prest.; Geo. Eurighan, secy. and treas.; Chas. McGregor, mgr. and supt. Cap. stk. \$5,000,000. Barcelona, gold and silver. Tunnel; refractory; steam; Huntington and stamp mill.
" . . . . .	"	Green Aldrich. Seventy-seven, silver. Slope, 10 tons; free; hand; 2 stamps.
" . . . . .	"	Wm. McCann. McCann, silver and quicksilver. Shaft; free; steam.
Beowawe . . . . .	Eureka Ry. 692.	Ervin & Richardson. Ononton, Puritan and London, gold, silver and lead. Tunnel; refractory (devel- oping). J. A. Ervin, supt.
Bernice . . . . .	Churchill Ry. Lovelocks 692.	Wilson W. Williams. Cap. \$50,000. Golden Crown, gold and silver. Tunnels, 3,000 tons; refractory; steam; 6 stamps. Wallace Goodell, supt.
Bristol . . . . .	Lincoln Ry. Frisco 776 (125 m. l.).	Bristol Development Co., Minneapolis, Minn., 306 First av. S. W. D. Hale, prest.; T. E. Hughes, secy.; W. W. Huntington, treas. Cap. stk. \$200,000. Mayflower, silver. Slope and tunnel; refractory; steam; 10 stamps.



## COAL—BITUMINOUS—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.			NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, CORE OVENS, AND NAME OF MINE SUPERINTENDENT.
TOWN	AND	COUNTY.	
Krumroy	Ry. 778.	Summit	C. H. Gregg (local). Gregg. Shaft: horse (developing).
Lathrop	Ry. 596.	Athens	Black Diamond Coal & Coke Co., Columbus, Ohio, Board of Trade Bldg., Robert W. Gilbert, pres.; Milton Hopkins, secy.; J. H. Earnshaw, treas. and mgr. Cap. stk. \$500,000. Black Diamond. Tunnel; electricity; breaker, 50 coke ovens, capacity 15,000 tons (developing). James Fox, supt.
"	"	"	McKinney Coal & Coke Co., Zanesville, Ohio, 42 N. Fourth st., O. F. McKinney, pres. and mgr.; F. E. Huggins, secy. and treas. Cap. stk. \$100,000. Slope; steam (developing). Thomas Opie, supt.
Laurelton	Ry. Portland Station 563.	Jefferson	Whelling, Lake Erie & Pittsburg Coal Co., Toledo, Ohio, W. R. Woodford, pres.; Downer Adams, secy. and treas. Cap. stk. \$1,000,000. Laurelton. Tunnel, 150,000 tons, horse. George Atherton, supt.
Leesville	Ry. 809.	Carroll	McCreary & Moore (local). Ball. Open pit, 1,379 tons; hand. G. C. McCreary, supt.
"	"	"	A. Preston (local). Open pit, 600 tons; hand.
Longstreth	Ry. 181.	Hocking	Columbus & Hocking Coal & Iron Co., Columbus, Ohio, Board of Trade Bldg., J. O. Moss, pres.; S. A. McManual, secy.; W. J. Redington, treas.; R. H. Johnson, v.-pres. and gen. mgr. No. 19. Drift, 60,000 tons, steam, electricity. Vint. Ferguson, supt.
Lyonsdale	Ry. 164.	Perry	M. Meenan. Cap. \$10,000. Lyonsdale. Tunnel, 3,000 tons; horse.
McArthur	Ry. 181.	Vinton	Benjamin Newlan (local). Tunnel, 172 tons; horse.
McTuneville	Ry. 42.	Perry	Crawford, Gaver Bros. & Co. Cap. \$4,000. Eagle. Tunnel, horse (developing). Wm. Gaver, supt.
McLaney	Ry. 164.	Perry	J. H. Jones. Cap. \$15,000. Beech Grove. Tunnel, 35,749 tons; horse. George Savage, supt.
Malvern	Ry. 175.	Carroll	Phoenix Fire Clay Co., C. A. Weaver, pres.; R. Roberts, secy. and treas.; Samuel Holkinson, mgr. Cap. stk. \$75,000. Phoenix. Slope, 1,500 tons; hand.
Mammoth	(P. O. Akron) Ry. Clinton 163, 12, 563, 566.	Summit	Brewster Coal Co., Akron, Ohio, 900 S. Main st., Alexander Brewster, pres.; A. K. Brewster, secy. and treas.; A. A. Brewster, mgr. Cap. stk. \$100,000. Turkeyfoot. Shaft, 50,000 tons; steam. John F. Meacham, supt.
Martins Ferry	Ry. 171, 175.	Belmont	Gaylord Coal Co., G. Edwards, pres.; Theodore Snodgrass, secy. and treas.; Jonah Lewis, mgr. Cap. stk. \$20,000. Open pit.
Massillon	Ry. 171, 585, 809.	Stark	Howells Coal Co., Anthony Howells, pres. and mgr.; John C. Albright, secy.; J. D. Wetter, treas. Cap. stk. \$200,000. Anderson. Shaft, 40,000 tons; steam. Evan J. Evans, supt.
"	"	"	E. G. Krause & Co., cor. Sheriff and Prospect sts., West Massillon. Shaft, 50,000 tons; steam.
"	"	"	Massillon Pigeon Run Coal Co., A. Howells, pres. and mgr.; E. S. Howells, secy.; J. D. Wetter, treas. Cap. stk. \$200,000. Pigeon Run. Shaft, 45,000 tons; steam. A. H. Owens, supt.
"	"	"	John Moore. Bridgeport. Tunnel, 1,150 tons; hand.
"	"	"	Upper Pigeon Run Coal Co., W. K. L. Warwick, pres. and treas.; Reinhard Keller, secy., mgr. and supt. Cap. stk. \$100,000. Upper Pigeon Run. Shaft, steam (developing).
"	"	"	Warwick Coal Co., Reinhard Keller, pres., mgr. and supt.; W. K. L. Warwick, secy. and treas. Cap. stk. \$100,000. Warwick. Shaft, steam (developing).
"	"	"	Whelling, Lake Erie & Pittsburg Coal Co., Toledo, Ohio, Cherry st., W. R. Woodford, pres.; Downer Adams, secy. and treas. Cap. stk. \$1,000,000. Forrest. Shaft, 27,300 tons; horse. R. H. Wannwright, supt.
Middleport	Ry. 181, 344, 333.	Meigs	Michael & Edwards (local). Diamond. Tunnel; horse.
"	"	"	Silver Run Coal Co., Silver Run. Drift, 12,000 tons; horse. A. Hysell, supt.
Millersburg	Ry. 169.	Holmes	Bilderback Bros. (local). McElroy. Tunnel, 50 tons; hand.
"	"	"	Cary & Unson (local). Slope, 10,000 tons.
"	"	"	John Chevalard. Cap. \$10,000. Drift; horse.
"	"	"	John Craft & Co. Cap. \$5,000. Open pit; hand.
"	"	"	John Horn. Tunnel, 1,000 tons; hand.
"	"	"	E. B. Skelly. Open pit, 1,250 tons; hand.
Mineral Point Tuscarawas	Ry. 175, 778.		Briek Bros. Cap. \$1,500. Tunnel and slope, 24,000 tons; steam. John Briek, supt.
"	"	"	Edward Holden. Cap. \$50,000. Shaft, 15,000 tons; horse. Thomas Osborne, supt.
"	"	"	Ohio Coal Mining Co., Akron, Ohio, F. A. Seiberling, pres.; L. C. Miles, secy. and treas.; T. W. McCue, mgr. Cap. stk. \$300,000. Mineral Ridge, Clover Dell, Acme. Tunnel (developing). George J. Markley, supt.
"	"	"	Ridgway Burton Co., Massillon, Ohio, J. P. Burton, pres. and treas.; D. Johns, secy. Cap. stk. \$30,000. Huff Run. Slope, 36,200 tons; horse. J. J. Klein, supt.
Mineral Ridge Trumbull	Ry. 383.		William Powers (local). Langan. Slope, 300 tons; horse.
Minersville	Ry. Pomeroy 181.	Meigs	Eli Roush (local). Entoka. Open pit, horse.
"	"	"	John J. Williams (local). Tunnel, 2,000 tons; hand.
Minerva	Ry. 173, 175, 376.	Stark	J. W. Shaw. Cap. \$500. Rustic Mountain. Tunnel, 480 tons; hand, horse. John Mills, supt.

## COAL BITUMINOUS—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, COKE OVENS, AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Monday ..... Hoeking Ry. 181.	Somers Coal Co., Columbus, Ohio, 11 E. Town st., A. Brenholts, prest.; James O. Somers, secy, and treas. Cap. stk. \$90,000. Monday. Drift, 800,000 tons; horse. F. Williams, supt.
Mt. Pleasant ..... Jefferson Ry. 869.	Wheeling, Lake Erie & Pittsburg Coal Co., Toledo, Ohio. W. R. Woodford, prest.; Downer Adams, secy, and treas. Cap. stk. \$1,000,000. Long Run. Tunnel, 155,000 tons; horse. George Atherton, supt.
Murray ..... Hoeking Ry. 181.	Columbus & Hoeking Coal & Iron Co., Columbus, Ohio, Board of Trade Bldg. J. O. Moss, prest.; S. A. McManigal, secy.; W. J. Redington, treas.; R. H. Johnson, v.-prest. and gen. mgr. Nos. 39 and 41. Drift, 60,000 tons; steam, horse. Vint. Ferguson, supt.
" " " " " " "	Greendale Furnace Co., Columbus, Ohio, V. M. C. A. Bldg. J. A. Long, prest.; J. H. Holloway, secy, and treas.; C. H. Boardman, mgr. Cap. stk. \$25,000. Murray City. Slope, 200,000 tons; steam. John Hopkins, supt.
Navarre ..... Stark Ry. 173, 171, 809.	Levi Hair. Tunnel, 240 tons; hand.
" " " " " " "	Ridgway Burton Co., Massillon, Ohio. J. P. Burton, prest. and treas.; D. Johns, secy. Cap. stk. \$30,000. South Massillon. Shaft, 30,500 tons; steam. Wm. Hardgrove, supt.
Neff's Siding ..... Belmont (P. O. Shields) Ry. 42.	George Neff (local). Cap. \$1,000. Open pit, 40 tons; hand.
Negley ..... Columbiana Ry. Holley 586.	Sutherns Mining Co. A. H. Davis, prest.; James Sutherns, treas., mgr. and supt. Cap. stk. \$10,000. Pleasant Valley. Drift, 75,000 tons; horse.
Nelsonville ..... Athens Ry. 181.	Buckeye Coal Co. Geo. E. Hall, prest.; Geo. O. Shoemaker, secy.; John Gintty, treas.; H. A. Crippen, mgr. Cap. stk. \$85,000. Burkeye. Tunnel, 75,000 tons; horse. John Gintty, supt.
" " " " " " "	Columbus & Hoeking Coal & Iron Co., Columbus, Ohio, Board of Trade Bldg. J. O. Moss, prest.; S. A. McManigal, secy.; W. J. Redington, treas.; R. H. Johnson, v.-prest. and gen. mgr. Nos. 15, 17, 27, 29. Drift, 180,000 tons; steam, electricity.
" " " " " " "	Hoeking Valley Coal Co., Columbus, Ohio, 41 E. Broad st. E. A. Cole, gen. mgr. Cap. stk. \$200,000. Minkes Run, Hawkes. Tunnel, 200,000 tons; steam, compressed air.
" " " " " " "	Johnson Hill Coal Co. Wm. Myers, prest.; Frank W. Poston, secy.; John W. Bennett, treas.; Wm. Dalrymple, mgr. and supt. Cap. stk. \$9,000. Johnson Hill. Slope, 30,000 tons; horse.
" " " " " " "	J. M. Lanna. Cap. \$6,000. Tunnel, 15,000 tons; hand.
" " " " " " "	Last Run Coal Co. James Dew, prest.; Charles F. Myers, secy.; C. H. Doan, treas.; Joseph Slater, v.-prest. and gen. mgr. Cap. stk. \$30,000. Last Run. Drift; electricity (developing). Wm. G. Halbert, supt.
" " " " " " "	Nelsonville Sewer Pipe Co. (local). James Dew, prest.; C. H. Doan, secy. and treas. Cap. stk. \$25,000. Steam.
" " " " " " "	C. L. Poston & Co. Cap. stk. \$100,000. C. L. Poston, mgr. Green Brier. Drift, 150,000 tons; steam. Cal. Mellinger, supt.
" " " " " " "	Springfield Coal & Ice Co., Springfield, Ohio, 93 S. Limestone st. E. S. Kelly, prest.; F. W. Ludlow, secy.; H. Voges, mgr. Cap. stk. \$50,000. Springfield. Tunnel, 25,000 tons; horse. Thomas Jones, supt.
New Albany ..... Mahoning (P. O. Salem) Ry. Columbus 42, 169, 170, 181, 182, 323, 585, 765.	George Godward & Sons (local). Tunnel, 3,650 tons; horse.
New Berlin ..... Stark Ry. 778.	Clayton Hall (local). Cap. \$2,000. New Berlin. Slope, 740 tons; horse.
" " " " " " "	Richard Warburton (local). Graham. Open pit, 700 tons; hand.
New Comerstown ..... Tuscarawas Ry. 174, 584.	Thomas Langhead. Tunnel, 250 tons; horse.
New Franklin ..... Stark Ry. Moultrie 563.	Wm. Sommersville (local). Cap. \$8,000. Slope, 1,800 tons.
New Lexington ..... Perry Ry. 164, 765.	D. E. Davis. Cap. \$1,000. Drift, 1,000 tons; hand.
" " " " " " "	Wales, Hammon & Collat. Nugent. Tunnel, 1,680 tons; hand. W. J. Ruddock, supt.
New Lisbon, Columbiana Ry. 593, 585.	Edward Broughton (local). Cap. \$1,000. Tunnel, 1,500 tons; hand.
" " " " " " "	P. March & Son. Cap. \$6,000. March. Tunnel, 4,100 tons; hand. H. A. March, supt.
" " " " " " "	Sterling Mining Co. N. F. Wood, prest.; H. D. Bileman, secy.; W. H. Warner, treas. and mgr. Cap. stk. \$10,000. Central Mine. Slope, 15,000 tons; steam. Jos. Farmer, supt.
New Philadelphia ..... Tuscarawas Ry. 171, 175.	Goshen Coal Co., Cleveland, Ohio, 253 Superior st. J. A. Beldler, prest. and treas.; A. W. Brown, secy. Cap. stk. \$100,000. Goshen. Drift, 100,000 tons; steam. C. J. Brokenshire, supt.
" " " " " " "	G. W. Mathias. Cap. \$15,000. Slope, 2,000 tons; horse, hand. Ed. Mathias, supt.
" " " " " " "	H. S. Odibert & Co., Cleveland, Ohio, Western Reserve Bldg. Cap. stk. \$50,000. Odibert. Drift, 225,000 tons; steam. John Price, supt.
New Pittsburg ..... Hoeking (P. O. Blatchford) Ry. 181.	New Pittsburg Coal Co., Columbus, Ohio, 11 and 12 Clinton Bldg. Thomas Johnson, prest. and treas.; G. D. Froston, secy.; Edward Johnson, v.-prest., gen. mgr. and supt. Cap. stk. \$100,000. Powell's Run. Drift, 500,000 tons; steam, compressed air.
New Straitsville ..... Perry Ry. 181.	Columbus & Hoeking Coal & Iron Co., Columbus, Ohio, Board of Trade Bldg. J. O. Moss, prest.; S. A. McManigal, secy.; W. J. Redington, treas.; R. H. Johnson, v.-prest. and gen. mgr. Rock Run, Nos. 5, 7, 9, 11, 13, 47, 49. Drift, 600,000 tons; steam, electricity, horse.
" " " " " " "	Ohio Coal Co., Columbus, Ohio, Board of Trade Bldg. Black Diamond. Drift, 50,500 tons; horse. David Wiatms, supt.

## COAL—BITUMINOUS—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 TONS, KIND OF POWER USED, COAL BREAKERS, WASHERS, COKE OVENS, AND NAME OF MINE SUPERINTENDENT.
TOWN	COUNTY	
North Industry Ry. 778.	Stark	Wade Coal Co., Cleveland, Ohio, 11 Bratenahl Block, H. D. Dennis, pres.; John C. Allen, secy. and treas. Cap. stk. \$7,500. Wade. Tunnel; horse. James Perkins, supt.
North Lawrence Ry. Lawrence 363.	Stark	James Mullins & Sons, Wooster, Ohio. Cap. \$50,000. Minglewood Nos. 1 and 2. Slope, shaft, 75,000 tons; steam. T. H. Elser, supt.
"	"	Ridgway Burton Co. J. P. Burton, pres. and treas.; D. Johns, secy. Cap. stk. \$30,000. Palermo. Shaft, 41,000 tons; steam. John Hodgson, supt.
North Lima Ry. 156.	Mahoning	Adam Little and others (local). Spaidville. Shaft, 850 tons; horse.
"	"	Daniel Little & Son (local). Cap. \$3,000. Shaft, 800 tons; steam.
"	"	Solomon Paulin (local). Open pit, 1,000 tons; horse.
Oakdale Ry. 182.	Athens	Songers Coal Co., Columbus, Ohio, 11 E. Town st., A. Brenholts, pres.; James O. Somers, secy. and treas. Cap. stk. \$90,000. Sunday Creek. Shaft, 50,000 tons; steam. F. Williams, supt.
Oak Hill Ry. 43.	Jackson	Etna Fire Brick & Coal Co., John D. Daviss, pres.; Elias Morgan, secy.; J. J. Jones, treas. and mgr. Cap. stk. \$21,000. Etna. Slope, 2,800 tons; hand.
Olive Furnace Ry. 156.	Lawrence	McGugin & Co. (local). Olive Furnace. Tunnel, 1,000 tons. W. H. McGugin, supt.
Orbison Ry. 181.	Hocking	Raybould Coal Co., Columbus, Ohio, 17 19 Clinton Bldg. Summit Raybould, pres. and mgr.; Frank A. Pendergrass, secy.; D. F. Postle, treas. Cap. stk. \$40,000. Slope; steam, electricity developing. Wm. Raybould, supt.
Osburg Ry. 173.	Stark	John Carruthers (local). Miller's. Drift, 1,200 tons.
Palmyra Ry. 376.	Portage	Hudson Coal Co., Cleveland, Ohio, Room 50 Willschire Bldg. H. D. Hutson, pres. and mgr.; H. D. Marble, secy. and treas. Cap. stk. \$25,000. Nos. 1 and 2. Shafts, 30,000 tons; steam. Thos. J. Williams, supt.
"	"	Palmyra Coal Co., Youngstown, Ohio, 114 N. Market st. Henry Wick, pres.; Wilford P. Ames, secy., treas. and mgr. A and B. Shaft, 50,000 tons; steam. H. B. Evans, supt.
Petersburg, (P. O. Algonsquid) Ry. 523.	Carroll	Charles W. Lewis, Allen. Slope, horse developing.
Pike P. O. and Ry. North Industry 778.	Stark	Wm. Slutz (local). Open pit, 100 tons; hand.
Point Pleasant, (P. O. name Dysons Ry. 174, 206.	Guernsey	Cisco Mining Co., Cleveland, Ohio, Western Reserve Bldg. W. R. Huntington, pres.; N. H. Foote, secy. and treas.; H. S. Oberst, mgr. Cap. stk. \$25,000. Cisco. Shaft, 50,000 tons; steam. John Prier, supt.
Pomeroy Ry. 181.	Meigs	Coal Ridge Salt Co. M. B. Wells, pres.; John M. Davis, secy.; J. W. Thomas, mgr. Cap. stk. \$25,000. Coal Ridge. Tunnel, 14,468 tons; horse. Daniel W. Daniels, supt.
"	"	B. Kochler (local). Cap. \$2,000. Excelsior. Tunnel, 8,800 tons; horse. Dan Diehl, supt.
"	"	Peacock Coal Co., X. Benzel, pres.; Fred Ebersbach, secy. and treas.; Martin Ebersbach, mgr. Cap. stk. \$25,000. Peacock. Slope, 100,000 tons; horse. Wm. Ebersbach, supt.
Powhatan Point, Ry. 583.	Belmont	John E. Schuegg & Bros. (local). Cap. \$2,000. Schuegg. Shaft, 380 tons; steam.
Quaker City Ry. 42.	Guernsey	Alex. Cochran. Cap. \$20,000. Tunnel, 75,000 tons; horse.
Radeliff Ry. 181.	Vinton	John Blore. Blore. Tunnel, 800 tons; hand. H. C. Booth, supt.
Redfield Ry. 182.	Perry	Columbus & Eastern Coal Co., Columbus, Ohio, J. F. Harris, pres.; S. J. Flickenger, secy.; James Cochran, treas.; C. A. Deem, mgr. and supt. Cap. stk. \$850,000. Drift, 17,000 tons; horse.
"	"	James Coyle & Son, Cap. \$5,000. Chestnut Grove. Drift, 12,000 tons; horse. G. W. Coyle, supt.
"	"	Craty Coal Co., Columbus, Ohio. Cap. stk. \$20,000. Wallace. Drift, 25,000 tons; horse. Wm. Wallace, supt.
"	"	Davis Mining Co. B. J. Davis, pres. and supt.; D. J. Williams, secy. and treas.; John M. Taylor, mgr. Cap. stk. \$4,000. Davis. Open pit, 25,000 tons; horse.
"	"	Standard Coal Co., Columbus, Ohio, 26 Wesley Block, 101 N. High st. D. Mathews, pres.; Charles Ratzel, secy. and treas. Cap. stk. \$100,000. Union No. 1. Open pit, 40,000 tons; horse. John Koppis, supt.
"	"	Wallace Coal Co., Columbus, Ohio. John B. Hamilton, pres.; Joseph Cratty, secy. and treas.; Wm. Wallace, mgr. and supt. Cap. stk. \$20,000. Wallace. Shaft, 40,000 tons; horse.
Rendville Ry. 182, 765.	Perry	W. P. Reul & Co., Chicago, Ill., 152 Madison st. Sunday Creek No. 3. Shaft, slopes; steam. James McLaughlin, supt.
Riverton Ry. Wellston 43, 156, 385.	Jackson	Riverton Coal Co. F. A. Hockett, pres. and mgr.; J. E. Gimpelring Jr., secy. and treas. Cap. stk. \$5,000. Riverton. Tunnel; steam. J. J. Donahue, supt.
Rogers Ry. 585.	Columbiana	Quaker Valley Mining Co., Youngstown, Ohio, 17 Public Square. Ralph J. Wick, pres.; M. C. McNabb, secy.; N. F. Wood, treas.; J. M. Walter, mgr. Quaker. Drift, 35,000 tons; horse. James Thompson sr., supt.
Romine, (P. O. Carlwick) Ry. 55.	Muskingum	Diamond Coal Co., Conesville, Ohio. Cap. \$8,000. Diamond. Tunnel, drift, 30,000 tons; horse. David Davis, supt.
"	"	O. F. McKinney, Zanesville, Ohio, 42 N. Fourth st. Oak Grove. Drift, 50,000 tons; horse and hand. H. N. Houk, supt.
Roscoe Ry. Coshocton 173, 584.	Coshocton	James H. Gillen (local). Treadway. Drift, 880 tons; hand.
Roseville Ry. 164.	Perry	Standard Coal Co., Columbus, Ohio, 26 Wesley Block, 101 N. High st. D. Mathews, pres.; Charles Ratzel, secy. and treas. Cap. stk. \$100,000. Standard No. 2. Open pit, 80,000 tons; horse. T. C. Hilliards, supt.

## COAL—BITUMINOUS (CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, COKE OVENS, AND NAME OF MINE SUPERINTENDENT.
TOWN	AND COUNTY.	
St. Clairsville	Belmont	Black Diamond Coal Co. C. Troll Sons, proprietors. Cap. \$50,000. Black Diamond, 100,000 tons; horse; hand.
"	"	Ohio & West Virginia Coal Co. C. Troll Sons, proprietors. Cap. \$50,000. Ohio and West Virginia, 100,000 tons; horse, hand.
Salem	Columbiana	Hoimer Dunn (local). Dunn. Slope, 5,000 tons; horse.
"	"	Howells & Ashmar (local). Cap. \$3,000. Greenanmyer. Shaft, 3,000 tons; steam. J. K. Ashmar, supt.
"	"	Sheldon Parker (local). Parker, 300 tons; horse.
"	"	Salem Co. Cap. stk. \$50,000. Slope. Wm. Dunn, supt.
"	"	Stephen Stone (local). Drift, 900 tons; hand.
Salineville	Columbiana	S. S. Carnahan. Cap. \$8,000. Empire. Open pit, 37,000 tons; steam, horse.
"	"	T. P. Francis (local). Slope, 2,000 tons; horse.
"	"	H. H. Kirk (local). Drift, 3,000 tons; horse. A. D. Fotheringham, supt.
Sandrun	Hocking	Columbus & Hocking Coal & Iron Co., Columbus, Ohio, Board of Trade Bldg. J. O. Moss, prest.; S. A. McManigal, secy.; W. J. Redington, treas.; R. H. Johnson, v.-prest. and gen. mgr. Nos. 21 and 37. Drift, 120,000 tons; steam; electricity.
Sarahsville	Noble	J. H. Young. Cap. \$800. Raceroom. Tunnel, 2,000 tons; horse. Levi Vandyne, supt.
Sealover	Muskingum	Zanesville Coal Co., Zanesville, Ohio, 42 N. Fourth st. O. F. McKinney, prest. and mgr.; F. E. Huggins, secy.; J. B. W. Amsteden, treas. Cap. stk. \$100,000. No. 7. Open pit, 55,500 tons. Thomas Opie, supt.
Shawnee	Perry	Columbus & Hocking Coal & Iron Co., Columbus, Ohio, Board of Trade Bldg. J. O. Moss, prest.; S. A. McManigal, secy.; W. J. Redington, treas.; R. H. Johnson, v.-prest. and gen. mgr. Nos. 31 and 35. Drift, 120,000 tons; steam; electricity.
"	"	Gosline & Barlow, Toledo, Ohio, 422 Madison st. Furnace. Slope, 100,000 tons; steam. J. P. Meredith, supt.
"	"	J. H. Hazetton. Rock Run. Tunnel; horse.
"	"	New York & Perry Coal & Iron Co., New York City, 2 Wall st. New York. Tunnel, drift, 150,000 tons; steam. Samuel W. Butt, supt.
"	"	Shaynee Valley Coal & Iron Co., Newark, Ohio. John C. Hamilton, prest.; L. J. Johnson, secy.; James H. Smith, treas.; Thomas Philippe, mgr. and supt. Drift, 140,000 tons; steam.
"	"	H. D. Turney & Co., Columbus, Ohio. H. D. Turney, prest.; T. W. Guthrie, secy.; G. S. Beeson, treas.; Thomas Cocoran, mgr. and supt. Cap. stk. \$250,000. XX. Drift, 300,000 tons; hand.
"	"	Upson Coal Co. Upson. Tunnel, 125,000 tons; hand, horse, steam, electricity. R. E. Williams, supt.
Sherodsville	Carroll	Fuller Coal Co., Toledo, Ohio. D. W. Fuller, prest.; James McClean, secy. and treas. Nos. 2 and 3. Tunnel, 125,000 tons; steam, horse. R. H. Wainwright, supt.
"	"	Somers & Wainwright, Cleveland, Ohio, 8 Euclid av. Cap. \$25,000. No. 4. Slope, 5,200 tons; steam. Frank McIntosh, supt.
Smith	Mahoning	Ralph Urmon (local). Slope, 3,000 tons; horse.
"	(P. O. Beloit) Ry. 156	
Stenbenville	Jefferson	Jefferson Coal & Iron Co. Wm. P. Hays, prest.; Geo. W. McCook, secy. and mgr.; Wm. Stanton, treas. Cap. stk. \$50,000. Bustard. Shaft, 43,136 tons; steam. John Kelly, supt.
"	"	Stenbenville Coal Mining Co. R. Sheppard jr., prest.; George W. McCook, secy. and treas.; Wm. Smurthwaite, mgr. and supt. Cap. stk. \$50,000. Shaft, 60,000 tons; steam; 6 coke ovens, capacity 1,000 tons.
"	"	H. L. Wilson (local). Cap. \$5,000. Wilson. Open pit, 5,000 tons; horse.
Stewartsville	Belmont	Robert Clark (local). Slope, 60 tons; hand.
"	"	Owen Meelan. Cap. \$30,000. Franklin. Tunnel, 65,000 tons; horse. W. T. Smith, supt.
Syracuse	Meigs	Syracuse Coal & Salt Co. Ralph Cheney, prest.; P. W. Robbins, secy. and treas.; L. H. Bridgeman, mgr. Cap. stk. \$100,000. Syracuse. Shaft, 52,500 tons; steam, horse. Adam Duckworth, supt.
Talmdage	Summit	W. L. Thomas & Son. Cap. stk. \$12,000. Fairview. Shaft, 5,000 tons; steam. W. L. Thomas, supt.
Thurman	Gallia	D. D. Morgan (local). Open pit, 500 tons; hand.
Trimble	Athens	Crescent Coal Co., Columbus, Ohio, Board of Trade Bldg. L. J. Doty, prest.; A. O. Mauck, secy. and treas. Cap. stk. \$100,000. Crescent. Shaft, 200,000 tons; electricity; steam. S. F. Knox, supt.
Tuscarawas	Tuscarawas	A. Herring. Cap. \$4,000. Diamond. Tunnel, 625 tons; horse. J. M. Herring, supt.
"	"	Nicholas Herf. Cap. \$12,000. Mineral Ridge. Open pit, 20,000 tons; horse. A. Stuber, supt.
"	"	C. P. Minnich. Cap. \$10,000. Mt. Carbon. Tunnel, 10,000 tons; hand. Benner Minnich, supt.
Urichsville	Tuscarawas	Diamond Fire Clay Co. James Ball, prest.; J. M. Cooper, secy., treas. and mgr. Cap. stk. \$25,000. Diamond. Tunnel, 7,000 tons; horse. George Ross, supt.
"	"	D. Dunlavey (local). Drift, 1,000 tons; hand.
"	"	John W. Fetter (local). Cap. \$1,000. Fetter. Open pit, 650 tons; hand.
"	"	Ebenezer H. Gowin (local). Fruit Hill. Open pit; hand.

## COAL—BITUMINOUS—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, COKE OVENS, AND NAME OF MINE SUPERINTENDENT.
TOWN	COUNTY.	
Uhrichsville	Tuscarawas	Jacob Huston (local). Cap. \$5,000. Huston. Open pit, 500 tons; horse.
"	"	John M. Smith (local). Scott. Drift, 1,440 tons; horse.
"	"	Uhrichsville Fire Clay Co. W. B. Thompson, pres.; T. J. Evans, secy.; George Beck, treas. Cap. stk. \$80,000. Slope, 8,000 tons.
Uley Ry. 766.	Athens	Federal Valley Coal Co., New York, N. Y., 41 Hoy st., Clarence Stephens, pres.; Samuel Snow, secy.; Melvin Stephens, treas. Cap. stk. \$1,000,000. Federal Creek No. 2. Tunnel, 30,000 tons; horse; breaker, washer, 125 coke ovens, capacity 5,000 tons. N. W. Musgrave, supt.
Vienna Ry. 506.	Trumbull	Home Brook Coal Co., Youngstown, Ohio. Late Hornbeek, pres.; James Davis, secy. and treas.; John Brunsweik, mgr. and supt. Cap. stk. \$1,000. Slope, steam (developing).
Wadsworth Ry. 568.	Medina	Akron Coal Co., Akron, Ohio, 112 S. Howard st. H. E. Loomis, pres. and mgr.; James P. Loomis, secy. and treas. Cap. stk. \$50,000. Stony Ridge. Slope, 60,000 tons; steam. V. Gerstenchlager, supt.
"	"	Card & Barrett Coal Co., Cleveland, Ohio, 44 Euclid av. Cap. \$80,000. No. 1, Eldorado. Slope, shaft, 67,174 tons; steam. O. V. Dibble, supt.
"	"	W. B. Coleman. Razor Slope. 7,000 tons; steam. J. Jordan, supt.
"	"	Excelsior Mining Co. John J. Wagon, pres. and treas.; C. F. Wagon, secy. and mgr. Cap. stk. \$50,000. Excelsior. Slope, 100,000 tons; steam. Wm. Lydiard, supt.
Wakemp Ry. Broadwell 766.	Athens	J. R. Wiekham. Slope, 300 tons; horse.
Washingtonville Ry. 568.	Columbiana	Cherry Valley Iron Works, A. H. King, pres.; S. E. Welker, secy.; C. M. Schmieck, treas. Cap. stk. \$50,000. Cherry Valley. Slope, 120,000 tons; steam.
"	"	Fair View Mining Co., Youngstown, Ohio, 114 N. Market st. W. H. Warner, pres.; Wilford P. Ames, secy., treas. and mgr. Cap. stk. \$5,000. Fair View. Slope, 30,000 tons; steam. John Hileman, supt.
"	"	Walter & Ferris Coal Co., Youngstown, Ohio, 17 Public Square. J. M. Ferris, pres. and treas.; J. H. Streeter, secy.; J. M. Walter, mgr. Drift, 100,000 tons; steam, horse. James Thompson sr., mgr.
Waynesburg Ry. 175.	Stark	George Munser (local). Cap. \$900. Baum. Slope, 1,000 tons; steam.
Wellston Ry. 42, 156, 505.	Jackson	Comet Coal Co., Dayton, Ohio, 104 Wayne av. W. W. Whitmore, pres.; J. D. Whitmore, secy., treas. and mgr. Cap. stk. \$100,000. Indiv. cap. \$48,000. Comet. Shaft, 35,000 tons; steam. Peter Gallagher, supt.
"	"	Eliza Coal Co., Dayton, Ohio, 235 S. Lincoln st. S. J. Patterson, pres.; G. O. Richardson, secy.; D. Armstrong, treas.; John James, mgr. Cap. stk. \$50,000. Eliza. Shaft, 50,000 tons; steam.
"	"	Fluhart Coal & Mining Co. L. B. Boyd, pres.; A. T. Holcomb, supt.; John J. Roberts, treas.; Theo. Fluhart, mgr. Cap. stk. \$200,000. Shaft, 130,000 tons; steam.
"	"	Southern Ohio Coal & Iron Co., Dayton, Ohio, 302 E. Third st. A. A. Thomas, pres.; W. L. Caten, secy., treas. and mgr. Cap. stk. \$500,000. No. 3. Slope, 100,000 tons; steam. Allen Still, supt.
"	"	Superior Coal Co. M. S. Stumberger, pres.; H. S. Willard, secy. and mgr. Cap. stk. \$400,000. Shaft; steam, horse.
"	"	Wainwright Coal Co. R. H. Wainwright, pres.; D. J. Harry, mgr. and supt. Cap. stk. \$75,000. Wainwright. Shaft, 150,000 tons; steam.
Wellsville Ry. 175, 533.	Columbiana	C. B. Weaver (local). Cap. \$5,000. Tunnel, 10,000 tons; hand. A. L. Weaver, supt.
Western Star Ry. Akron 42, 169, 503, 582, 592, 778.	Summit	D. P. Davis (local). Slope, 2,000 tons; horse.
W. Lafayette Ry. 584.	Coshocton	Benj. C. Williams (local). Barts Run. Tunnel, 1,000 tons; hand.
Yorkville Ry. 175.	Jefferson	Ohio & Pennsylvania Coal Co., Cleveland, Ohio. J. B. Zerbe, pres.; A. McGarry, secy. Open pit; horse. W. H. Ewing, supt.
Youngstown Ry. 383, 503, 563, 592.	Mahoning	Witch Hazel Coal Co., 114 N. Market st. Henry Wick, pres.; Wilford P. Ames, secy., treas. and mgr. Witch Hazel. Shaft, 40,000 tons; steam. David Jacobs, supt.
Zaleski Ry. 46.	Vinton	Zaleski Co. W. T. McClintick, pres.; Amos Smith, secy. and treas.; Robert Thompson, mgr. Cap. stk. \$150,000. Zaleski. Drift, 35,000 tons; horse. T. L. Watkins, supt.
Zanesville Ry. 12, 173, 563, 629, 182, 884.	Muskingum	James H. Alexander (local). Open pit, 100 tons; hand.
"	"	Bridewell & Barton, 265 E. Pike st. Slope, 4,000 tons; hand. George Jones, supt.
"	"	J. A. Detonbeek. Cap. \$10,000. Oak View. Tunnel, 4,000 tons; horse. Thomas Toole, supt.
"	"	Theo. Dietz (local). Slope, 35 tons.
"	"	John German (local). Tunnel, 2,000 tons; hand. George German, supt.
"	"	Geo. H. Harper (local). Open pit, 1,800 tons; horse.
"	"	Thomas Potts, 67 Adams st. (local). Tunnel, 1,500 tons; hand.
"	"	Wm. A. Werner, 67 Eighth st. (local). Cap. \$8,000. Tunnel, 14,000 tons; hand. James Foutz, supt.
Zoar Ry. 174, 175, 809.	Tuscarawas	Wm. R. Jones. Cap. \$8,000. Eagle Hill. Tunnel, 11,230 tons; horse.
"	"	Zoar Society (local). Tunnel, 375 tons; hand.

## COAL—CANNEL

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, COKE OVENS, AND NAME OF MINE SUPERINTENDENT.
Pigeon Run . . . Stark Ry. Massillon 171, 563.		O. Young Coal Co., Cleveland, Ohio, 725 Society Savings Bldg. Cap. stk. \$60,000. Camp Creek. Shaft, 50,000 tons; steam. Joseph Collier, supt.
Warsaw . . . Coshocton Ry. 169.		Pinkney Cannel Coal Co., Cleveland, Ohio, 505 West-11th Reserve Bldg. J. B. Zerbe, prest. and treas.; E. E. Barney, secy. Cap. stk. \$30,000. Warsaw. Drift, 40,000 tons; horse. W. G. Jones, supt.

## FIRE CLAY

LOCATION OF MINE OR BANK, RAILWAYS, WATER ROUTES, AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE OR BANK, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, ETC., AND NAME OF SUPERINTENDENT.
Canal Dover, Tuscarawas Ry. 171, 174, 175.		Dover Fire Brick Co., Cleveland, Ohio, cor. Bank and Superior sts. C. S. Barrett, prest. and treas.; G. H. Gauson, secy.; P. Arnold, mgr. Cap. stk. \$100,000. Barretts. Tunnel, 30,000 tons; hand.
Canton . . . Stark Ry. 173, 585, 778.		Canton Brick Co. H. S. Belden, prest.; J. L. Hingley, secy. and treas.; Peter Miller, mgr. Shale clay.
Coleman . . . Columbiana Ry. 263.		Union Fire Clay and Stone Co. C. Coleman, prest.; C. S. Coleman, prest. and treas.; Wm. Douglas, mgr. Cap. stk. \$10,000. Coleman. Tunnel, 17,000 tons; steam. J. T. Griffiths, supt.
Cuyahoga Falls . . . Summit Ry. 169, 592.		Camp & Thompson. Cap. \$100,000. Open pit, 18,000 tons; water, steam.
E. Palestine . . . Columbiana Ry. 563.		State Line Sewer Pipe Co., James Mullins, prest.; Robert F. Taggart, secy. and treas.; Hugh Laughlin, mgr. and supt. Cap. stk. \$50,000. State line. Slope, 50,000 tons; steam.
Empire . . . Jefferson Ry. 153.		Congo Fire Clay Co., B. U. Wilkinson, prest. and mgr.; Thos. Wilkinson, secy. and treas. Cap. stk. \$80,000. Congo. Slope, 80,000 tons.
" . . . "		Minor Fire Clay Co. Tunnel, 8,000 tons; horse.
Freeman . . . Jefferson Ry. 175.		Freeman Fire Clay Co. C. A. Freeman, prest.; J. M. Freeman, secy. Cap. stk. \$80,000. Tunnel, 15,000 tons.
Greenford . . . Mahoning Ry. 563.		Greenford Fire Clay Co. Cap. stk. \$5,000. Slope, 2,000 tons; steam.
Haydensville . . . Hocking Ry. 181.		Haydensville Mining & Manufacturing Co. Charles H. Hayden, prest.; J. W. Jones, secy., treas. and mgr. Cap. stk. \$410,700. Mingo. Open pit, tunnel, 65,000 tons; steam.
Ironton . . . Jefferson Ry. 563.		Wm. Lacey, Cleveland, Ohio, 77 and 79 River st. Cap. stk. \$100,000. Lacey, sandstone and fire clay. Shaft, 18,000 tons; steam.
Lilly . . . Scioto Ry. Gephart 43.		R. H. & G. C. Cook. Cap. \$5,000. Enterprise. Slope, 6,500 tons; steam. R. H. Cook, supt.
Logan . . . Hocking Ry. 181.		Joe Bartholow. No. 6. Open pit, 10,000 tons.
Magnolia . . . Carroll (Not a P. O.) Ry. 175.		Beatty Fire Clay Co., Canton, Ohio. W. M. Beatty, prest., mgr. and supt.; J. J. Whitacre, secy. and treas. Cap. stk. \$10,000. Beatty. Tunnel, 8,000 tons; horse.
Malvern . . . Carroll Ry. 175.		Malvern Clay Co. John H. Wilson, prest.; George H. Aller, secy., treas. and mgr. Cap. stk. \$6,500. Malvern. Slope, 20,000 tons; horse. Peter Reich, supt.
" . . . "		Phoenix Fire Clay Co. C. A. Weaver, prest.; R. Roberts, secy. and treas.; Samuel Hodgkinson, mgr. Cap. stk. \$75,000. Phoenix. Slope, 300,000 tons; steam. John Connor, supt.
Massillon . . . Stark Ry. 171, 585, 809.		Massillon Stone & Fire Brick Co., Pittsburg, Pa., 383 Penn av. R. P. Duff, prest.; Wm. G. Hepp, secy. and mgr.; E. A. Kitzmiller, treas. Cap. stk. \$80,000. Tunnel, 25,000 tons; steam.
Maxville . . . Perry Ry. Winona Furnace 181.		L. M. Butt. Tunnel; hand.
Mineral Point, Tuscarawas Ry. 173, 778.		C. E. Brothers (local). Open pit.
Mogadore . . . Summit Ry. 173.		Myers & Hall. Fire clay. 5,000 tons.
Mt. Vern'n Furn., Lawrence (P. O. Campbell) Ry. 156		Campbell Iron Co., Ironton, Ohio. J. B. Moulton, prest.; H. H. Campbell, secy. and treas.; J. W. Camp- bell, mgr. Cap. stk. \$100,000. Mt. Vernon Furnace. Open pit, 6,000 tons; hand.
Navarre . . . Stark Ry. 173, 589.		Akron Fire Brick Co., Akron, Ohio, 105 Bank st. C. A. Allison, prest.; B. M. Allison, secy., treas. and mgr. Cap. stk. \$50,000. Navarre. Slope, 5,000 tons; hand.
Nelsonville . . . Athens Ry. 181.		Nelsonville Sewer Pipe Co., James Dew, prest. and mgr.; C. H. Doan, secy. and treas. Cap. stk. \$25,000. Tunnel, 45,000 tons; steam.
New Lisbon . . . Columbiana Ry. 263, 586.		Keystone Fire Clay Co., Fred H. Pritchard, prest. and mgr.; Willis Jordan, secy. and treas. Cap. stk. \$25,000. Keystone. Tunnel, 15,000 tons; horse. John Gillis, supt.
Portsmouth . . . Scioto Ry. 42, 169, 529, 539.		Scioto Star Fire Brick Works. E. B. Greene, prest.; R. A. Mitchell, secy. and mgr. Cap. stk. \$48,000. Tunnel, 15,000 tons.
Sandy . . . Tuscarawas P. O. and Ry. Mineral Point 173, 178.		Edward Holden. Point Savage. Tunnel, 5,000 tons; horse. Wm. Holden, supt.
Springfield . . . Summit (P. O. Akron) Ry. 42, 169, 563, 582, 592, 778.		Akron Clay Co. Archie Markle, secy. and treas.; Geo. W. Markle, mgr. Cap. stk. \$5,000. Harshberger. Open pit; steam. John Grant, supt.
Toronto . . . Jefferson Ry. 175.		John Franey's Sons Co. Cap. \$150,000. Forest City. Slope, 25,000 tons; steam.

## FIRE CLAY—(CONTINUED)

LOCATION OF MINE OR BANK, RAILWAYS, WATER ROUTES, AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE OR BANK, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, ETC., AND NAME OF SUPERINTENDENT.
TOWN AND COUNTY.	
Toronto Jefferson	Great Western Fire Clay Co. Cap. \$150,000. Shaft, 24,000 tons; steam.
" (Continued.) "	Jefferson Fire Clay Co. Cap. \$55,000. Jefferson. Shaft, 10,000 tons; steam. D. H. Kett, supt.
Chillicothe Tuscarawas	Diamond Fire Clay Co. James Ball, pres.; J. M. Cooper, secy., treas. and mgr. Cap. stk. \$25,000. Tunnel, 20,000 tons; horse.
" " "	Chillicothe Fire Clay Co. W. B. Thompson, pres.; T. J. Evans, secy. and mgr.; George Beck, treas. Cap. stk. \$80,000. Slope; steam.
Walkers, Columbiana	N. F. Walker Clay Manufacturing Co. N. U. Walker, pres., treas. and mgr.; M. J. Ryan, secy. Cap. stk. \$250,000. Walker. Open pit, 15,000 tons; steam.

## IRON

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, BLAST FURNACES, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Blackband, Tuscarawas	Ridgway Burton Co., Massillon, Ohio. J. P. Burton, pres. and treas.; D. Johns, secy. Cap. stk. \$80,000. Ankeny, black band ore. Tunnel, 25,000 tons; horse. Christian Maurer, supt.
Bloom Switch, Scioto	Clare Iron Co., Portsmouth, Ohio. J. D. Clare, pres. and treas.; E. H. Clare, secy. and mgr. Cap. stk. \$100,000. Black ore. Open pit, 10,000 tons; hand; charcoal furnace, capacity 3,000 tons. J. N. Foster, supt.
Campbell, Lawrence	Campbell Iron Co., Ironton, Ohio. J. H. Moulton, pres.; H. H. Campbell, secy. and treas.; J. W. Campbell, mgr. and supt. Cap. stk. \$100,000. Mt. Vernon Furnace, iron ore. Open pit, 10,000 tons; hand.
Canal Dover, Tuscarawas	Penn Iron & Coal Co. J. P. Burton, pres.; H. S. Reim, secy.; S. W. Croxton, treas. and mgr. Cap. stk. \$200,000. Bahler, black band ore. Slope, open pit, 15,000 tons; horse, hand, furnace. George Brick, supt.
Fairfield, Tuscarawas	G. V. Kollar. Cap. \$5,000. Black band ore. Tunnel, 3,000 tons; hand.
Hanging Rock, Lawrence	Means, Kyle & Co. E. B. Willard, pres.; James Bull, secy. and treas. Cap. \$500,000. Pine Grove, carbonate iron ore. Open pit, tunnel, 25,000 tons; hand; charcoal furnace. A. R. Mackintosh, supt.
Mt. Vernon Furn., Lawrence	Campbell Iron Co., Ironton, Ohio. J. H. Moulton, pres.; H. H. Campbell, secy. and treas.; J. W. Campbell, mgr. Cap. stk. \$100,000. Mount Vernon Furnace, iron ore. 10,000 tons; hand.
New Philadelphia, Tuscarawas	George V. Kollar. Cap. \$5,000. Black band ore. Tunnel, 3,000 tons; hand.
Olive Furnace, Lawrence	McGuen & Co. Olive Furnace, Ilmonite. Tunnel, 10,000 tons; charcoal furnace.
Post Boy, Tuscarawas	Black Band Iron Co., Marietta, Ohio. A. J. Warner, pres.; Geo. H. Jones, secy. Cap. stk. \$100,000. Post Boy, black band ore. Drift, 10,000 tons; horse. A. J. Oustine, supt.
" " "	Morris & Howells, Canal Dover, Ohio. Cap. stk. \$100,000. Camp Morris, black band ore. Tunnel, 25,000 tons; horse. William Morris, supt.
Radelin, Vinton	D. B. Pearce. Iron ore. Tunnel, open pit, 5,000 tons; hand. L. Arbaugh, supt.

## SALT

LOCATION OF MINE OR WELL, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF PRODUCT, KIND OF MINE OR WELL, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Pomeroy, Meigs	Buckeye Salt Co., George McQuigg, pres.; A. D. Brown, secy., treas. and mgr. Cap. stk. \$65,000. Coarse, fine, dairy. 75,000 brls.; steam.
" " "	Coal Ridge Salt Co. M. B. Wells, pres.; John M. Davis, secy. and treas.; J. W. Thomas, mgr. Cap. stk. \$25,000. Coal Ridge. 50,000 brls.; steam.
" " "	Ebersbach, Schaefer & Co. Cap. \$25,000. Pomeroy. Common, fine, dairy. Well, 60,000 brls.; steam.
" " "	Excelsior Salt Works, B. Koehler, propr. Cap. \$3,000. Excelsior, Dairy, common, fine. 4 wells, 11,000 tons; horse.
" " "	John J. Juhler. Cap. \$80,000. White Rock. Common, fine. Artesian wells, 50,000 brls.; steam.
Syracuse, Meigs	Syracuse Coal & Salt Co., Ralph Cheney, pres.; P. W. Robbins, secy. and treas.; L. H. Bridgeman, mgr. Cap. stk. \$100,000. Syracuse. Common, fine, dairy. Shaft, well, 42,500 brls.; steam, horse. Adam Duckworth, supt.

## STONE, MARBLE, GRANITE AND ONYX

LOCATION OF MINE OR QUARRY RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE OR QUARRY, KIND OF STONE, KIND OF MINE OR QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STONE OR MARBLE MILLS, LIMEKILNS AND CAPACITY, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Akron ..... Summit Ry. 292, 103, 42, 506.	J. Hugill, 114 South College st. Cap. stk. \$20,000. Sandstone. Open pit, 4,800 tons; horse.
Amherst ..... Lorain Ry. 383.	Ohio Stone Co., Cleveland, Ohio, 204 Superior st. J. M. Hughes, pres.; L. P. Haldeman, v.-pres. and secy.; C. C. Caskey, treas.; D. D. Haldeman, mgr. Cap. stk. \$200,000. Sandstone. Open pit, 14,000 tons; steam; mill.
Amity ..... Montgomery Ry. Trotwood 170, 584.	A. J. Shaffer (local). Limestone. Hand; mill.
Barr's Mills ..... Tuscarawas Ry. 173.	Kitzmiller Stone Co., Canton, Ohio, 18 W. Eighth st. John W. Gabriel, pres., secy. and treas.; H. A. Kitzmiller, mgr. Cap. stk. \$22,500. Kitzmiller, sandstone. Open pit, 18,000 tons; steam; mill. John Saunders, supt.
Berea ..... Cuyahoga Ry. 170, 383.	Cleveland Stone Co., Cleveland, Ohio, Wilshire Bldg. J. M. Worthington, pres.; Geo. H. Worthington, secy. and treas. Cap. stk. \$2,250,000. Berea, sandstone. Open pit, 42,000 tons; steam; mill. James Nicholl, gen. supt.
Berlin Heights ..... Erie Ry. Ceylon 383.	G. A. Baillie. Sandstone. Slope, 16,000 tons; steam.
Bluestone ..... Cuyahoga Via Cleveland 170, 173, 173, 383, 502, 503, 778.	Maxwell Roll & Co., Cleveland, Ohio, 5 Euclid av. Cap. stk. \$20,000. Bluestone. Open pit, 100,000 tons; steam; mill.
Bluffton ..... Allen Ry. 378, 582.	Siddall & Townsend. Limestone. Open pit, 45,000 tons; steam; limekiln, capacity 2,400 tons.
Bowling Green ..... Wood Ry. 156, 700.	Murphy & Mercer. Cap. stk. \$3,000. Limestone. 20,000 tons; steam; mill. George E. Mercer, supt.
Briggs ..... Washington Ry. 43.	D. B. Calder. Cap. \$2,000. Constitution, sandstone. 200 tons; steam.
" ..... "	F. W. Knowles (local). Grind-stones. 200 tons; hand; mill.
Brookfield ..... Trumbull Ry. 383.	Hamilton & Daley Stone Co. Cap. stk. \$8,000. Whitaker, sandstone. Open pit, 2,000 tons; steam; mill.
Brownhelm ..... Lorain Ry. 383.	Cleveland Stone Co., Cleveland, Ohio, Wilshire Bldg. J. M. Worthington, pres.; George H. Worthington, secy. and treas. Cap. stk. \$2,250,000. Brownhelm, sandstone. Open pit, 42,000 tons; steam; mill. James Nicholl, gen. supt.
Buena Vista ..... Scioto Ry. 583.	Buena Vista Freestone Co. Adolph Cadm, pres.; W. L. Cadm, secy. Cap. stk. \$50,000. Buena Vista, freestone. Open pit, 20,000 tons; steam; mill. Adolph Cadm, supt.
" ..... "	John Miller & Sons. Cap. stk. \$25,000. Buena Vista, freestone. Open pit, 5,000 tons; steam.
Campbell ..... Lawrence Ry. Mt. Vernon Furnace, 156.	Campbell Iron Co., Ironton, Ohio, J. H. Moulton, pres.; H. H. Campbell, secy. and treas.; J. W. Campbell, mgr. and supt. Cap. stk. \$100,000. Mt. Vernon Furnace, limestone. Open pit, 30,000 tons; hand.
Carthage ..... Hamilton Ry. 156, 170.	F. E. Wiebe (local). Cap. \$2,000. Limestone. Open pit, 578 tons; hand.
Centreville ..... Montgomery Ry. Dodds 158.	James Maurer. Sandstone. 1,400 tons.
Clarksfield ..... Huron Ry. 809.	Furlong Stone Co. Cap. stk. \$10,000. Furlong quarry, sandstone. Open pit; steam and horse; mill. Daniel Malloy, supt.
Cold Springs ..... Clarke Ry. 170.	Moores & Co. Limestone. Slope; steam. W. H. Kennedy, supt.
Columbia Station ..... Lorain Ry. 170.	Cleveland Stone Co., Cleveland, Ohio, Wilshire Bldg. J. M. Worthington, pres.; George H. Worthington, secy. and treas. Cap. stk. \$2,250,000. Columbia, sandstone. Open pit, 42,000 tons; steam; mill. James Nicholl, gen. supt.
Constitution ..... Washington Ry. 43.	Constitution Stone Co. M. J. O'Connor, pres. and treas.; Thomas Cleary, secy. and supt. Sandstone 2,000 tons; steam; mill.
Covington ..... Miami Ry. 156, 584.	J. W. Ruhl. Cap. \$20,000. Rocky Branch, limestone. Open pit, 18,000 tons; steam; mill, limekilns capacity 2,625 tons. J. R. Reuch, supt.
Edinburg ..... Portage Ry. 175.	W. B. Davis. Red sandstone. Open pit; hand.
Eifort ..... Scioto Ry. 43.	W. E. Marsh & Co. Limestone. Open pit, 30,000 tons; hand. W. E. Marsh, supt.
Ellsworth ..... Mahoning Ry. 563.	M. J. Barnes. Cap. \$8,000. Sandstone, limestone. Open pit; hand.
Elyria ..... Lorain Ry. 171, 383.	George E. Bryant, 13 W. Third st. Cap. \$10,000. Sandstone. Open pit, 800 tons; steam; mill.
" ..... "	H. E. Mussey & Co. Mussey, sandstone. Open pit; steam.
Forest Dale ..... Lawrence Ry. Ironton 156, 329, 723, 583.	Edward Adkins. Limestone. Open pit, 50,000 tons; hand.
Fostoria ..... Seneca Ry. 42, 181, 502, 705.	D. P. Lloyd Co. Cap. \$30,000. Limestone. Open pit, 15,000 tons; steam; limekiln, capacity 9,000 tons.
Fremont ..... Sandusky Ry. 378, 383, 809.	Gottron Bros. Limestone. Open pit, 6,400 tons; steam, hand; limekiln, capacity 60,000 brls.
Fulton ..... Morrow Ry. 765.	J. B. Rimhart. Cap. \$2,000. Fulton, sandstone. Open pit, 14,000 tons; steam. B. J. Lyons, supt.



## STONE, MARBLE, GRANITE AND ONYX (CONTINUED)

LOCATION OF MINE OR QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE OR QUARRY, KIND OF STONE, KIND OF MINE OR QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STONE OR MARBLE MILLS, LIMEKILNS AND CAPACITY, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Fultonham Ry. 182.	Muskingum Hoover Bros. Fultonham, limestone. Open pit, 10,000 tons; steam; limekiln.
Grafton Ry. 170, 171.	Lorain Elyria Stone Co., Elyria, Ohio. H. E. Corning, prest.; W. L. Fay, secy., treas. and mgr. Cap. stk. \$105,000. Elyria, sandstone. Open pit, 320,000 tons; steam; mill. Charles F. Peebles, supt.
"	" Grafton Stone Co., E. S. Flint, prest.; W. S. Miller, secy.; Col. S. Bliss, treas.; W. E. Miller, v.-prest. and mgr. Sandstone, 80,000 tons; Cap. stk. \$230,000; steam; mill.
Greenfield (P. O. Steuben) Ry. 42, 535.	Huron Cuit & Graham. Steuben, sandstone. Open pit, 500 tons; hand.
Hanging Rock Ry. 523.	Lawrence Means, Kyle & Co., E. B. Willard, prest. and mgr.; James Bull, secy. and treas. Cap. stk. \$500,000. Junior Hearth Stone, sandstone. Hand (developing).
Independence Ry. 778.	Cuyahoga J. Bender (lessee). Smiths, sandstone. Open pit, 300 tons; horse.
"	" Little & Pettibone, Cleveland, Ohio, 5 Euclid av. Independence, freestone. Mill
"	" Ohio Stone Co., Cleveland, Ohio, 201 Superior st., J. M. Hughes, prest.; L. P. Haldeman, v.-prest. and secy.; C. C. Chicks, treas.; D. D. Haldeman, mgr. Cap. stk. \$200,000. Sandstone. Open pit, 14,000 tons; steam; mill.
Killbuck Ry. 169.	Holmes Killbuck Brown Stone Co., Chas. E. Duer, secy.; Z. T. Duer, treas. and mgr. Killbuck, sandstone. Open pit; electricity, horse, hand; mill. Enos Schirdorf, supt.
La Grange Ry. 170.	Lorain Cleveland Stone Co., Cleveland, Ohio, Wilshire Bldg., J. M. Worthington, prest.; George H. Worthington, secy. and treas. Cap. stk. \$2,250,000. La Grange, sandstone. Open pit, 42,000 tons; steam; mill. Jas. Nichol, gen. supt.
Langaster Ry. 164, 181.	Fairfield F. C. Neeb, Cap. \$90,000. Alleghany, sandstone. 75,000 tons; steam, horse. Wm. Strachan, supt.
Line City Ry. 700.	Wood Line City Co., C. H. Sawyer, prest.; J. P. Bronson, secy. and treas.; G. S. Broad, mgr. Cap. stk. \$50,000. Line City, limestone. Open pit, 60,000 tons; steam; 4 limekilns. J. Helleman, supt.
"	" Michigan Stone & Supply Co., Detroit, Mich., 40 W. Fort st., Gus. F. Smith, prest. and mgr.; Cameron Urrie, secy. and treas. Cap. stk. \$100,000. Homestead Quarry, limestone. Open pit, 50,000 tons; steam. Orlando Edmon, supt.
Lucas Ry. 585.	Richland Richland Stone Co., Mansfield, Ohio, Savings Bank Bldg., H. C. Post, prest.; Ed H. Zurhorst, secy.; Geo. E. St. John, treas.; Chas. W. French, mgr. Cap. stk. \$500,000. Lucas, Sandstone, slope and steam.
Lykens Ry. 582.	Crawford A. J. Brown. Limestone; open pit; steam.
McArthur Ry. 181.	Vinton J. H. Picher (local). Picher, limestone. Open pit, hand.
McChalmers Ry. 42.	Belmont Joseph McChalmers & Son, Belleaire, Ohio, 3322 Garvey st., Joseph McChalmers, prest. and mgr.; Wm. G. McChalmers, secy. and treas. Cap. stk. \$100,000. McChalmers, sandstone. Open pit, 20,000 tons; steam. Henry Hall, supt.
Marble Cliff Ry. 584.	Franklin T. J. Price & Co., Columbus, Ohio, 72 N. Seloto st. Marble Cliff, limestone. Open pit, 30,000 tons; steam, limekiln, capacity, 5,000 tons. J. E. Price, supt.
Marblehead Ry. 384.	Ottawa King & Johnson, Sandusky, Ohio, Water st., Cap. \$75,000. Limestone. Open pit, 100,000 tons; hand; limekiln, capacity 150,000 lbs. John Burns, supt.
"	" Sloss Marblehead Lime Co., S. Sloss, prest. and treas.; F. Vandervell, mgr. Sloss Marblehead, limestone. Open pit.
Massillon Ry. 171, 583, 809.	Stark Vogt Stone Co., Wm. H. Vogt, prest.; Wm. McMillan, secy. and treas.; F. T. Vogt, mgr. and supt. Cap. stk. \$8,000. Sandstone. Open pit, 15,000 tons; steam, mill.
"	" Warthorst & Co., Sandstone, sand.
Mt. Vernon Furn. Lawrence (P. O. Campbell) Ry. 156.	Lawrence Campbell Iron Co., Ironton, Ohio., J. H. Monton, prest.; H. H. Campbell, secy. and treas.; J. W. Campbell, mgr. Cap. stk. \$190,000. Mt. Vernon Furnace, limestone. Open pit, 42,000 tons; hand.
Newark Ry. 42, 584.	Licking George Havens. Newark, freestone. Open pit, 2,000 tons; hand.
New Lisbon Ry. 503, 586.	Columbiana John H. O'Mara. Cap. \$5,000. Excelsior, sandstone. Open pit, 4,000 tons; hand.
Newport (P. O. name Wilson) Ry. 165.	Adams Highland Stone Co., Norwood, Ohio., F. J. McFarlan, prest. and secy.; John W. Talball, secy., mgr. and supt. Cap. stk. \$5,000. Limestone. Open pit, 19,500 tons; mill.
"	" E. & F. Tuetting, Cincinnati, Ohio, 50 Webster st., Cap. stk. \$10,000. Shinn, limestone. Open pit, 2,000 tons; hand. F. Tuetting Jr., supt.
North Amherst Ry. 385.	Lorain Cleveland Stone Co., Cleveland, Ohio, Wilshire Bldg., J. M. Worthington, prest.; George H. Worthington, secy. and treas. Cap. stk. \$2,250,000. North Amherst, sandstone. Open pit, 45,000 tons; steam; mill. James Nichol, gen. supt.
Olmsted Falls Ry. 383.	Cuyahoga Cleveland Stone Co., Cleveland, Ohio, Wilshire Bldg., J. M. Worthington, prest.; George H. Worthington, secy. and treas. Cap. stk. \$2,250,000. Olmsted Falls, sandstone. Open pit, 42,000 tons; steam; mill. James Nichol, gen. supt.
Orway Ry. 165.	Scioto W. B. Smith & Sons, Freeman, sandstone. Open pit, 65,000 tons; steam, horse, hand. F. C. Smith, O. F. Smith and James Barker, supts.
Owens Ry. 184.	Marion D. Owens & Son, Owens, limestone, sandstone, 32,850 tons; steam, limekiln, capacity 2,400 tons. Daniel Owens, supt.
Peninsula Ry. 778.	Summit Cleveland Stone Co., Cleveland, Ohio, Wilshire Bldg., J. M. Worthington, prest.; George H. Worthington, secy. and treas. Cap. stk. \$2,250,000. Peninsula, sandstone. Open pit, 42,000 tons; steam; mill. James Nichol, gen. supt.

## STONE, MARBLE, GRANITE AND ONYX—(CONTINUED)

LOCATION OF MINE OR QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE OR QUARRY, KIND OF STONE, KIND OF MINE OR QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STONE OR MARBLE MILLS, LIMEKILNS AND CAPACITY, ETC., AND NAME OF MINE SUPERINTENDENT.
Peninsula ..... Summit (Continued.)		Olio Stone Co., Cleveland, Ohio, 204 Superior st. J. M. Hughes, pres.; L. P. Haldeman, v.-pres. and secy.; C. C. Caskey, treas.; D. D. Haldeman, mgr. Cap. stk. \$200,000. Sandstone. Open pit, 14,500 tons; steam; mill.
Plymouth ..... Richmond Ry. 42, 582.		Plymouth Stone Co. D. L. Critten, pres.; Jacob Wallace, secy. and treas.; C. H. Whittier, mgr. and supt. Cap. stk. \$6,000. Sandstone. Open pit; steam; horse.
Point Pleasant ..... Clermont Ry. 533.		Galbreath & Bushman. Cap. \$3,000. Limestone. Open pit, 6,000 tons; horse, hand.
" .....		Point Pleasant Stone Quarry. Limestone. Open pit, 750 tons; hand. George F. Knabb, supt.
Ridgeville ..... Lorain (P. O. Bement) Ry. Shawville 383.		Dallas Beebe. Cap. \$3,000. Beebe, sandstone. Open pit, 75,000 tons; horse, hand.
Rockbridge ..... Hocking Ry. 181.		Detroit & Hocking Valley Red & Brown Stone Co., Detroit, Mich., 55 Champlain st. Joseph S. Visger, pres.; Richard J. Sinclair, secy.; G. Chlra, treas.; Charles C. Canny, mgr. Cap. stk. \$100,000. Hocking Valley, sandstone. Open pit, 15,000 tons; steam. H. A. Flowers, supt.
St. James ..... Morrow Ry. 170.		Buckeye Stone Co. J. J. McClarren, pres.; A. W. Monroe, secy. and treas.; J. H. McClarren, mgr and supt. Cap. stk. \$20,000. Buckeye, sandstone. Open pit, 15,000 tons; steam.
Silverton ..... Hamilton Ry. 158.		J. K. Galloway. Limestone. Open pit.
Springfield ..... Clarke Ry. 170, 503, 535, 584.		Wm. K. Duke, 97 W. Mulberry st. Mill Creek, limestone. Open pit; hand; mill.
" .....		Mills Bros., 107 S. Limestone st. Cap. stk. \$10,000. Limestone. Open pt. 25,000 tons; steam and hand; mill, kiln, 8,500 tons. Henry Hoss, supt.
Stony Ridge ..... Wood Ry. 753.		Luckey Stone Co., Elnore, Ohio. J. B. Luckey, proprietor. Luckey, limestone. Open pit, 40,000 tons; steam; mill.
Sugar Grove ..... Fairfield Ry. 181.		R. L. Sharp Stone Co. Sandstone. Open pit; hand, horse.
" .....		Wm. Sharp. Buckeye. Open pit, 2,000 tons; hand.
Sulphur Grove, Montgomery Ry. Dayton 156, 170, 207, 503, 584.		D. P. Oram. Limestone. Open pit, 1,000 tons; hand.
Sunbury ..... Delaware Ry. 163.		Sunbury Stone Co. William Bunyan, pres.; Edward T. Bunyan, secy. and mgr. Cap. stk. \$25,000. Sunbury. Open pit, 4,800 tons; steam; mill. John Hunter, supt.
Thompson ..... Geauga Ry. Madison 383, 502.		Chrys Sidley. Cap. \$2,000. Sandstone. 20,000 tons; horse and hand; mill.
Tiffin ..... Seneca Ry. 42, 170, 530.		J. Poling. Cap. \$3,000. Limestone. Open; hand.
Vincent ..... Washington Ry. 753.		Hayes Bros. Cap. \$15,000. Sandstone. Open pit, 1,000 tons; steam; mill.
Wakeman ..... Huron Ry. 383.		Cleveland Stone Co., Cleveland, Ohio, Wilshire Bldg. J. M. Worthington, pres.; George H. Worthington, secy. and treas. Cap. stk. \$2,250,000. Wakeman, sandstone. Open pit, 42,000 tons; steam; mill. Jas. Nicholl, gen. supt.
Waverly ..... Pike Ry. 523, 533.		Waverly Stone Co. W. S. Jones, pres.; J. W. Logan, secy. and treas.; R. E. Sharpe, mgr. and supt. Cap. stk. \$5,000. Sandstone. Open pit, 24,000 tons; steam, horse, hand; mill. R. E. Sharpe, supt.
West View ..... Cuyahoga Ry. 170.		Cleveland Stone Co., Cleveland, Ohio, Wilshire Bldg. J. M. Worthington, pres.; George H. Worthington, secy. and treas. Cap. stk. \$2,250,000. West View, sandstone. Open pit, 42,000 tons; steam; mill. Jas. Nicholl, gen. supt.
Whitehouse ..... Lucas Ry. 784.		J. L. Pray & Son. Cap. stk. \$3,000. Sandstone. Open pit, 10,000 tons; hand; mill. J. E. Pray, supt.
Youngstown ..... Mahoning Ry. 382, 503, 533, 591.		Youngstown Stone Co. R. T. Walker, pres.; F. P. Hood, secy.; Wm. Cornelius, treas.; George W. Canfield, mgr. Cap. stk. \$5,000. Youngstown, sandstone. Open pit; steam; sand mill.
Zanesville ..... Muskingum Ry. 42, 164, 170.		E. M. Ayers, 108 Main st. Cap. \$10,000. Dillon Falls, sandstone. Open pit, 10,000 tons; steam. Harry Lucas, supt.
" .....		A. Emery. Cap. \$10,000. Putnam, sandstone. Slope, 7,000 tons; hand.
" .....		John W. King, 15 N. Fourth st. Kings, fire clay, sandstone. Open pit, 3,000 tons. George Smith, supt.
" .....		Phillip Mowrin (local), 98 Elm st. Cap. \$1,500. Mowrin, limestone. Open pit, 9,000 tons; hand. Limekiln, 6,000 tons capacity.

SEE ALSO SUPPLEMENTARY LIST

## OREGON

## COPPER

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, FURNACES, ETC., AND NAME OF MINE SUPERINTENDENT.
Gold Beach	Curry	N. Huntley. Black Diamond. Open pit, 40 tons; refractory; hand.
Ry. 552.		

## GOLD AND SILVER

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
Applegate Ry. Jacksonville 776 117 miles).	Jackson	John T. Layton. Cap. \$80,000. Farris Gulch, gold. Placer; hydraulic.
Ashland	Jackson Ry. 692.	Ashland Mining Co., Portland, Ore., 13 Stark st., P. Kelly, pres.; H. T. Coffin, secy. and treas. Cap. stk. \$200,000. Patton and A. N. King, gold and silver. Shaft and tunnel; free. Joseph A. Wilson, supt.
Auburn	Baker Ry. Baker City 776.	Jas. U. Wells. Gold. Shaft, horse.
Baker City	Baker Ry. 776.	Baisley-Elkhorn Mining Co., Portland, Ore., 140 First st., L. W. Nelson, pres., mgr. and supt., S. J. Barber, secy. Cap. stk. \$1,000,000. Elkhorn, gold and silver. Shafts, tunnels and levels, 20,000 tons; free and refractory; steam. Bryan and Huntington mills.
"	"	Baker City Gold & Silver Mining Co., Isidor Fuchs, pres.; A. B. Elmer, secy.; A. H. Terry, treas. Cap. stk. \$200,000. Monumental and Tight-Squeak, gold and silver. Shaft and tunnels; free (developing).
"	"	Elkhorn Gold Mining Co., Portland, Ore., 181 First st., L. W. Nelson, pres.; Geo. N. Wolfe, secy.; North-Western Loan & Trust Co., treas.; Lewis O. Nelson, mgr. and supt. Cap. stk. \$100,000. Gold Medal and Gold Eagle, gold and silver. Shafts, tunnels, drifts and slopes, 9,000 tons; free and refractory; steam; mill.
"	"	Elkhorn Mining Co., Portland, Ore., J. H. Robbins, pres., mgr. and supt.; W. L. Harmon, secy.; I. G. Davidson, treas. Cap. stk. \$50,000. Elkhorn, gold and silver. Tunnel; free and refractory; water; mill.
(12 miles).	"	Eureka & Excelsior Consolidated Mining Co., St. Louis, Mo., 703 Orle. Bldg., R. C. Kemis, pres.; C. H. Smith, secy.; C. M. Donaldson, mgr. Cap. stk. \$80,000,000. Eureka and Excelsior, gold and silver. Tunnels; refractory; steam, 20 stamps.
(37 miles).	"	Geiser Estate. Albert Geiser, mgr. Bonanza, gold. Tunnel, 7,500 tons; free; steam; 10 stamps.
"	"	Hodgins & Rohner. G. R. Hodgins, pres. and mgr.; John Rohner, secy.; P. R. Beship, treas. and supt. Cap. \$80,000. Cow Boy, gold and silver. Tunnel; free (developing).
"	"	Jones & Carpenter. Cap. \$20,000. Never Sweat, gold. Placer, deep; hydraulic and water. Moses Carpenter, supt.
"	"	Robinson Gold Mining Co., Geo. W. Robinson, pres. and secy.; D. W. C. Nelson, mgr. and supt. Cap. stk. \$1,000,000. North Star, gold. Tunnel, 1,500 tons; refractory.
"	"	Robinson Mining Co., S. Ottenholmer, pres.; E. F. Waring, secy.; D. W. C. Nelson, treas., mgr. and supt. Cap. stk. \$1,000,000. Robinson, gold. Drift, refractory (developing).
(16 miles).	"	Snowstorm Consolidated Gold Mining Co., Bedford, Indiana, Thomas V. Thornton, pres.; Edmund B. Thornton, secy. and treas.; J. E. Mencham, mgr. and supt. Cap. stk. \$500,000. Snowstorm, Golden Chariot, Thornton, Windsor, Lily White, St. Albans and Eureka, gold. Slope and shaft, 9,000 tons; horse, water; 10 stamps.
"	"	Washington Gulch Mining Co., Portland, Ore., 354 E. Oak st., S. M. Keenan, pres.; A. L. Keenan, secy. and treas.; Wm. Deemer, mgr. and supt. Cap. stk. \$125,000. Washington Gulch, gold. Placer, hydraulic.
Bolt Ry. Woodville 692.	Jackson	Alexander Orme. Brother, gold. Placer, water.
Bridgeport	Baker Ry. Baker City 776 (20 m.).	Burnt River Mining Co., Archie J. Murray, pres.; William Cox, secy.; J. H. Murray, treas.; F. Caym, mgr. and supt. Cap. \$10,000. Chicken Bar, gold. Placer; hydraulic.
"	"	Henry Heisy. Blue Bar, gold. Tunnel, placer.
Cable Cove	Baker (P. O. Baker City) Ry. McEwen, 776 (6 m.).	Eagle Mining Co., L. V. Colbath, pres.; W. S. Crismon, secy. and treas.; John C. Young, mgr. Cap. \$1,000,000. Eagle Group, gold and silver. Shafts and tunnels, 10 tons; free and refractory.
Caleh Ry. The Dalles, 776.	Grant	Owens, Erlison & Taswell. Spanish Gulch, gold. Placer; hydraulic.
Canyon City	Grant Ry. Baker City 776 (5 m.).	Hugh Cannon. Gold. Placer; water, hydraulic.
"	"	Clark & Rulison. Last Chance, gold. Placer, hydraulic.
"	"	William Hahn. Quartz Gulch, gold. Placer; hydraulic.
"	"	Humboldt Mining Association, H. W. Sloan, mgr. Cap. \$4,250,000. Humboldt, gold. Placer; hydraulic.
"	"	J. A. Whitman. Cap. \$1,000. Whitmans, gold. Placer; hydraulic, water.
Canyonville	Douglas Ry. Riddles 692.	Ash & McWilliams. Cap. \$15,000. McWilliams and Ash, gold. Placer; hydraulic.

## GOLD AND SILVER—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.			NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN	AND	COUNTY.	
Canyonville	Douglas		D. J. Bollenbough. Picknue, gold. Placer; hydraulic, water.
"	"	(Continued.)	
"	"	"	Last Chance Mining Co. Last Chance, gold, silver and copper. Tunnel; free; water. E. L. Goodridge, supt.
"	"	"	D. A. Levens. Douglas, gold. Shaft and tunnel; free; water.
"	"	"	James Yokum. Cap. \$500. Gold. Placer; hydraulic (developing).
Connor Creek By Huntington 776 (20 miles).	Baker		Connor Creek Mining & Milling Co., Portland, Ore., Abington Bldg. S. G. Reed, pres't; Martin Wynch, secy. and treas.; J. Myrick, mgr. and supt. Cap. \$1,000,000. Connor Creek, gold. Tunnel, 16,000 tons; free; water; 35 stamps.
"	"	"	Dinning & Thomas. Cap. \$2,000. Albatross, gold. Open pit, placer; water.
Cornucopia By Union 776 (40 m. l.).	Union		Companion Mining Co. Gold and silver. Shaft and tunnel; free and refractory; steam; 5 stamps. E. P. Torrey, supt.
"	"	"	Last Chance Mining Co. Last Chance, gold. Tunnels; free and refractory (developing).
"	"	By Baker City 776 (60 m. l.).	New Discovery Mining Co. New Discovery, gold and silver. Tunnels; free and refractory (developing). R. Kelly, supt.
"	"	"	Norway Mining Co. Cap. \$1,000. Norway, gold. Tunnel, 3,000 tons; free and refractory; water; Huntington mill. Geo. Lindgreen, supt.
"	"	"	Nyanza Mining Co. Nyanza, silver. Shaft; free and refractory (developing). Robert Kelly, supt.
"	"	"	Oregon Gold Mining Co., Louisville, Ky., 514 W. Main st. Geo. H. Dietz, pres't; H. W. Bohmer, secy.; A. L. Schmidt, treas.; O. F. Steen, mgr. Cap. \$300,000. Red Jacket and Whitman, gold and silver. Tunnel, 10,000 tons; free and refractory; steam and water; 20 stamps. J. H. Wilson, supt.
"	"	"	Queen of the West Mining Co., gold. Shafts and inclines; free; hand (developing). Robert Kelly, supt.
"	"	"	Stella Mining Co. Stella, gold and silver. Tunnel; free and refractory (developing). W. S. Wilson, supt.
"	"	"	Union Mining Co. Anstead, Tice & Burdett, proprs. Union, gold and silver. Tunnel; free and refractory (developing).
Eugene P. O. and Ry. Myrtle Creek 692.	Douglas		Myrtle Creek Hydraulic Gold Mining & Manufacturing Co., Eugene, Ore. L. W. Brown, pres't, mgr. and supt. J. F. Robinson, secy.; T. G. Hendricks, treas. Cap. \$200,000. Myrtle Creek, gold. Placer; hydraulic.
Glendale By 692.	Douglas		J. T. C. Nash. Nash, gold. Placer; hydraulic, water.
Granite By Baker City 776 (35 m. l.).	Grant		Baisley & Klopp. Cap. \$33,000. Baisley & Klopp, gold. Placer, deep; hydraulic, water. Isaac Klopp, supt.
"	"	"	Fairview Ophir Mining Co., Pendleton, Ore. Calvin cor. W. R. R. st. Peter Parmentier, pres't; R. R. Dixon, secy.; David Horn, treas.; Frank Duprat, mgr. and supt. Cap. \$150,000. Encouragement, gold, silver, copper and lead. Shaft; hand and horse; mill, 40 stamps.
"	"	"	Granite & Greenhorn Milling and Mining Co. A. G. Tabor, pres't; C. S. Miller, secy., mgr. and supt. Cap. \$1,250,000. Monumental and Morris Consolidated, silver. Shafts and tunnels; refractory; steam; 20 stamps.
"	"	"	Grant Silver Mining Co., Portland, Ore., cor. Front S. st. Geo. W. Weidner, pres't; Thomas Gray, secy. and treas.; J. C. Powers, mgr. and supt. Cap. \$100,000. Intrinsic and others, gold and silver. Shafts and tunnel; refractory; steam.
"	"	"	G. H. Gutridge & Co. G. H. Gutridge, pres't; Harry Mack, secy.; M. Thornburg, treas.; E. E. Thornburg, mgr. Cap. \$5,000. Camp Mason, gold. Placer; water. A. J. Dickinson, supt.
Grants Pass By 692.	Josephine		T. J. & J. T. Clark. Cap. \$120,000. Quartz Boulder, gold. Placer, hydraulic. T. J. Clark, supt.
"	"	"	Roque River Mining & Developing Co. J. T. Flynn, pres't; A. C. Taylor, secy. and supt.; Robert G. Smith, treas. Cap. \$100,000. Conductor and Gray Mule, gold. Tunnel and shafts, 1,000 tons; free and refractory; steam; 10 stamps.
Greenhorn (P. O. Austin) By Me- Ever 776 (50 miles).	Grant		C. G. Nelson, Austin, Ore. Greenhorn, gold. Placer; water.
Harney By 776.	Harney		Robert Drinkwater. Gold. Placer; water (developing).
Idol By Harney 776 (40 m. l.).	Harney		Brunner & Gilham, Main st. Cap. \$1,500. Big Boulder, gold and silver. Shaft; free; hand.
"	"	"	Heath & Roberts, Harney City, Ore. E. A. Heath, pres't; John E. Roberts, secy. and treas.; D. A. Crowfield, mgr. and supt. Cap. \$30,000. General Heath, gold. Placer; hand.
"	"	"	J. A., J. E. & J. H. Loggan. Cap. \$1,250. Gold. Placer (developing).
"	"	"	Ream, Black & Kitching, Portland, Ore., 159 Seventh st. C. R. Black, mgr. Charvont, gold and silver. Refractory. E. H. Ream, supt.
"	"	"	Samuel Roach. Cap. \$4,000. Gold. Open pit, placer.
Jacksonville By 692.	Jackson		Jacksonville Mining & Milling Co. Jeremiah Nunan, pres't; Silas J. Day, secy.; Thomas J. Kenney, treas.; H. Cronmiller, mgr. Cap. \$10,000. Jacksonville, gold. Tunnel; free and refractory; hand (developing). Henry Klippel, supt.
Joseph By Elgin 776.	Wallowa		Royal Purple Mining Co. T. J. Deam, pres't, mgr. and supt.; T. M. Deam, secy.; J. F. Cutler, treas. Cap. \$1,000,000. Royal Purple, silver and copper. Tunnel; free and refractory; water; concentrator, crusher and furnace, 5 stamps.
La Grande By 776.	Union		Chloride Mining & Milling Co., Portland, Ore., 33 Stark st. F. W. Paine, pres't; M. D. Wisdom, secy.; R. L. Durham, treas.; J. K. Ronig, mgr. Cap. \$500,000. Chloride, gold and silver. Tunnel, 350 tons; free; water. J. J. Taylor, supt.
Leland By 692.	Josephine		Alta Ditch Co., Grants Pass, Ore. L. C. Windom, pres't; J. W. Sherer, secy. and treas.; John A. Niday, mgr. and supt. Cap. \$3,000. Gold. Placer.

## GOLD AND SILVER (CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Leland ..... Josephine (Continued.)	L. N. Browning. Browning, gold. Placer.
Mathur ..... Malheur Ry. Baker City.	Samuel & Hiram Colt. Cap. \$10,000. Tip Top, Humboldt and Autocrat, gold. Shaft, tunnel and slope. 500 tons; free; steam; 2 stamps.
Prairie City ..... Grant Ry. Baker City 776 05 miles.	W. E. Gifford. Present Need, gold and silver. Shaft and tunnel, 100 tons; free and refractory; steam.
" ..... "	Geo. E. Robinson & Co. Colorado, gold. Tunnel, 3,500 tons; refractory; steam; 5 stamps. Geo. E. Robinson, supt.
Riddles ..... Douglas Ry. 692 (37) miles.	Canyonville Mining, Water & Manufacturing Co., Eugene, Ore. E. J. Smith, pres.; Hon. A. C. Wood- cock, secy. Cap. stk. \$500,000. Canyonville, gold. Placer, hydraulic developing.
" ..... "	S. S. Catching. Cap. \$500. Gold. Placer.
" ..... "	John Hudson. Cap. \$5,000. Gold. Open pit, water developing.
Rock Creek ..... Baker P. O. and Ry. Baker City 776.	Robinson Mining Co. Geo. W. Robinson, pres.; D. W. T. Nelson, secy. and treas.; F. C. Smith, mgr. and supt. Cap. stk. \$1,000,000. North Star, gold. Tunnel, 400 tons; free and refractory; steam and water; mill.
Rye Valley ..... Baker Ry. Weatherby 776 (15 miles).	Cartwright Bros. (lessees). Rye Valley, gold. Placer.
" ..... "	H. B. Frans. Silver Blue and Extension, gold and silver. Tunnels; free; hand and arrastre.
" ..... "	John Frisco. Bonanza, gold. Placer; hydraulic.
Sanger ..... Union Ry. Union 776 (30 m.).	C. T. Bradley Mining Co., Daggett, Cal. C. M. Sanger, pres.; A. T. Sanger, secy.; C. T. Bradley, treas. Cap. stk. \$100,000. Summit, gold and silver. Shaft, 10,000 tons; free; steam; 10 stamps. W. J. Townley, supt.
" ..... "	Sturdliff Bros., Baker City, Oregon. Bonanza, gold. Shaft; refractory, horse.
Sarahine Creek ..... Jackson P. O. Rock Point Ry. Gold Hill 692.	N. & C. Ritter. Lucky Hill, gold. Tunnel; free; horse and hand arrastre. N. Ritter, supt.
Spanish Gulch ..... Grant P. O. Gulch Ry. The Dalles 776.	Mule Gulch Mining Co. W. W. Towne, pres. and mgr.; R. V. Gibbons, secy.; W. B. Cowne, treas. Cap. stk. \$20,000. Mule Gulch, gold. Placer, hydraulic. E. Seville, supt.
Sparta ..... Union Ry. Baker City 776.	E. H. Boyer, Walla Walla, Wash. Boyer's, gold. Placer, hydraulic. Edward Whitney, supt.
" ..... "	Eastern Oregon Gold Mining Co., Detroit, Mich. Geo. W. Robinson, pres.; Geo. H. Lathrop, secy. and treas. Cap. stk. \$100,000. Little Arcde, gold. Shaft and tunnel, 200 tons; free; hand, F. C. Smith, supt.
" ..... "	Jay Guy Lewis. Silver Queen and Livingston, gold. Shafts, tunnels, 2,000 tons; free and refractory; horse.
" ..... "	Oro Bell Mining & Milling Co., Chicago, Ill., 25 Dearborn st. W. W. Watson, pres.; Chas. N. Hale, secy. and treas.; F. A. Hetherington, mgr. and supt. Cap. stk. \$1,000,000. Oro Bell, Belle of Kansas and others, gold. Shaft and tunnel, free; steam mill.
" ..... "	Snow-storm Consolidated Gold Mining Co., Bedford, Ind. T. B. Thornton, pres.; E. B. Thornton, secy. and treas.; J. E. Meacham, mgr. and supt. Cap. stk. \$300,000. Snow-storm, gold. Shaft and slope; free; water; 10 stamps.
Sterling ..... Jackson P. O. and Ry. Jackson- ville 692.	Sterling Mining Co., Portland, Ore. Vincent Cook, pres.; O. L. Cook, secy. and treas.; Henry E. An- keny, mgr. and supt. Cap. stk. \$100,000. Sterling, gold. Placer; water.
Sumpter ..... Baker Ry. Baker City 776.	Mary Agnes Consolidated Placer Mining Co. Cap. stk. \$8,000. Mary Agnes, gold. Placer; hydraulic. A. Downie, supt.
Susannah ..... Grant Ry. Heppner 776.	Sloan & Haskell. Gold. Placer, 1 giant, steam.
Waldo ..... Josephine Ry. Grant's Pass 692.	Geo. Simmons & Z. Cameron. Geo. Simmons, mgr. and supt. Simmons & Co., gold.
" ..... "	Wimer Bros. & Co., Oakland, Cal., 1003 Washington st. Waldo, gold. Deep, hydraulic.
Wolf Creek ..... Josephine Ry. 692 (4 miles).	William & Ruth Ruble. Cap. \$25,000. Ruble, gold. Open pit, deep; water. S. C. Ruble, supt. and hydraulic mine inspector.
Woodville ..... Jackson Ry. 692.	Alex. Wilson. Gold. Placer, water.

## IRON

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, BLAST FURNACES, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Oswego ..... Clackamas Ry. 692.	Oregon Iron & Steel Co., Portland, Ore., 106 Third st. Theo. B. Wilcox, pres.; J. Frank Watson, secy. and mgr.; Ladd & Tilton, treas. Cap. stk. \$1,500,000. Prosser and Duck Pond, brown hematite. Shaft and tunnel, 40,000 tons; steam. J. H. Pomerooy, supt.

## KAOLIN

LOCATION OF MINE, OR BANE, RAILWAYS, WATER ROUTES, AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE OR BANE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, ETC., AND NAME OF SUPERINTENDENT.
Huntington Baker Mine in Malheur Co., Ky. 776.		American Kaolin Co., Portland, Ore., 110 Second st., J. F. Edwards, pres.; Robert R. Tuttle, secy.; F. C. Brodie, treas.; James S. Weeks, mgt. Cap. \$1,000,000. Kaolin (developing).

## LEAD AND ZINC

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, SMELTERS, ETC., AND NAME OF MINE SUPERINTENDENT.
Pendleton Ky. 776.	Umatilla	Golden Hill Mining & Milling Co., 113 Court st., Jacob Frazer, pres.; W. P. Lathrop, secy.; B. F. Rein, treas.; James A. Howard, v.-pres. and mgt. Cap. \$750,000. Vulture, lead. Shaft and tunnel.

## MINERAL PAINT

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF PRODUCT, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, PAINT MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
Etta Ky. Gold Hill 792.	Jackson	H. Richardson. Mineral paint. Open pit.

## NICKEL

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, SMELTERS, ETC., AND NAME OF MINE SUPERINTENDENT.
Riddles Ky. 682 (4 miles).	Douglas	Edson Adams & Harvey S. Brown, San Francisco, Cal., Fourth and Townsend sts., Oregon (develop- ing). W. Q. Brown, supt.
"	"	International Nickel Mining Co., Chicago, Ill., Chamber of Commerce Bldg., cor. La Salle and Washing- ton sts., James B. Ashley, pres.; Will. H. Taylor, secy. and mgt. Cap. \$3,000,000. Rid- dles. Shaft, tunnel and open pit, 600 tons; steam. Will Q. Brown, supt.

## PRECIOUS STONES

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF PRODUCT, KIND OF MINE, KIND OF POWER USED, ETC., AND NAME OF MINE SUPERINTENDENT.
Hardman Ky. Heppner 776.	Morrow	William A. Fisher. Peters, opals.

## STONE, MARBLE, GRANITE AND ONYX

LOCATION OF MINE OR QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE OR QUARRY, KIND OF STONE, KIND OF MINE OR QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STONE OR MARBLE MILLS, LIMEKILNS AND CAPACITY, ETC., AND NAME OF MINE SUPERINTENDENT.
Forest Grove Washington Ky. 682.		Forest Grove Stone Co., J. G. Boos, pres.; E. H. Heitzhausen, secy.; A. Vosper, treas.; J. Hansen, mgt. Cap. \$1,000,000. Forest Grove, blue sandstone. Open pit; steam (developing).
Lime Station Baker (1 P. O.) Huntington Ky. 776.		Oregon Marble & Lime Co., Portland, Ore., T. F. Rourke, pres. and mgt.; Charles F. Beebe, secy.; C. E. S. Ward, treas. Cap. \$300,000. Limestone. Open pit, 18,000 tons; hand; kilns, 10,000 tons. W. L. Peaks, supt.
St. Helen Ky. 532.	Columbia	Burke's Quarry, Portland, Ore., 72 1/2 Morrison st. Burke's, basalt rock. 2,000 tons.

SEE ALSO SUPPLEMENTARY LIST

## PENNSYLVANIA

## COAL—ANTHRACITE

TOWN	AND	COUNTY.	LOCATION OF MINE. RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, COKE OVENS, AND NAME OF MINE SUPERINTENDENT.
Alaska	Northumberland	Philadelphia & Reading Coal & Iron Co., Philadelphia, Pa., 227 S. Fourth st. A. A. McLeod, pres. and gen. mgr.; Franklin P. Kaecher, secy.; W. A. Church, treas. 188,161 tons; steam; breaker and washer. John Veith, supt.		
	(P. O. Strong, Pa.) Ry. 578.			
Alden Station	Luzerne	Alden Coal Co., Richard Sharpe st., pres.; George H. Myers, secy.; Richard Sharpe Jr., treas. Cap. stk. \$200,000. Alden. Tunnel and shaft, 300,000 tons; steam; breaker. K. M. Smith, supt.		
Archbald	Laekawanna	Delaware & Hudson Canal Co., Scranton Pa., 230 Providence pl. R. M. Olyphant, pres.; F. M. Olyphant, secy.; C. A. Walker, treas.; H. G. Young, mgr. Cap. stk. \$80,000,000. White Oak. Slope and tunnels, 105,400 tons; steam and horse; breaker. Andrew Nicol, supt.		
		Riverside Coal Co., Scranton, Pa., Jas. J. Williams, pres.; Thos. E. Jones, secy. and treas.; John Reese, mgr. Cap. stk. \$200,000. Riverside. 125,000 tons; steam; breaker. Thos. J. Williams, supt.		
Ashland	Schuylkill	Philadelphia & Reading Coal & Iron Co., Philadelphia, Pa., 227 S. Fourth st. A. A. McLeod, pres. and mgr.; F. P. Kaecher, secy.; W. A. Church, treas. 148,500 tons; steam; breaker and washer. John Veith, supt.		
Ashley	Luzerne	Lehigh & Wilkes Barre Coal Co., New York City, Central Bldg. J. R. Maxwell, pres.; W. T. Zell, secy. and treas.; Elmer H. Lawall, supt. Jersey, No. 8. Slopes, 151,776 tons; steam; breaker. M. R. Merriam, supt.		
Andover	Carbon	C. M. Dodson & Co., Bethlehem, Pa. C. M. Dodson, pres.; A. S. Schropp, secy. and treas.; E. L. Bullock, mgr. Cap. \$200,000. Beaver Brook. Slope, 200,000 tons; steam; breaker and washer. D. J. Thomas, supt.		
		Lehigh & Wilkes Barre Coal Co., New York City, 143 Liberty st. J. R. Maxwell, pres.; W. T. Zell, secy. and treas.; E. H. Lawall, mgr. Honey Brook. Slopes, 500,000 tons; steam; breaker and washer. D. P. Roberts, supt.		
Avoca	Luzerne	Avoca Coal Co., Ltd. C. C. Bowman, pres.; E. L. Bowman, secy. and treas.; W. H. Hollister, mgr. Cap. stk. \$20,000. Avoca. Shafts, slope and tunnel, 100,000 tons; steam; breaker. Solomon Deedle, supt.		
		Florence Coal Co., Ltd., Scranton, Pa., 322 Laekawanna av. W. B. Whitney, pres.; E. P. Kingsbury, secy.; Chas. F. Matthews, treas.; Austin Moore, mgr. and supt. Cap. stk. \$48,000. Elmwood. Shaft, 146,250 tons; steam; breaker.		
		Langelille Coal Co., Scranton, Pa., Laekawanna av. R. G. Brooks, pres.; T. R. Brooks, secy.; J. A. Mears, treas. Langelille. Shaft and tunnel; steam; breaker.		
Beaver Meadows	Carbon	William T. Carter & Co., Philadelphia, Pa., 392 Walnut st. Cap. \$400,000. Coleraine. Slopes, 120,000 tons; steam; breaker.		
		Coxe Bros. & Co., Drifton, Pa. Cross Creek Collieries. Tunnel, 192,000 tons; steam; coal breakers and washers. E. B. Coxe, supt.		
		Evans Mining Co., H. J. Boardman, pres.; Chas. Haigh, secy.; John D. Evans, treas., mgr. and supt. Cap. stk. \$50,000. Evans. Slope, 50,000 tons; steam; breaker and washer.		
Bernice	Sullivan	State Line & Sullivan R. Co., Towanda, Pa. J. Raymond Claghead, pres.; O. A. Baldwin, secy. and treas.; L. D. Bight, mgr. and supt. Cap. stk. \$1,000,000. Bernice. Tunnel, 150,000 tons; steam; breaker and washer.		
Blackwood	Schuylkill	Lehigh Valley Coal Co., Philadelphia, Pa., 228 S. Third st. Elisha P. Wilbur, pres.; J. R. Fanshawe, secy.; Wm. C. Alderson, treas.; W. A. Lathrop, mgr. and supt. Cap. stk. \$650,000. Blackwood, 8,400 tons; steam; breaker.		
Branch Dale	Schuylkill	Philadelphia & Reading Coal & Iron Co., Philadelphia, Pa., 227 S. Fourth st. A. A. McLeod, pres. and mgr.; F. P. Kaecher, secy.; W. A. Church, treas. Otto, 113,300 tons; steam; breaker. R. C. Luther, supt.		
Brownsville	Schuylkill	Lehigh Valley Coal Co., Philadelphia, Pa., 228 S. Third st. Elisha P. Wilbur, pres.; J. R. Fanshawe, secy.; Wm. C. Alderson, treas.; W. A. Lathrop, mgr. and supt. Cap. stk. \$650,000. Tacker No. 3 Colliery, 91,200 tons; steam; breaker.		
	(P. O. Lost Creek) Ry. 578.			
Carbondale	Laekawanna	Delaware & Hudson Canal Co., Scranton, Pa., 230 Providence pl. R. M. Olyphant, pres.; F. M. Olyphant, secy.; C. A. Walker, treas.; H. G. Young, mgr. Cap. stk. 80,000,000. Clinton and Powderly Slopes, Coal Brook, Wilson Creek and Rackerd Brook tunnels, and Carbondale Nos. 1 and 3 shafts, 620,000 tons; steam and horse; breakers. Andrew Nicol, supt.		
		Northwest Coal Co., Scranton, Pa., C. D. Simpson, pres.; A. F. Law, secy.; T. H. Watkins, treas. Cap. stk. \$100,000. Northwest. Slope, 300,000 tons; steam; breaker. James L. Crawford, supt.		
		Stroud & Chamberlain, Belmont st. and Oak av. G. F. Chamberlain, mgr. and supt. Cap. stk. \$50,000. Ontario and Belmont. Slope and tunnels, 68,000 tons; steam; breaker.		
		Wm. P. Williams, 100 S. Church st. Cap. \$1,000. Tunnel, 40,000 tons; hand; breaker.		
Centralia	Columbia	Lehigh Valley Coal Co., Philadelphia, Pa., 228 S. Third st. Elisha P. Wilbur, pres.; J. R. Fanshawe, secy.; Wm. C. Alderson, treas.; W. A. Lathrop, mgr. and supt. Cap. stk. \$650,000. Continental.		
		Philadelphia & Reading Coal & Iron Co., Philadelphia, Pa., 227 S. Fourth st. A. A. McLeod, pres. and gen. mgr.; F. P. Kaecher, secy.; W. A. Church, treas. North Ashland, 156,000 tons; steam; breaker and washer. John Veith, supt.		
Coaldale	Schuylkill	Lehigh Coal & Navigation Co., Philadelphia, Pa., 234 S. Third st. Joseph S. Harris, pres.; S. Shepherd, secy. and treas.; W. D. Zehner, mgr. Cap. stk. \$14,328,650. Lehigh, Nos. 8, 9, 10, 11 and 12. 700,200 tons; steam and horse; breaker. R. C. Luther, supt.		
Derringer	Luzerne	Coxe Bros. & Co., Cross Creek. Shaft, 192,000 tons; steam; breakers and washers. E. B. Coxe, supt.		
	(P. O. Drifton) Ry. 543.			
Dickson City	Laekawanna	Elk Hill Coal & Iron Co., Scranton, Pa., 3125 N. Main av. Wm. H. Richmond, pres. and mgr.; E. K. Richmond, secy. Cap. stk. \$60,000. Richmond No. 3. Shaft, 95,000 tons; steam; breaker. Patrick Riley, supt.		
	Ry. 213, 565.			

## COAL—ANTHRACITE (CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, COKE OVENS, AND NAME OF MINE SUPERINTENDENT.
TOWN	COUNTY.	
Drifton	Luzerne	Coxe Bros. & Co., Cross Creek. Shaft, 192,000 tons; steam. E. B. Coxe, supt.
Ry. 118, 393.		
Dunmore	Lackawanna	Murray & Co., M. J. Murray, prest. and supt.; Thomas Brown, seey.; John Carney, treas.; A. J. Murray, mgr. Cap. stk. \$25,000. Murray's. Shaft, 25,000 tons; steam; breaker.
Ry. 252.		
Duryea	Luzerne	Babylon Coal Co., Seranton, Pa., T. H. Watkins, prest.; W. G. Parke, seey.; C. D. Simpson, treas. Cap. stk. \$200,000. Babylon. Shaft, 225,000 tons; steam; breaker. James L. Crawford, supt.
Ry. 209, 292, 393.		
"	"	Old Forge Coal Co., Ltd., New York City, 1 Broadway. John A. Meares, prest. and mgr.; J. Alton Davis, seey.; C. S. Crane, treas. Cap. stk. \$30,000. Columbia and Phoenix. Shafts and tunnel, 300,000 tons; steam; breaker.
"	"	
Eagle Hill	Schuylkill	Philadelphia & Reading Coal & Iron Co., Philadelphia, Pa., 227 S. Fourth st. A. A. McLeod, prest. and mgr.; F. P. Kaercher, seey.; W. A. Church, treas. Eagle Hill, 107,000 tons; steam; breaker. R. C. Lathier, supt.
Ry. and P. O. Pottsville		
393, 563, 570, 578.		
Eckley	Luzerne	Coxe Bros. & Co., Drifton, Pa. Cross Creek Collieries. Slope, 192,000 tons; steam; breakers and washers. E. B. Coxe, supt.
Ry. 118, 393.		
Edwardsville	Luzerne	The Kingston Coal Co., Kingston, Pa. Daniel Edwards, prest. and mgr.; Elliott R. Morgan, seey. and treas. Cap. stk. \$1,000,000. Kingston. Shafts, 500,000 tons; steam and compressed air; 2 breakers. G. Willym Edwards, supt.
Ry. and P. O. Kingston		
209.		
Excelsior, Northumberland		Excelsior Coal Co., Shamokin, Pa. A. Robertson, prest.; C. W. Kingsley, seey. and treas.; A. D. Robertson, mgr. and supt. Excelsior. Slopes and tunnels, 268,000 tons; steam and horse; breaker.
Ry. 578.		
Exeter	Luzerne	Lehigh Valley Coal Co., Philadelphia, Pa., 228 S. Third st. Elisha P. Wilbur, prest.; J. R. Fanshawe, seey.; Wm. C. Alderson, treas.; W. A. Lathrop, mgr. and supt. Cap. stk. \$650,000. Exeter. Shaft, 47,225 tons; steam; breaker.
Ry. Pittston 209, 213,		
393.		
"	"	Stevens Coal Co., Pittston, Pa. (West Side). Mito J. Wilson, prest.; C. W. Wesner, seey.; F. E. Stevens, treas.; A. B. Stevens, mgr. Cap. stk. \$200,000. Stevens. Slope; steam; breaker (developing).
"	"	
Fell	Lackawanna	John Murrin. Fall Brook. Tunnel, 1,900 tons; steam; breaker.
Ry. and P. O. Carbondale		
213, 502.		
Gilberton	Schuylkill	Draper Colliery, Pottsville, Pa. H. L. Williams, gen. mgr. and supt. Cap. \$500,000. Draper. Slopes and tunnels, 220,000 tons; steam; coal breaker and washer.
Ry. 563, 578.		
"	"	Philadelphia & Reading Coal & Iron Co., Philadelphia, Pa., 227 S. Fourth st. A. A. McLeod, prest. and mgr.; F. P. Kaercher, seey.; W. A. Church, treas. Gilberton, 253,000 tons; steam; breaker. John Veith, supt.
"	"	
"	"	Stoddard Coal Co., Chas. E. Breckons, prest.; Guy C. Irish, seey. and treas.; Wm. J. McArthur, mgr. and supt. Cap. stk. \$25,000. Stoddard. 75,000 tons; steam; breaker and washer.
"	"	
Girardville	Schuylkill	Philadelphia & Reading Coal & Iron Co., Philadelphia, Pa., 227 S. Fourth st. A. A. McLeod, prest. and mgr.; F. P. Kaercher, seey.; W. A. Church, treas. Preston Nos. 2 and 3, Girard and Hammond. 296,500 tons; steam; breakers. John Veith, supt.
Ry. 393, 578.		
Glen Carbon	Schuylkill	Philadelphia & Reading Coal & Iron Co., Philadelphia, Pa., 227 S. Fourth st. A. A. McLeod, prest. and mgr.; F. P. Kaercher, seey.; W. A. Church, treas. Richardson, 13,500 tons; steam; breaker. R. C. Lathier, supt.
Ry. 578.		
Gowen	Luzerne	Coxe Bros. & Co., Drifton, Pa. Cross Creek, 192,000 tons; steam; coal breakers and washers. E. B. Coxe, supt.
Ry. 563.		
Harwood	Luzerne	Pardee Sons & Co., Lattimer Mines, Pa. C. Pardee, mgr. Cap. \$500,000. Harwood. Slopes, 215,000 tons; steam; coal breaker and washer. A. W. Drake, supt.
Ry. 578.		
Highland	Luzerne	G. B. Markle & Co., Jeddo, Pa. Highland Nos. 1 and 2. Slopes, 200,000 tons; steam; coal breaker. John Markle, supt.
(P. O. Jeddo) Ry. 393.		
Hollywood	Luzerne	Calvin Pardee & Co., Lattimer Mines, Pa. C. Pardee, mgr. Cap. \$500,000. Hollywood. Slopes, 220,000 tons; steam; coal breaker and washer. A. W. Drake, supt.
(P. O. Lattimer Mines) Ry. 578.		
Humboldt	Luzerne	Linderman & Skeer, South Bethlehem, Pa. Cap. \$1,200,000. Humboldt Mine. Slope, 84,000 tons; steam and horse; breaker. Jas. E. Roderick, supt.
(P. O. Hazleton) Ry. 393.		
Jouett	Schuylkill	Philadelphia & Reading Coal & Iron Co., Philadelphia, Pa., 227 S. Fourth st. A. A. McLeod, prest. and mgr.; F. P. Kaercher, seey.; W. A. Church, treas. Good Spring, 54,000 tons; steam; breaker. R. C. Lathier, supt.
Ry. and P. O. Pottsville		
578, 393, 563, 570.		
Jeddo	Luzerne	G. B. Markle & Co., Jeddo Nos. 3 and 4. Shafts, 209,200 tons; steam; coal breaker. John Markle, supt.
Ry. 118, 393.		
Jermyn	Lackawanna	Delaware & Hudson Canal Co., Seranton, Pa., 230 Providence pl. R. M. Olyphant, prest.; F. M. Olyphant, seey.; C. A. Walker, treas.; H. G. Young, mgr. Cap. stk. \$90,000,000. Jermyn No. 1 shaft, 198,800 tons; steam and horse; breaker. Andrew Neel, supt.
Ry. 213, 505.		
"	"	Edgerton Coal Co., Ltd., Seranton, Pa. C. D. Simpson, prest.; T. H. Watkins, seey.; W. G. Parke, treas. Cap. stk. \$200,000. Edgerton. Tunnels, 250,000 tons; steam; coal breaker. James L. Crawford, supt.
"	"	
"	"	West-side Coal Co. S. D. Davis, prest. and mgr.; J. Alton Davis, seey. Cap. \$4,000. Sunshine. Tunnel, 10,000 tons; steam; breaker. John F. Nicholson, supt.
"	"	
Kingston	Luzerne	Lehigh Valley Coal Co., Philadelphia, Pa., 228 S. Third st. Elisha P. Wilbur, prest.; J. R. Fanshawe, seey.; Wm. C. Alderson, treas.; W. A. Lathrop, mgr. and supt. Cap. stk. \$550,000. Maltby. Shaft, 31,000 tons; steam; breaker.
Ry. 209.		
Lafin	Luzerne	Annora Coal Co., Wilkes Barre, Pa. Charles Parrish, prest. and mgr.; Wm. C. Allen, seey.; Theo. F. Ryan, treas. Cap. stk. \$500,000. Annora. Slopes and tunnels, 160,000 tons; steam; breaker. John N. Conyngham, supt.
Ry. 213.		
Lansford	Carbon	Lehigh Coal & Navigation Co., Philadelphia, Pa., 234 S. Third st. Jos. S. Harris, prest.; S. Shepherd, seey. and treas.; W. D. Zolner, mgr. and supt. Cap. stk. \$14,538,650. Collieries, Nos. 4, 5 and 6. 240,000 tons; steam and horse; breaker.
Ry. 118.		
Lattimer Mines	Luzerne	Pardee Bros. & Co., C. Pardee, mgr. Cap. \$500,000. Lattimer. Slopes, 215,000 tons; steam; breaker and washer. A. W. Drake, supt.
Ry. Milnesville 393.		



## GOLD AND SILVER—(CONTINUED)

LOCATION OF MINE. RAILWAYS, WATER ROUTES AND SHIPPING POINT.		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWNS	AND COUNTY.	
Piedmont	Grant (P. O. Carlisle) Ry. Duncan, Ariz., 19 1/4 miles.	Stiple Rock Mining Co., Silver City, N. Mex. Chas. Davenport, pres.; P. P. Barnes, secy.; J. E. Hussey, treas.; W. C. Davenport, mgr. and supt. Cap. stk. \$20,000. Jim Crow, gold and silver. Shafts and tunnels; refractory; steam, 5 stamps.
Pinos Altos	Grant Ry. Silver City 26 1/2 m.	Bell & Stephens, N. Bell, mgr. and supt. Pacific, Extension, Ohio and Kept Woman, gold. Shafts and tunnels, 2,500 tons; refractory; steam, 15 stamps.
"	"	Christian & Robinson Bros. Cap. \$1,500. Little Pacific, gold, silver and lead. Shaft, 300 tons; free and refractory.
"	"	Consolidated Nebraska Mining Co., Beatrice, Neb. D. A. Walden, pres.; E. C. Salisbury, secy.; A. Bradtt, treas. B. W. Davis, mgr. and supt. Cap. stk. \$3,000,000. Gold, silver and lead. Shaft, 1,000 tons; refractory; steam, 5 stamps.
"	"	Dinnick Bros. Cap. \$10,000. Silver Cell, silver. Shaft and tunnel; horse. C. A. Dinnick, supt.
"	"	Hersberger, Everis, Osborn & Spils. Eastern, Western, Eldorado and Oro Fino, gold, silver and lead. Shafts and tunnels, 1,000 tons; free and refractory; horse.
"	"	Houston & Thomas, El Dorado and Prospectus, gold. Shaft and open pit, 21 tons; refractory, hand.
"	"	Manhattan Gold Mining & Milling Co., St. Louis, Mo., Laclede Bldg. Hon. Nathan Frank, pres.; A. C. Einstein, v.-pres.; secy., mgr. and supt.; Julius Rothschild, treas. Cap. stk. \$450,000. Aztec, Asiatic and others, gold and silver. Shafts and tunnels, 11,000 tons; free; steam, 20 stamps.
"	"	Wm. Skilleon & L. A. Snyder, L. A. Snyder, mgr. and supt. Pacific No. 2, gold and silver. Shaft, horse; 5 stamps.
Pyramid	Grant Ry. 692 (9 miles).	Pyramid Silver Mining Co., Rochester, N. Y., Wilder Bldg. T. J. Reynolds, pres.; G. C. Buell, v.-pres.; J. W. Moore, secy. and treas. Cap. stk. \$1,000,000. Viola and others, silver. Shaft, 5,000 tons; refractory; steam; 20 stamps. J. W. Hamilton, supt.
Questa	Taos Ry. Antonito, Colo., 215.	Red River Mining Co. Henry J. Young, pres. and mgr.; Wm. W. Young, secy.; E. S. Redding, treas. Red River, gold and copper. Tunnel; steam and hand (developing).
Read River	Taos (P. O. Questa) Ry. An- tonito 215.	G. W. Payne. Georgia, gold, silver and copper. Shaft; hand.
San Antonio	Taos (P. O. Arroyo Seco) Ry. Tres Piedras 215.	Rio Hondo Mining Co., Louisville, Ky. Cap. stk. \$400,000. Keystone and others, gold. Pacer (develop- ing). Lorin W. Brown, supt.
Sandia City	Bernalillo P. O. and Ry. Albu- querque 26.	Sandia Mining & Smelting Co. John S. Tompson, pres.; Theodore Honegger, secy. and treas.; A. Schwarzenbach, mgr. Cap. stk. \$500,000. Sandia, gold, silver, copper and lead. Alex. Rodgers, supt.
San Marcial	Socorro Ry. 26.	John W. Crawford, J. W. Crawford, pres., secy. and treas.; James Carlin, mgr. Cap. stk. \$12,000. Jim Carlin, silver and lead. Shaft and tunnel, hand (developing).
"	"	Rosedale Mining Co. Great London and Rothschild, gold. Shafts; 3 stamps (developing).
San Pedro	Santa Fe Ry. Cerrillos 26 1/2 m.	Georgia Hill Mining Co. Alexander Rogers, pres.; James Chress, secy. and supt.; L. Skinner, treas.; Alex. Rogers, mgr. Cap. stk. \$700,000. Six mines, gold, 5,000 tons; horse.
"	"	Lincoln Lucky Mining Co. R. Y. Anderson, mgr. and supt. Lincoln and Lucky, gold, silver and lead Shaft and tunnel, 10,000 tons; steam.
"	"	Silver Belt Mining Co. Albuquerque, P. O. Box 133, T. L. Tremayne, pres.; Alex. Stevens, secy.; J. L. Andrews, treas.; A. Richards, mgr. Cap. stk. \$500,000. Silver Belt, Lucky No. 2 and Homestake, gold and lead. Shaft (developing).
Socorro	Socorro Ry. 26.	C. T. Brown, Magdalena Queen and Mountain Key, silver, lead and iron. Shaft and tunnel, 200 tons; free, hand.
"	"	R. E. Leeson. Saint Vicente, silver and lead. Shaft and drifts, 200 tons; refractory; horse. J. J. Leeson, supt.
"	"	Merritt Mining & Milling Co. R. B. Langdon, pres.; W. J. Halin, secy.; A. H. Linton, treas.; A. D. Coon, mgr. Cap. stk. \$150,000. Merritt, gold and silver. Tunnel, free; steam, 10 stamps (developing).
"	"	Geo. H. Thwaites. Box 98. Piedlite, silver. Shaft, tunnel and drift; free and refractory; horse.
Steins Pass	Grant Ry. 692.	Beek Mining Co. W. K. Meade, mgr. and supt. Cap. stk. \$50,000. Beek, gold and silver. Open pit, deep, 300 tons; refractory, steam.
"	"	P. B. Smith. Cap. \$20,000. Volcano, gold and silver. Shaft, 100 tons; free; horse and steam.
"	"	Chas. W. Thomas & Cozle. Cap. \$5,000. Pa. Ch. La. Kl., silver. Shafts, 2,000 tons; free; hand.
Taos	Taos Ry. Embudo 215.	Chas. H. Berry & Co. Rio Grande, gold. Pacer, free; water.
Tierra Blanca	Sierra Ry. Lake Valley 26.	Kenny Bros. Johnson & Sly. Log Cabin, gold and silver. Shafts and tunnels; free; hand (developing).
White Oaks	Lincoln Ry. Carthage 26 3/8 m.	Lady Godiva Mining Co., Lady Godiva, gold. Shaft, 350 tons; free; steam. B. H. Nye, supt.
"	"	North Homestake Mining Co., Ferris, Cal. James M. Sigafus, pres.; J. Everett Bird, secy.; treas. and mgr. Cap. stk. \$100,000. North Homestake, gold. Shaft, deep, 12,000 tons; free; steam, 40 stamps, Frank R. Lloyd, supt.
"	"	Old Abe Mining Co. John Y. Hewitt, pres.; Frank J. Sager, secy. and treas. Cap. stk. \$1,200,000. Old Abe, gold. Shaft, 14,400 tons; free; steam, 20 stamps.
"	"	White Oaks Mining Co., St. Louis, Mo., 56 Olive st. Kolla Wells, pres.; F. B. York, secy. and treas.; E. W. Parker, mgr. Cap. stk. \$200,000. Homestake, gold. Shafts and drifts, 5,000 tons; free; steam, 20 stamps. Joseph Grushaber, supt.

## IRON

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, BLAST FURNACES, ETC., AND NAME OF MINE SUPERINTENDENT.
Hanover, ..... Grant Ry. 26.		Southwestern Coal & Iron Co., Colorado Springs, Colo., Bank Bldg. C. L. Perkins, pres.; T. G. Condon, v.-pres. and mgr.; R. P. Perkins, secy. and treas. Cap. stk. \$1,000,000. Open pit, 30,000 tons; hand.
Santa Rita, ..... Grant Ry. 26.		Santa Rita Copper & Iron Co., J. P. Whitney, pres.; Wm. J. Downing, secy. and treas.; Franklin Mahon, mgr. and supt. Voltaire, Garfield, Booth and Nugent, hematite and magnetic. Shafts and open pits, 2,500 tons; steam, horse and hand.
Silver City, ..... Grant Ry. 26.		William H. Newcomb. Cap. \$50,000. Union, Hartburn, Iron Head, Mikado and Adonis, magnetic and hematite. 30,000 tons; horse and hand.
White Oaks, ..... Lincoln Ry. Carthage 26.		Zicarilla Iron Mining Co., East Las Vegas, N. M. Cap. stk. \$100,000. Zicarilla, hematite. Shaft.

## LEAD AND ZINC

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, SMELTERS, ETC., AND NAME OF MINE SUPERINTENDENT.
Cooks, ..... Grant Ry. Florida 26.		Peter Sprey. Minnesota, Wisconsin and others, lead. Tunnel; refractory.
Hanover, ..... Grant Ry. 26.		Mineral Paint Zinc Co., Chicago, Ill., 1206 Ashland Block. D. B. Jones, pres.; W. A. Jones, secy. and treas. Thunderbolt and Zinc Valley, zinc. Open pit; hand.
Kelly, ..... Socorro Ry. 26.		Graphic Mining Co. Graphic, lead. Shafts and tunnels, 12,000 tons; steam. W. H. Patterson, supt.
Las Cruces, ..... Dona Ana Ry. 26.		Lawrence Lapoint. Alice A. R. Neil, lead. Shaft.
Organ, ..... Dona Ana Ry. Las Cruces 26.		A. J. De Meules. Cap. \$5,000. Galena King, lead. Tunnel; hand.
" " " " " "		Gibbs & Edson, W. B. Gibbs, mgr. and supt. Cap. \$5,000. Comstock, lead. Shaft, 200 tons; refractory; horse.
Pinon Altos, ..... Grant Ry. Silver City 26.		J. H. Houston & W. B. Thomas. Alpha and Omega, lead. Shafts; tunnels and slopes, 1,200 tons.

## MICA

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF PRODUCT, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS KIND OF POWER USED, ETC., AND NAME OF MINE SUPERINTENDENT.
Tres Piedras, ..... Taos Ry. 213.		George B. Berry. California, Highland, Little Giant, mica. Shafts and tunnels; hand.

## STONE, MARBLE, GRANITE AND ONYX

LOCATION OF MINE OR QUARRY RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE OR QUARRY, KIND OF STONE, KIND OF MINE OR QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STONE OR MARBLE MILLS, LIMEKILNS AND CAPACITY, ETC., AND NAME OF MINE SUPERINTENDENT.
Hillsboro, ..... Sierra Ry. Lake Valley 26.		Owen McDonald & Arend. Statue. Marble (developing).
Silver City, ..... Grant Ry. 26.		G. Armeny & J. Wollsten, New York City, 90 Nassau st. G. Armeny, mgr. Ajax, stone. Slope; hand and horse. J. Wollsten, supt.
" " " " " "		Mexican Marble & Onyx Co., Chicago, Ill., 59 Dearborn st. W. J. Patchell, pres.; D. F. Morris, secy.; A. H. Droullot, treas.; T. E. Hinds, mgr. Cap. stk. \$250,000. Cadwell, marble and onyx. Open pit; hand (developing).

SEE ALSO SUPPLEMENTARY LIST

## NEW YORK

## ASBESTOS

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Edwards . . . . . St. Lawrence Ry. Gouverneur 658.	Asbestos Pulp Co., Rochester, N. Y., German Insurance Bldg. A. L. McTeer jr., mgt. Cap. stk. \$300,000. Asbestos, fibrous talc. 16,000 tons; water.

## CEMENT

LOCATION OF MINE OR QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE OR QUARRY, KIND OF PRODUCT, KIND OF MINE OR QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, CEMENT MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
De Witt . . . . . Onondaga Ry. 501.	John Sheedy & Son. Cap. \$20,000. Cement, limestone. Open pit, 7,000 tons; cement mill, 6,000 tons; lime- kiln, 5,000 tons.
Fayetteville . . . . . Onondaga Ry. 798.	Edgus & Gaydos. Cement and plaster rock. Open pit, 12,000 tons; steam; cement mill, 600 tons; plaster mill, 7,000 tons. W. F. Gaydos, supt.

## CORUNDUM

LOCATION OF MINE OR BANK, RAILWAYS, WATER ROUTES, AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE OR BANK, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, ETC., AND NAME OF SUPERINTENDENT.
TOWN AND COUNTY.	
Corundum . . . . . Westchester P. O. and Ry. Peekskill kill 215, 301.	New York Emery Co. A. G. Sinclair, pres. and mgt.; T. H. Dugan, secy. Cap. stk. \$100,000. Peekskill, emery. Open pit, 350 tons; hand; steam; mill. A. G. Sinclair, supt.

## GRAPHITE

LOCATION OF MINE OR BANK, RAILWAYS, WATER ROUTES, AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE OR BANK, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, ETC., AND NAME OF SUPERINTENDENT.
TOWN AND COUNTY.	
Graphite . . . . . Warren Ry. Ticonderoga 120, 213.	Joseph Dixon Crucible Co., Jersey City, N. J., cor. Wayne and Monmouth sts. E. F. C. Young, pres.; George E. Long, secy.; John A. Walker, v. pres.; treas. and mgt. Cap. stk. \$734,500. American graphite. Open pit, 800 tons; steam. George Hooper, supt.

## GYPSUM

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Camillus . . . . . Onondaga Ry. 501.	Kenna & Allen (local). Gypsum. Open pit, 100 tons; water; mill.
De Witt . . . . . Onondaga Ry. Orville 250.	W. W. Candell, Fayetteville, N. Y. Cap. \$5,000. Gypsum. Open pit, 10,000 tons; hand.
" . . . . . " . . . . . " . . . . . "	Robert Dunlap & Co. Cap. \$20,000. Jamesville, gypsum, cement. Open pit, 5,000 tons; water; cement mill, capacity 15,000 tons; gypsum mill, capacity 7,500 tons.
" . . . . . " . . . . . "	Wm. C. Hurd. Gypsum Bed, gypsum rock. F. M. Sovereance, mgt.
Lebox . . . . . Madison (P. O. Hobokenville) Ry. Wampsville 798, 250.	Irving Tuttle. Cap. \$5,000. Open pit, 500 tons; water.
Manlius . . . . . Onondaga Ry. 798.	James Behan. Cap. \$5,000. Gypsum, cement. Open pit, 30,000 tons; steam; cement mill, kiln, 12,000 tons.
Oakfield . . . . . Genesee Ry. 798.	Olmsted & Stopas. Cap. \$10,000. Gypsum, 2,000 tons; steam.
Sullivan . . . . . Madison Ry. Cottons 247.	R. D. Button. Plaster stone, 1,000 tons; mill.
Wheatland . . . . . Monroe (P. O. Garbutt) Ry. 85.	J. W. Garbutt. Garbutt, gypsum. Shaft, 8,000 tons; water; mill.

## IRON

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, BLAST FURNACES, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWNS AND COUNTY.	
Amenia ..... Dutchess Ry. 501.	Amenia Mining Co., New York City, 58 Williams st. F. Kingsbury Curtis, pres.; A. M. Card, secy.; J. J. Morehouse, treas. Cap. stk. \$150,000. Amenia, brown hematite. Open pit, 20,000 tons; steam.
Antwerp ..... Jefferson Ry. 688.	Jefferson Iron Co. E. B. Bulkeley, pres. and mgr.; F. S. Salisbury, secy.; C. E. Bulkeley, treas. Cap. stk. \$2,500,000. Old Sterling, hematite. Shaft and slope, 75,000 tons.
Beckwith ..... Dutchess Ry. 493.	A. E. Tower & Bro., Poughkeepsie, N. Y. Hematite. 13,000 tons; steam. J. P. Cramp, supt.
Black Brook ..... Clinton Ry. Au Sable 213.	Peru Steel Ore Co. Ltd., Clintonville, N. Y. Geo. H. Cleaves, pres.; Charles M. Hopkins, secy. and treas. Cap. stk. \$31,000. Palmer and Winter, iron ore. Slope; steam; bloomary forge.
" ..... "	J. & J. Rogers Iron Co., Au Sable Forks, N. Y. H. W. Stofson, pres.; James Rogers, secy. and cap. stk. \$200,000. Palmer, magnetic. Slope; steam. Wm. Hopkins, supt.
Crown Point ..... Essex Ry. 196, 213.	Crown Point Iron Co., Chester Griswold, pres.; H. M. Olmsted, secy. and treas.; A. L. Inman, mgr. Cap. stk. \$1,500,000. Crown Point, bessemer. Shafts and slopes, 55,000 tons; steam. Thos. Montague, supt.
Dannemora ..... Clinton Ry. 124.	Chateaugay Ore & Iron Co., Plattsburg, N. Y., 50 Clinton st. Smith M. Weed, pres.; A. L. Inman, secy. and mgr.; H. M. Olmsted, treas. Cap. stk. \$1,500,000. Chateaugay, bessemer, magnetic. Shafts, 300,000 tons; steam; furnace. A. McDonald, supt.
East Fishkill ..... Dutchess Ry. Sylvan Lake 493.	A. E. Tower & Bro., Poughkeepsie, N. Y. Brown hematite. 12,000 tons; steam. J. P. Cramp, supt.
Fort Montgomery, Orange Ry. 738.	Forest of Dean Iron Ore Co., Poughkeepsie, N. Y., foot of Hoffman st. Jos. T. Tower, pres.; H. N. Bronsina, secy.; A. E. Tower, treas. and mgr. Cap. stk. \$490,000. Forest of Dean, magnetic. Slope, 20,000 tons; water. Pearee Clonan, supt.
Gouverneur, St. Lawrence Ry. 638.	Gouverneur Iron Ore Co., S. H. Beach, pres.; John Webber, secy. and mgr.; Wm. R. Dodge, treas. Cap. stk. \$200,000. Kearny, hematite. Shaft, 30,000 tons; steam. John Salmon, supt.
Hartsville ..... Lewis Ry. 160.	Specular Iron Mining Co., Syracuse, N. Y., White-Merrill Bldg. Clarence Tucker, pres. and mgr.; E. N. Westcott, secy.; Charles A. Tucker, treas. Cap. stk. \$240,000. Specular, bessemer. Shaft; steam.
Moriah ..... Essex Ry. Port Henry 213.	Essex Iron Co., New York, N. Y., 45 Cedar st. G. Lindenthal, pres.; O. H. Cutler, secy.; James M. Lewis, treas.; Wm. H. Searles, mgr. Cap. stk. \$25,000. Essex, bessemer, magnetic. Slope, 15,000 tons; steam. Wm. H. Searles, supt.
" ..... "	Port Henry Iron Ore Co., Poughkeepsie, N. Y., foot of Hoffman st. I. Townsend Burden, pres.; Frank S. Witherbee, secy.; A. Edward Tower, treas. and mgr. Cap. stk. \$200,000. "21," Fisher, magnetic. Shafts, slopes and open pit, 160,434 tons; steam. George G. Roe, supt.
" ..... "	Witherbee, Sherman & Co., Port Henry, N. Y. New Red, "O. B.," 21 inches, bessemer, magnetic. Shaft, tunnel, slope, open pit, 400,000 tons; steam, electricity; 3 furnaces. W. H. Tott, supt.
North Salem Westchester Ry. Purdy's Sta. 501.	Clover Hill Mine & Concentrating Works, Pittsburg, Pa., Bank of Commerce Bldg. Clover Hill, magnetic. Open, 60,000 tons; steam. Wm. D. Hoffman, supt.
Roselle ..... St. Lawrence Ry. Hammond 628.	Roselle Iron Works, New York, N. Y., Room 84 Duprex Bldg. Anthony J. Thomas, pres.; J. P. Curtis, secy. and treas.; Gregory P. Harte, mgr. Cap. stk. \$300,000. Keene, Caledonia, Kearny, red hematite. Shaft, slope, 40,000 tons; steam.
Warwick ..... Orange Ry. 394.	Sterling Iron & Railway Co., New York, N. Y., 43 Wall st. M. Cox, pres.; Peter C. Barlow, secy.; D. Crawford Clark, treas.; Chas. R. Westbrook, gen. mgr. and supt. Cap. stk. \$1,250,000. Sterling, Scott, iron ore. Shaft, slope, 65,000 tons; steam.

## MICA

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF PRODUCT, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWNS AND COUNTY.	
Wilmurt ..... Herkimer Ry. Prospect 638.	Isaac J. Griffith, Utica, N. Y. 57 Arcade. Tunnel; hand (developing).

## MINERAL PAINT

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF PRODUCT, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, PAINT MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWNS AND COUNTY.	
Cambridge ..... Bersebalet P. O. and Ry. Eagle Bridge 213, 261.	William Connors, Troy, N. Y., 677 River st. American Seal, mineral paint. Open pit, 2,000 tons; water.
Oneonta ..... Otsego Ry. 218.	Oneonta Mineral Paint Works, New York City, Tribune Bldg. Oneonta, Indian ocher. Steam; mill.

## SALT

LOCATION OF MINE OR WELL, RAILWAYS, WATER ROUTES AND SHIPPING POINT.			NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF PRODUCT, KIND OF MINE OR WELL, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN	AND	COUNTY.	
Helle Isle	.....	Onondaga	James M. Gere. Wells, 15,000 brls.; steam, horse, hand.
Ry. 501, 737, 738.			
Castle	.....	Wyoming	Mrs. R. F. Edmundson, Silver Springs, N. Y. J. M. Duncan, receiver. Wells, 30,000 brls.; steam.
Ry. 503.			
Cuylerville	....	Livingston	Phoenix Dairy Salt Co., Mount Morris, N. Y. Benjamin Roberts, pres.; W. W. Morehouse, secy.; E. J. Almer, treas., mgr. and supt. Cap. stk. \$30,000. Phoenix, common, fine, dairy. Wells, 50,000 brls.; steam.
Ry. 805.			
Gainsville	.....	Wyoming	Duncan Salt Co., Silver Springs, N. Y. J. M. Duncan, pres. and mgr.; S. G. Whiton, secy. and treas. Cap. stk. \$150,000. Dairy, common, fine. 6 wells, 300,000 brls.; steam.
Ry. 85.			
Lakeville	.....	Livingston	National Salt & Chemical Co., F. B. Thurler, pres.; L. P. West, secy.; Charles F. Burger, treas. and mgr. Cap. stk. \$500,000. Conesus, common, fine. 3 wells, 300,000 brls.; steam. L. P. West, supt.
Ry. 503.			
Leicester	.....	Livingston	Lackawanna Salt Co., J. S. Tower, mgr. Cap. stk. \$30,000. Lackawanna, rock, common, fine. 2 wells, 65,000 brls.; steam. A. W. Wells, supt.
(P. O. Moscow) Ry. 209.			
Le Roy	.....	Genesee	Le Roy Salt Co., C. F. Pentie, pres.; C. V. Keeney, secy.; A. E. Miller, treas., mgr. and supt. Cap. stk. \$100,000. Dairy, common, fine. 3 wells, 180,000 brls.; steam.
Ry. 85, 501, 503.			
Liverpool	.....	Onondaga	J. & P. Smith. Cap. \$75,000. Fine. Wells, 50,000 brls.; steam.
Ry. 638.			
Mount Morris	.....	Livingston	Royal Salt Co., John A. Young, pres.; John M. Prophel, secy. and treas.; J. C. Winters, mgr. Cap. stk. \$100,000. Royal, salt, dairy, fine, coarse. Wells, 20,000 tons; steam.
Ry. 269, 503, 805.			
Onondaga	.....	Onondaga	R. Mara, Syracuse, N. Y., 28 Lynch Block. Salt, fine, coarse. Evaporation, 2,000 tons.
Ry. Syracuse, 209, 501, 638.			
Pearl Creek	.....	Wyoming	Pearl Salt Co., George C. Oris, pres.; J. C. Bixton, secy. and treas. Cap. stk. \$40,000. Pearl, dairy, common, fine. Wells, 140,000 brls.; steam.
Ry. 85.			
Perry	.....	Wyoming	Perry Salt Co., F. H. Wyckoff, pres.; W. S. Page, secy. and treas.; W. C. Patterson, mgr. Cap. stk. \$80,000. Perry, common, fine. Wells, 150,000 brls.; steam, water. T. H. Donnelly, supt.
Ry. 673.			
Salina	.....	Onondaga	Phillip Corkings, Syracuse, N. Y., Clinton Block. Thomas Gale, pres.; Lewis Hawley, secy.; Thomas Malloy, treas., Onondaga, coarse. Wells; steam. P. J. Brunelkamp, supt.
(P. O. Liverpool) Ry. 638.			
"	.....	"	Luchs Gleason, Liverpool, N. Y. Cap. \$100,000. Fine. Wells, 15,000 tons; steam.
"	.....	"	
Salt Vale	.....	Wyoming	Crystal Salt Co., Haverstraw, N. Y. Geo. H. Smith, pres.; C. T. Bartlett, secy. and mgr.; I. M. Hedges, treas. Cap. stk. \$500,000. Crystal, table, dairy. Wells, 350,000 brls.; steam.
Ry. 85.			
Syracuse	.....	Onondaga	H. H. Freeman, 204 Wolf st. Cap. \$50,000. Common, fine. Wells, 14,000 tons; steam. P. J. Brunelkamp, supt.
Ry. 209, 501, 638, 708.			
"	.....	"	M. R. Hayes, 2508 Ludl st. Cap. \$20,000. Common, fine. Wells, 35,000 brls.; steam.
"	.....	"	Western Course Salt Co., 9 Clinton Block, S. L. Comstock, pres. and mgr.; George F. Comstock Jr., secy.; George F. Comstock, treas. Cap. stk. \$125,000. Coarse. Wells, 40,000 brls.; steam and water.
"	.....	"	
Warsaw	.....	Wyoming	Atlantic Salt Co., New York, N. Y., 107 Hudson st. J. A. Cook, pres. and mgr.; B. C. Maey, secy. and treas. Cap. stk. \$70,000. Standard, dairy, table. Wells, 150,000 brls.; steam.
Ry. 85, 503.			
"	.....	"	Gouinlock & Humphrey. Cap. \$100,000. Dairy, fine, common. Wells, 130,000 brls.; steam.
"	.....	"	
"	.....	"	Miller Salt Co., E. A. Miller, pres.; F. E. Norton, secy.; R. D. Miller, treas. and mgr. Cap. stk. \$175,000. Miller, common, fine, dairy. 2 wells, 150,000 brls.; steam. William Sutcliffe, supt.
"	.....	"	
York	.....	Livingston	Livingston Salt Co., Ltd., Pilard, N. Y. Charles F. Wadsworth, pres.; Thomas O'Mera, secy., treas. and mgr. Cap. stk. \$50,000. Livingston, common, fine, rock. Wells, 120,000 brls.; steam.
Ry. 805.			
"	.....	"	York Salt Co., Nell Stewart, pres.; Alex. Reid, secy.; James Bouday, treas. and mgr. Cap. stk. \$50,000. Coarse. Well, 55,000 brls.

## SLATE

LOCATION OF QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT.			NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF QUARRY, KIND OF SLATE, KIND OF QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, MILLS, ETC., AND NAME OF QUARRY SUPERINTENDENT.
TOWN	AND	COUNTY.	
Granville	.....	Washington	Martin McHenry. Bates & Allen, red slate. Open pit, 1,200 tons; horse.
Ry. 213.			
"	.....	"	Mettowee Red Slate Co., Wm. H. Kirtland, pres.; Hugh Williams, secy., treas. and mgr. Mettowee, red slate. Open pit; horse, scotch.
"	.....	"	
"	.....	"	New Boston Red Slate Co., E. Richardson, pres.; O. H. Hughes, secy.; Evan W. Davison, treas.; A. S. Hughes, mgr. New Boston. Open pit, 21,500 tons; steam, horse.
"	.....	"	
Middle Granville	.....	Washington	Williams & Griffiths, Granville, N. Y. Cap. \$4,000. Red slate. Open pit, 100 tons; horse. Joseph W. Williams, supt.
Ry. 213.			
Salem	.....	Washington	Morey & Kays. Cap. \$30,000. Morey, red slate. Open pit; steam.
Ry. 213.			
"	.....	"	John M. Williams. Valley View. Open pit, 500 tons; horse, steam. John H. Owens, supt.

## SLATE (CONTINUED)

LOCATION OF QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF QUARRY, KIND OF SLATE, KIND OF QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, MILLS, ETC., AND NAME OF QUARRY SUPERINTENDENT.
TOWN AND COUNTY.	
Sand Lake . . . . . Reusselator Ry. Troy 315, 501.	Cornelius Snyder. Cap. \$15,000. Sand Lake. Open pit, 450 tons; water; paint mill.
Troy . . . . . Reusselator Ry. 315, 501.	F. Thomas, 92 Fourth st. Slate rock. Open pit, 1,000 tons; water; mill.
Whitehall . . . . . Washington Ry. 213.	Hatch Hill Red Slate Works. Red and olive slate. Paint mill.

## SOAPSTONE

LOCATION OF MINE OR BANK, RAILWAYS, WATER ROUTES, AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE OR BANK, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, ETC., AND NAME OF SUPERINTENDENT.
TOWN AND COUNTY.	
Edwards . . . . . St. Lawrence Ry. Gouverneur 638.	Adirondack Pulp Co. R. H. Thurman, prest.; W. V. Baker, secy.; John A. Manning, treas. Cap. stk. \$75,000. Adirondack, tale. Shaft, drift, slope, 10,000 tons; steam. Charles A. Millet, supt.
" . . . . . "	Agalite Fibre Co., New York City, P. O. Box 781. Freeman, fibrous tale. Shaft, 8,000 tons; steam. Henry Johnson, supt.
" . . . . . "	Fred H. Haile. Col. Palmer, tale. Shaft, 8,000 tons; water. Alfred Treglow, supt.
Fowler . . . . . St. Lawrence Ry. Gouverneur 638.	Gardner Pulp Co. Wm. Woodcock, tale. Shaft, 6,000 tons; steam.
" . . . . . "	Northern New York Manufacturing Co. Donald McNaughton, prest.; M. D. Packard, secy. and treas.; J. McNaughton, mgr. Cap. stk. \$200,000. Wight, tale. Shaft, 4,000 tons; horse; mill, capacity 4,000 tons. J. McNaughton, supt.
Gouverneur St. Lawrence Ry. 638.	Asbestos Pulp Co., Rochester, N. Y., 65 German Insurance Bldg. A. S. Bigelow, prest.; A. H. Green, secy. and treas.; A. L. McCrea Jr., mgr. Cap. stk. \$30,000. Palmer, fibrous tale. Shaft, 30,000 tons; water.
Halesboro, St. Lawrence Ry. Gouverneur 638.	Asbestos Pulp Co., Rochester, N. Y., German Insurance Bldg. Albert S. Bigelow, prest.; Arthur H. Green, secy. and treas.; A. L. McCrea Jr., mgr. Cap. stk. \$300,000. Palmer, Freeman, tale. Shaft, slope; water. A. L. McCrea Jr., supt.

## STONE, MARBLE, GRANITE AND ONYX

LOCATION OF MINE OR QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE OR QUARRY, KIND OF STONE, KIND OF MINE OR QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STONE OR MARBLE MILLS, LIMESTONES AND CAPACITY, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Albion . . . . . Orleans Ry. 250, 501.	Albion Stone Co. H. M. Claffin, prest.; W. B. Page, secy. Cap. stk. \$50,000. Albion, sandstone. Open pit; steam. Thos. Halifax, supt.
" . . . . . "	Goodrich & Clark Stone Co. D. L. Goodrich, mgr. Sandstone. Open pit, 20,000 tons; hand and steam.
" . . . . . "	Rochester Medina Stone Co., Rochester, N. Y., Ellwanger & Barry Bldg. Wm. F. Ross, prest. and mgr.; T. A. Snythe, treas. Cap. stk. \$15,000. Medina sandstone. Open pit; steam; hand.
Clarendon . . . . . Orleans Ry. Holly 501.	Michael Shek, Medina, N. Y., 27 Main st. Cap. \$50,000. Shek's, sandstone. Open pit, 12,000 tons; steam and hand; mill. James Burns, supt.
Ellenville . . . . . Ulster Ry. 505.	Ulster Granite Co., New York, N. Y., 25 Whitehall st. Charles Galwey, prest.; Peter Balen, v.-prest.; Thomas M. Bissette, secy.; Alfred W. Lewis, treas. Cap. stk. \$1,000,000. Granite. Steam; hand.
Fordham . . . . . New York (P. O. N. Y. City) Ry. 501.	Carpenter Bros., Port Chester, N. Y. Cap. \$100,000. Ballast, gneiss. Open pit, 75,000 tons; steam.
Genoa . . . . . Cayuga Ry. King's Ferry 393.	J. G. Barger. Cap. \$5,000. Barger's, bluestone. Open pit, 2,000 tons; steam.
Gouverneur St. Lawrence Ry. 638.	Empire State Marble Co. John R. Wood, prest. and treas.; Gilbert Mallison, secy.; John W. Tracy, mgr. and supt. Cap. stk. \$75,000. Empire Slate, marble. Open pit; steam; mill.
" . . . . . "	Gouverneur Marble Co. S. B. Van Duzee, prest.; G. P. Ormiston, secy.; Lewis Eckmann, treas.; D. J. Whitney, mgr. and supt. Cap. stk. \$75,000. Gouverneur, marble. Open pit, 6,000 tons; steam; mill.
" . . . . . "	St. Lawrence Marble Co. John Benham, prest. and treas.; H. D. Fuller, secy.; T. J. Whitney, mgr. and supt. Cap. stk. \$150,000. St. Lawrence, marble. 20,000 tons; steam; mill.
Granby . . . . . Oswego P. O. and Ry. Oswego Falls 200.	Granby Brown Stone Co., Oswego, N. Y. O. J. Jennings, secy. and mgr. Cap. stk. \$20,000. Granby, sandstone. 6,000 tons; steam.
Greenville . . . . . Columbia (P. O. Jonesburg) Ry. 70, 307, 501.	Fred. W. Jones, Jonesburg, N. Y. Hudson, limestone. 60,000 tons; hand and steam; mill. Wm. Young, supt.
Hindsburg . . . . . Orleans Ry. 250.	Chadwick Bros. Albion, N. Y. Cap. \$15,000. Sandstone. Open pit, 3,000 tons; steam and horse.
Hulberton . . . . . Orleans Ry. 501.	Edward Fancher, Murray, N. Y. Cap. \$10,000. Medina stone. Open pit, 6,000 tons; steam, electricity.
Minerva . . . . . Essex Ry. North Creek 213.	Adirondack Garnet Co. Everett J. Stevens, prest.; Minot Crehore, secy.; Harry Crehore, treas. and mgr. Cap. stk. \$50,000. Garnet. Open pit, 500 tons; hand. F. L. Allen, supt.

## STONE, MARBLE, GRANITE AND ONYX (CONTINUED)

LOCATION OF MINE OR QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT.			NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE OR QUARRY, KIND OF STONE, KIND OF MINE OR QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STONE OR MARBLE MILLS, LIMERILS AND CAPACITY, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN	AND	COUNTY.	
Mt. Pleasant (P. O. Pleasantville) Ry. 501.		Westchester	Snowflake Marble Co., New York City, 157 Broadway. Geo. S. Rice, pres.; H. Graenemeyer, secy.; A. L. Pritchard, treas. and mgr. Cap. stk. \$100,000. Snowflake, marble. Open pit, 10,000 tons; steam mill, 3 kilns. R. S. Denwood, supt.
New Hartford. Ry. 200, 505.	Oneida		E. F. Thompson local. Thompson, brown sand-stone. Open pit, 1,000 tons; horse, hand.
Oxford Ry. 200, 505.	Chenango		F. G. Clarke Blue Stone Co., Oxford, bluestone; steam mill. H. W. Clarke, supt.
Phillips, P. O. and Spring 594.	Putnam Ry. Cold		Lewis J. Batley. Breakneck, granite. Open pit; mill.
Plattsburg Ry. 213, 124.	Clinton		Burlington Manufacturing Co., Burlington, Vt., 25 Pine St. Torrey E. Wales, pres.; Michl H. Stone, secy.; Joel H. Gates, treas.; Chas. R. Hayward, mgr. Cap. stk. \$175,000. Lepanto and French gray marble. Open pit; steam mill. P. Lezotto, supt.
Potsdam, Ry. 638.	St. Lawrence		Potsdam Red Sandstone Co. Sandstone. Steam.
Ridgeway Ry. Medina 501.	Orleans		John Le Valley, Shelby Basin, N. Y. Cap. \$50,000. Le Valley's, sand-stone. Open pit, 14,000 tons; hand and horse; mill.
Rochester (P. O. Accord) Rosendale 788.	Ulster Ry.		Esopus Millstone Co., Kingston, N. Y. Wm. M. Hayes, pres. and treas.; A. Hayes, secy. and mgr. Esopus, millstone. Open pit; hand; mill.
"	"		T. C. Harnden, Kyserlike, N. Y. Cap. \$4,000. Esopus, millstone. Open pit, 500 tons; hand.
"	"		James S. Vanetten, Granite, N. Y. Esopus, millstone. Open pit; hand; mill.
Warsaw, Ry. 85, 303.	Wyoming		Warsaw Blue Stone Co., N. S. Beardsley, pres.; W. J. Emerson, secy. and mgr.; S. B. Whitlock, treas. Cap. stk. \$100,000. Warsaw Blue, bluestone. Slope, open pit, steam mill. A. B. Davis, supt.
Warwick Ry. 304.	Orange		Tutbill & Hankins. Poeluch Mountain, granite. Open pit; hand. Floyd S. Tutbill, supt.
Wawarsing Ry. 213.	Ulster		F. H. Lawrence. Esopus, millstone; hand; cement mill.

SEE ALSO SUPPLEMENTARY LIST

# NORTH CAROLINA

## BARYTES

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, BLAST FURNACES, ETC., AND NAME OF MINE SUPERINTENDENT.
Stackhouse Ry. 622.	Madison	J. T. Morehead, Leaksville, N. C. Open pit, 1,200 tons; hand.

## COAL—BITUMINOUS

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, COKE OVENS, AND NAME OF MINE SUPERINTENDENT.
Egypt Depot Ry. 244.	Chatham	Egypt Coal Co. Samuel A. Henzey, pres. and mgr.; Fletcher Coleman, secy. and treas. Cap. stk. \$330,000. Egypt. Shaft, 100,000 tons; steam.

## COPPER

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, FURNACES, ETC., AND NAME OF MINE SUPERINTENDENT.
Blue Wing Ry. Mayo 32.	Granville	Granville Copper Co., Washington, D. C., 1416 F st. H. S. Cummings, pres.; C. S. Conger, secy.; Chas. A. Williams, treas.; Geo. B. Chittenden, mgr. Cap. stk. \$900,000. Blue Wing, copper, hornblende, quartz. Shaft, 6,000 tons; steam; concentrator, 6,000 tons. J. C. Fenlon, supt.
Cullowhee Ry. Webster 622.	Jackson	Southern Mining & Manufacturing Co. Cullowhee, Wa-ze-Nutta and Savannah, copper, mica and kaolin. Shaft and tunnel.
Raker City (P. O. Blue Wing) Ry. Mayo 32.	Granville	Blue Wing Copper Co. William Whitman, pres.; J. R. Kaufman, secy.; A. Walter, treas.; William Raker, mgr. Cap. stk. \$900,000. Blue Wing, copper. Shaft and drift, 20,000 tons; free; steam.

## CORUNDUM

LOCATION OF MINE OR BASE, RAILWAYS, WATER ROUTES, AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE OR BASE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, ETC., AND NAME OF SUPERINTENDENT.
Elliday Ry. Webster 622.	Macon	J. D. Moore, Turkey Knob, Corundum Hill and Whitecomb. Open pit.

## GOLD AND SILVER

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE OR ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
Avety's Creek, Buncombe Ry. Asheville 622 (1410.)		Levi Jackson, Asheville, N. C. County Line, gold and silver. Open pit; hand.
Brindletown Ry. Morganton 622.	Burke	Boyd Co. Hancock, gold. Placer; free; water. J. F. Boyd, supt.
"	"	Carolina Queen Consolidated Co., Boston, Mass., 178 Devonshire st. Charles M. Bruce, trustee. Carolina Queen Consolidated, gold. Placer, shaft; free; steam; 5 stamps. Frank W. Boyd, supt.
"	"	M. H. Goins, Brindletown, gold. Placer, open pit.
"	"	F. A. Johnson, Queen Mine, gold. Placer, open pit; hand.
"	"	W. Kelley, White Bank, gold. Open pit; hand. J. C. Mills, supt.
"	"	John C. Landrum, Washington, D. C. Hancock, gold. Placer; hand.
"	"	William Long, Vein, gold. Placer, tunnel; hand.
"	"	Cybus Settlement, Gold.
Chandler's Grove Montgomery Ry. Lexington 622.		W. E. Russell. Cap. \$1,000. Russell, gold, quartz. Open; hand.



## GOLD AND SILVER (CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN	AND COUNTY.	
China Grove, Ry. 622 (4 miles).	Rowan	Aldrich Mining Co., Salisbury, N. C. W. F. Aldrich, prest.; A. P. Lighthill, seey., treas. and mgr. Cap. stk. \$30,000. Southern Belle, gold. Shaft and slope, 3,000 tons; free and refractory; steam; 10 stamps. M. Folsom, supt.
Clear Creek Ry. Harrisburg 622.	Cabarrus	Simpson River Silver & Tunnel Mining Co., Hornet, N. C. Robert Simpson, mgr. Cap. stk. \$6,150. Simpson, gold and silver. Gold mill, 100 tons; steam. M. O'Donnell, supt.
Derita Ry. 622.	Mecklenburg	C. A. Mezgar. Hunter, gold. Open pit, free; steam; stamp mill.
Flagtown Ry. Lexington 622.	Montgomery	F. E. Reeves. Gold. Shaft; water.
Garfield Ry. Gold Hill 622.	Rowan	Lacy E. Williams. F. R. Williams, mgr. and supt. Gold Knob, gold and copper. Shafts; refractory; steam; 5 stamps.
Gastonia Ry. 622.	Gaston	Long Creek Co., Richmond, Va., City Bank. T. M. R. Talcott, prest.; Wm. H. Palmer Jr., seey. and treas. Cap. stk. \$100,000. Macarty Hill, Dixon, Asbury, gold. Shafts; refractory; steam (developing).
Globe Ry. Lenoir 622.	Caldwell	Watanga Mining Co., Knoxville, Tenn. Charles H. Brown, prest.; T. F. Brungdorf, seey. and treas.; J. H. Todd, mgr. Cap. stk. \$100,000. Old Cragg, gold. Slope, 200 tons; free; water; stamp mill. Alfred Wortman, supt.
Gold Hill, Ry. 622.	Rowan	F. H. Manney. Cap. \$10,000. Rumble and McMackin, gold. Shafts; free and refractory; horse.
"	"	New Gold Hill Co., Ltd., London, Eng., 35 George st., Mansion House. Major General Lloyd, prest., Richard L. Hobbs, seey.; Richard Eames Jr., mgr. and supt. Cap. stk. \$1,750,000. Gold Hill, gold and copper. Shafts, 6,000 tons; refractory; steam; 20 stamps.
Hartland Ry. Lenoir 622.	Caldwell	Bea Mountain Mining Co., Lenoir, N. C. Miller, gold. Open pit, free; steam; mill (developing).
Hornet Ry. Charlotte 622.	Mecklenburg	C. P. Mingo & E. H. Hinson. Cap. \$2,000. Harris. Open pit and shaft; free (developing). C. P. Mingo, supt.
Huntersville, Ry. 622.	Mecklenburg	W. R. Jordan, Derita, N. C. Jordan, gold. Open pit; water.
Jamesstown Ry. 622.	Gulford	Central Gold & Copper Mining Co., Norfolk, Va. John B. Whitehead, prest. Cap. stk. \$100,000. Central, gold and copper. Shaft; free; steam; mill.
"	"	North State Copper & Gold Mining Co., Baltimore, Md., 6 South Gay st. Charles K. Oliver, prest.; Firman Sadler, seey.; W. H. Sadler, treas. Cap. stk. \$1,000,000. North State, gold and copper. Shafts, tunnel and slope, free, refractory; steam, water; 20 stamps and concentrator. James Palmer, supt.
"	"	Southern Gold & Copper Co., Philadelphia, Pa., 293 Walnut st. George R. Morehouse, prest. Cap. stk. \$100,000. Southern, gold and copper. Shafts; free and refractory; steam. James Palmer, supt.
Lenoir Ry. 622.	Caldwell	Blue Ridge Mining Co., Husbands Creek, Bald Knob, gold. Shaft; stamp mill. J. S. Perkins, supt.
Mauchpeth Ry. Iron Station 104 7 miles.	Lincoln	W. A. Graham. Cap. \$10,000. Graham, gold, silver, copper. Open and placer; free; hand.
Matthews Ry. 104.	Mecklenburg	Baltimore & North Carolina Gold Mining Co., Baltimore, Md., 21 S. Gay st. T. W. Hooper, seey. Baltimore and North Carolina, gold quartz. Shaft and slope, free and refractory; steam; 5 stamps. P. G. Edmest, supt.
Monroe Ry. 104, 604.	Union	A. A. Lauey. Lynchen River, gold. Shaft and open pits; free (developing).
Morattock Ry. Albemarle 622.	Montgomery	Morattock Mining Co., Albemarle, N. C. Morattock, gold. Open pit; refractory; steam; 10 stamps. S. T. Mully, supt.
New London Ry. 622.	Stanley	Jine Mining Co., T. J. Crowell, prest.; T. M. Crowell, seey.; J. L. Crowell, treas.; H. C. Crowell, mgr. and supt. Cap. stk. \$5,000. Jine, gold. Shaft, 10,000 tons; free; steam; 10 stamps.
"	"	Parker Gold Mines Co., Ltd., London, Eng., 8 Cornhill st. James Judd, prest.; N. Goldman, seey. and treas.; Henry Judd, mgr. and supt. Cap. stk. \$25,000. Parker, Flint Springs, gold. Placer, open pit and shaft; free; steam and hydraulic; 10 stamps.
Ransom's Bridge, Ry. Marsh 622.	Franklin	Arthur Arrington, Louisburg, N. C. Arthur Arrington, gold quartz. Placer, free.
"	"	S. G. Sturges. W. E. Sturges, mgr. Portis, gold. Placer, open pit; steam; 15 stamps.
Science Hill Ry. Asheville 622 8 m.	Randolph	John T. Lowe. Cap. \$20,000. Bingham, gold.
Silver Hill Ry. Lexington 622.	Davidson	Silver Hill Mining Co., New York, N. Y. Cap. stk. \$200,000. Silver Hill, gold, silver, lead and zinc. Shaft, 8,000 tons; refractory; steam; 20 stamps. J. M. Prim, supt.

## GRAPHITE

LOCATION OF MINE OR BASE, RAILWAYS, WATER ROUTES, AND SHIPPING POINT.		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE OR BASE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, ETC., AND NAME OF SUPERINTENDENT.
TOWN	AND COUNTY.	
Raleigh, 615, 622.	Wake	Tucker, Pullen & Wharton, 236 Fayetteville st. Cap. stk. \$25,000. Heron, plumbago. Slope; hand.

## IRON

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, BLAST FURNACES, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Bessemer City..... Gaston Ry. King's Mountain 622.	Bessemer City Mining & Manufacturing Co. J. S. Carr, prest.; J. A. Smith, secy. and treas.; J. A. Pinch- back, mgr. and supt. Cap. stk. \$650,000. Ormond, Little Mount, Ferguson and Ore Hill, Bessemer. Shafts, 12,000 tons; steam.
Big Ore Bank..... Lincoln (P. O. Derr) Ry. Iron Mountain 104.	Derr & Reinhardt. Cap. \$21,000. Big Ore Bank, shaft and tunnel; stenn; furnace.
Burnsville..... Yancey Ry. Marion 622.	Ray & Burton. G. D. Ray, mgr. Cap. \$30,000. Magnetite and corundum. Open pit, 1,000 tons; horse.
Catawba..... Catawba Ry. 622.	J. A. Blackwelder. Catawba Valley Iron Works. Shaft and tunnel; water; furnace.
Cranberry..... Mitchell Ry. 241.	Cranberry Iron & Coal Co. Frank Firmstone, prest.; John S. Wise, secy. and treas.; C. H. Nimson, mgr. Cap. stk. \$2,000,000. Cranberry, magnetic. Tunnels and open pits, 2,000 tons; steam, air, electricity, horse and hand; furnace, 3,000 tons. S. M. Pitman, supt.
Danbury..... Stokes Ry. Walnut Cove 523.	Carolina Iron Mining & Investment Co. W. B. Wills, prest.; G. E. Brodrick, secy. and treas.; H. B. Tilden, mgr. Cap. stk. \$1,000,000. Magnetic. Open pit, 22,500 tons.
King's Mtn..... Cleveland Ry. 622.	Ormond Co. J. J. Ormond, mgr. Cap. stk. \$10,000. Chestnut Ridge, mica, iron and tin. Open pit; hand.
Ore Hill..... Chatlam Ry. 98.	North Carolina Steel & Iron Co., Greensboro, N. C. J. A. Odell, prest.; C. D. Benbow, secy. and treas.; J. D. Kaise, mgr. and supt. Cap. stk. \$1,000,000. Ore Hill, hematite and magnetic. Open pit, 20,000 tons; steam and horse; furnaces.
Pilot Mountain..... Surry Ry. 98.	North Carolina Steel & Iron Co., Greensboro, N. C. J. A. Odell, prest.; C. D. Benbow, secy. and treas.; J. D. Kaise, mgr. and supt. Cap. stk. \$1,000,000. Pilot Mountain, hematite and magnetic. Shafts and open pits, 20,000 tons; steam; furnaces.
"..... "	David W. Worth. Magnetic. Water.
Rockford..... Surry Ry. 622.	North Carolina Steel & Iron Co., Greensboro, N. C. J. A. Odell, prest.; C. D. Benbow, secy. and treas.; J. D. Kaise, mgr. and supt. Cap. stk. \$1,000,000. Rockford, hematite and magnetic. Shafts and open pits, 20,000 tons; steam; furnaces.
Seth..... Granville Ry. Oxford 622.	W. Baker & Co. Cap. \$10,000. Baker. Shaft, 20,000 tons.
South Toe..... Yancey Ry. Marion 622.	E. Burnett. Burnett, mica, iron, silver and lead. Slope; hand.

## MICA

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF PRODUCT, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Bakersville..... Mitchell Ry. Marion 121, 622.	John Collis, Estatoe, N. C. Cap. \$5,000. Murphy Rock. Open pit, 5 tons; hand.
"..... "	Flat Rock Mining Co., Penland, N. C. Geo. H. Zimmerman, prest.; J. Milton Bailey, secy.; Isaac H. Bailey, treas.; J. Milton Ellis, mgr. Cap. stk. \$50,000. Flat Rock.
"..... "	J. L. Rorison & Co. Hason, Clondland and Clarissa. Shaft, tunnel, slope and open pit; steam.
Burnsville..... Yancey Ry. Marion 622.	W. E. Gouge. Open pit; hand.
Cashiers..... Jackson Ry. Walhalla, S. C. 622.	J. F. Rice. Mica and corundum. Hand.
Cowarts..... Jackson Ry. Webster 622.	John H. Smith. Wood. Open pit; hand.
Cranberry..... Mitchell Ry. 241.	Western Carolina Mica Co., Plum Tree, N. C. Geo. A. Blood, prest.; H. A. North, secy.; S. Wm. Blood, treas.; W. Vance Brown, mgr. Cap. stk. \$30,000. Mica and feldspar. Steam.
Cullowhee..... Jackson Ry. Webster 622.	Hamlin & Fordyce, Detroit, Mich., 621-623 Hammond Bldg. Wm. T. Hamlin, prest.; T. N. Fordyce, V. prest.; Herman Nagle, treas.; W. W. Helm, mgr. and supt. Cullowhee, mica and corundum. Slope, tunnel and open pit; steam, water, horse, hand.
Elljay..... Macon Ry. Webster 622.	J. D. Moore. Pressley and Rocky Face. Shaft.
Franklin..... Macon Ry. Webster 622.	Eugene Munsell & Co., New York City, 218 Water st. Open; hand.
"..... "	C. G. Shepherd (lessee). Beasley No. 2. Tunnel; hand.
Grassy Creek..... Mitchell (P. O. Spruce Pine) Ry. Marion, Va., 622.	Asheville Investment Co., Asheville, N. C., 45 S. Main st. C. F. Grilling, prest. and mgr.; Geo. I. Paroley, secy.; John C. Brown, treas. Cap. stk. \$200,000. Cook. Shaft and tunnel; hand.
Ingalls..... Mitchell Ry. Cranberry 241.	Jason E. Burleson. Horse, hand and steam.
"..... "	James G. Wiseman. Tunnel; hand.
Ledger..... Mitchell Ry. Marion 622, 121.	John Willis. Cap. \$1,000. Howell. Shaft; horse.
Mica..... Mitchell Ry. Marion 622, 121.	M. D. Wiseman. Wiseman. Shaft, tunnel; hand.

## MICA—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWNS AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF PRODUCT, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, ETC., AND NAME OF MINE SUPERINTENDENT.
Phintree	Mitchell Ry. Cranberry 241.	Toe River Ground Mica Co. H. R. Jones, prest. and supt.; Geo. H. Zimmerman, secy.; T. B. Vance, treas.; J. E. Warwick, mgr. 300 tons; water.
South Toe	Yancey Ry. Marion 121, 622.	J. L. Gibbs, Burnsville, N. C. Cap. \$1,500. O'Brien. Shaft; horse and hand.
Spruce Pine	Mitchell Ry. Marion 121, 622.	Irby & Gilman. Cap. \$12,000. Blazetock and Howell. 40 tons; steam.
"	"	J. A. McDonald, Marion, N. C. Wm. McBee, mgr. Hawkins. Hand; stone mill.
Webster	Jackson Ry. 622.	C. P. Bryson. Junbo, Shelton, M. Bryson. Tunnel, open pit; hand.
"	"	M. Buchanan. East Fork. Open pit and shaft.

## NICKEL

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWNS AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, SMELTERS, ETC., AND NAME OF MINE SUPERINTENDENT.
Webster	Jackson Ry. 622.	Prof. Emmons. Webster, nickel and corundum. Shaft, tunnel, slope, open pit; hand. J. J. Wild, supt.
"	"	Pinekey & Willis. Pinekey, nickel and chrome iron. Open pit.

## PHOSPHATE

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWNS AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
Navassa	Brunswick (P. O. Wilmington) Ry. 817.	Navassa Grand Co., Wilmington, N. C., cor. Water and Princess sts. Donald MacRae, prest.; Donald MacRae Jr., secy. and treas. Cap. \$1,000,000. 24,000 tons; steam; mill, 24,000 tons. Chas. E. Borden, supt.

## STONE, MARBLE, GRANITE AND ONYX

LOCATION OF MINE OR QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWNS AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE OR QUARRY, KIND OF STONE, KIND OF MINE OR QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STONE OR MARBLE MILLS, LIMEKILNS AND CAPACITY, ETC., AND NAME OF MINE SUPERINTENDENT.
Egypt Depot	Chatham Ry. 344.	Egypt Brown-stone Co. Samuel A. Henszey, prest. Egypt, brown-stone. Open pit (developing).
Iron Station	Lincoln Ry. 104.	J. A. Brown. Open pit; hand; mill.
Mount Airy	Sturty Ry. 98.	Mount Airy Granite Co., Greensboro, N. C. R. Petty Gray, prest.; J. W. Fry, secy.; Thos. Woodrolle, treas. and mgr. Cap. \$1,800,000. Mount Airy, granite, steam, mill. Wm. A. Woodrolle, supt.
Salisbury	Rowan Ry. 622.	D. M. Bodger (local), Organ Church, N. C. Brown Rock, white granite. Open pit; hand.
"	"	Stone Mountain Granite & Improvement Co. W. J. Klutz, prest. and mgr.; J. Samuel McRobbins, secy. and treas. Cap. \$1,800,000. Stone Mountain, white granite. Slope, 100,000 tons; steam.
"	"	J. T. Wyatt Granite Millstone Manufacturing Co. Cap. \$10,000. Wyatt's Granite Mountain, white and gray granite. Open pit and slope; hand. J. T. Wyatt, supt.
Sanford	Moore Ry. 98.	Carolina Brown-stone Co., Norfolk, Va., Main st. J. W. Hunsdale, prest.; Chas. M. Cassell, secy. and treas. Cap. \$1,850,000. Carolina, brown-stone. Slope, 12,000 tons, steam. J. E. Malloy, supt.
"	"	Southern Red & Brown Stone Co., Philadelphia, Pa., S. E. cor. American and Diamond sts. Ezekiel Stew- art, pres.; John B. Stewart, secy. and treas. Cap. \$1,000,000. Red and brown stone. Open pit steam (developing). Miah Richardson, supt.
Summerfield	Guilford Ry. 622.	Angus M. Smith, Greensboro, N. C., P. O. Box 301. Granite, 200,000 tons. Irving Smith, supt.

SEE ALSO SUPPLEMENTARY LIST

# NORTH DAKOTA

## COAL—BITUMINOUS

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, CORE OVENS, AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Homer . . . . . Mercer (P. O. Causey) Ry, Bis- mark 529.	Homer Coal & Mining Co., Jersey City, N. J., 101 Arlington av. Josephus Plenty, pres. and mgr.; Charles Plenty, secy.; Wm. A. Rosenbaum, treas. Cap. stk. \$100,000. Homer. Tunnel, 100,000 tons; electricity and steam.
Lehigh . . . . . Stark (P. O. Dickinson) Ry, 529.	Lehigh Coal Mining Co. Geo. Q. Eskrine, pres.; R. E. Fleming, secy.; A. C. McGillivray, treas. and mgr. Cap. stk. \$300,000. Lehigh. Tunnel, 30,000 tons; horse. F. Reilly, supt.
Shim. . . . . Morton Ry, 529.	North Dakota Coal & Power Co., Mandan, N. Dak. H. R. Lyon, pres. and treas.; H. T. Wadeson, secy., mgr. and supt. Cap. stk. \$30,000. Slope, 30,000 tons; horse.
" . . . . . "	H. T. Wadeson, Cap. \$2,000. Frances. Slope, 20,000 tons; horse.

SEE ALSO SUPPLEMENTARY LIST

# OHIO

## CEMENT

LOCATION OF MINE OR QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE OR QUARRY, KIND OF PRODUCT, KIND OF MINE OR QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, CEMENT MILLS, ETC. AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Centre . . . . . Columbiana P. O. and Ry. New Lis- bon 503, 584.	Ohio Cement Co. A. G. Smith, pres. and mgr.; M. P. Child, secy. Cap. stk. \$20,000. Cement, rock. Tunnel, 8,000 tons; steam; mill, 10,000 tons.
Gypsum . . . . . Ottawa Ry, 383.	Marsh & Co., Sandusky, Ohio. Sloane Block. Cap. \$200,000. Marsh. Open pit, 25,000 tons; steam, hand; mill. Henry German, supt.
Sandusky . . . . . Erie Ry, 375, 383.	Sandusky Portland Cement Co., Cleveland, Ohio, 711 Perry-Payne Bldg. Ben. P. Earls, pres.; A. St. J. Newberry, secy. and treas.; Prof. S. B. Newberry, mgr. Cap. stk. \$500,000. Martins Point, marl. 20,000 tons; steam; mill, 15,000 tons.

## COAL—ANTHRACITE

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, CORE OVENS, AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Cambridge . . . . . Guernsey Ry, 42, 174.	J. H. Buckingham. Milener. Open pit, 13,500 tons.
Massillon . . . . . Stark Ry, 171, 563, 809.	Drake Coal Co., Cleveland, Ohio, Wilshire Bldg. Reinhard Keller, pres. and mgr.; J. W. Warwick, secy. and treas. Cap. stk. \$40,000. Drake. Slope, 60,000 tons; steam. C. A. Kouth, supt.
" . . . . . "	Massillon City Coal Co. J. A. Beidler, pres.; J. F. Hooock, secy. and treas.; Wm. Purman, mgr. Cap. stk. \$60,000. Massillon City. Shaft, 100,000 tons; steam.
" . . . . . "	Massillon Elm Run Coal Co. J. A. Beidler, pres.; J. F. Poreock, secy.; H. Hulger, treas.; J. A. Wilson, mgr. Cap. stk. \$80,000. Elm Run. Shaft, 100,000 tons; steam.
Toronto . . . . . Jefferson Ry, 534, 563.	Jefferson Fire Clay Co. Cap. \$50,000. Shatt, 35,000 tons; steam. D. H. Kerr, supt.

## COAL—BITUMINOUS

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, CORE OVENS, AND NAME OF MINE SUPERINTENDENT.
TOWN	COUNTY	
Akron Ry. 788.	Summit	Lake View Coal Co. John Todd, pres.; A. J. McCartney, secy. and treas.; George F. Stanbaugh, mgr. Cap. stk. \$200,000. Lake View. Shaft, 30,000 tons; steam. Wm. Phillips, supt.
Alliance Ry. 13, 563.	Stark	E. S. Davis (local), 116 Cambridge st. Waugh. Shaft, steam.
"	"	J. J. Robertson (local). Shaft, 3,000 tons; steam.
Alliance Jn. (P. O. Alliance) Ry. 563.	Mahoning	Henry L. Bandit. Cap. \$800. Bandy. Slope, 1,875 tons; horse.
Armstrong's Mills Ry. 55.	Belmont	Captina Coal Co. Cap. stk. \$10,500. Captina. Shaft, 8,000 tons; steam. M. V. Gates, supt.
Balfie Ry. 173.	Tuscarawas	James Connor. Drift (developing).
Bamock Ry. Bruce 171.	Belmont	Wm. Taylor (local). Tunnel, hand.
Barton Ry. 171, 639.	Belmont	John H. Denham. Cap. \$12,000. Maple Hill. Drift, 5,500 tons; horse.
"	"	W. S. Taggart. Cap. \$6,000. Taggart. Drift, 2,500 tons; horse.
Beldler Ry. Barnhill 171.	Tuscarawas	C. J. Nungesser. Cap. \$8,000. Walton Ridge. Open pit, 12,000 tons; horse. G. Aboller, supt.
Bellaire Ry. 12, 55, 171, 583, 563.	Belmont	W. G. Barnard. Cap. \$25,000. Open pit; horse.
"	"	Bellaire Nail Works. J. R. McCartney, pres.; A. B. Carter, secy. and treas. Cap. stk. \$750,000. Slope, 483 tons; hand. Wm. Turnbull, supt.
"	"	R. Heslop & Son. Cap. \$2,000. Belmont. Tunnel, 7,500 tons; horse. W. Heslop, supt.
"	"	Morgan & Gorrell. Morgan. Tunnel, 28,000 tons; horse. George E. Morgan, supt.
"	"	G. O. Robinson, Georgetown, Ohio. Cap. \$25,000. Tunnel, horse.
"	"	Louis Rockershausen. Cap. \$20,000. Pittsburg. Slope, 10,000 tons; steam. John Hinds, supt.
"	"	James Turnbull & Co. Cap. stk. \$10,000. Schicks. Open pit, 34,000 tons; horse. Wm. O'Mally, supt.
Beloit Ry. 563.	Mahoning	Mark Godward (local). Cap. \$900. Stanley. Slope, 1,500 tons; horse.
"	"	Youngstown Paving Brick Co., Youngstown, Ohio, 504 Belmont av. J. K. Bogenfritz, pres.; Horace Smith, secy.; A. B. Fogg, treas.; Frank Barber, mgr. Cap. stk. \$300,000. Beloit. Shaft, 6,000 tons; steam. Frank Barber, supt.
Bergholz Ry. 13.	Jefferson	J. P. George & Co. Cap. \$10,000. Bergholz. Drift, open pit, 12,000 tons; steam. S. Schaeckler, supt.
Blakes Mills Ry. 533.	Tuscarawas	Henry Miller. Goshen. Drift, 1,500 tons; horse. S. Miller, supt.
"	"	Warner Bros. (local). Stoney. Open pit, 15 tons; horse.
Boardman Ry. Youngstown 383, 503, 563, 591, 592.	Mahoning	Foster Coal Co., Youngstown, Ohio, 23 Public Square. C. H. Andrews, pres.; John Shaw, secy. and treas. Tippecanoe. Shaft, 40,533 tons; steam. J. Head, supt.
Bradbury Ry. Middleport 181, 344, 563.	Meigs	Thomas H. King. Drift, 18,000 tons; horse.
Brashears Ry. 181.	Hocking	Consolidated Coal & Mining Co., Cincinnati, Ohio, 99 W. Fourth st. Alex. McDonald, pres.; Oliver Kin- sey, secy.; R. E. Folsom, treas. and mgr. Cap. stk. \$297,000. Brush Fork. Tunnel, 17,500 tons; steam. M. E. Shafter, supt.
Bridgeport Ry. 171, 533, 563.	Belmont	Milton McConaughy (local). Cap. \$5,000. Open pit, 150 tons; horse.
Brilliant Ry. 563, 869.	Jefferson	Brilliant Steel & Iron Co., Wheeling, W. Va. George K. Wheat, pres.; Alex. Uplergraf, secy. and treas.; A. T. Wilson, mgr. Cap. stk. \$150,000. Brilliant. Shaft, 17,500 tons; steam. Richard Himes, supt.
Broadwell (P. O. Wakeup)	Athens	Federal Mining Co. Broadwell. Slope; horse.
Buechel Ry. 181.	Athens	Columbus & Hocking Coal & Iron Co., Columbus, Ohio, Board of Trade Bldg. J. O. Moss, pres.; S. A. McManigal, secy.; W. J. Redington, treas.; R. H. Johnson, v. pres. and gen. mgr. Nos. 26, 6, 29 and 25. Drift, 180,000 tons; steam, electricity. Vint Ferguson, supt.
Buffalo Ry. Hartford 236.	Guernsey	Cambridge & Elyria Coal Co., Elyria, Ohio. A. H. Johnson, pres.; E. K. Mussey, secy., treas. and mgr. Hartford. Shaft, 120,000 tons; steam. J. C. Hill, supt.
Byessville Ry. 174.	Guernsey	James A. Anderson, Cleveland, Ohio, 294 Superior st. Shaft, 100,000 tons; steam. W. A. Smith, supt.
"	"	Cambridge & Elyria Coal Co. A. H. Johnson, pres.; E. K. Mussey, secy., treas. and mgr. Cap. stk. \$100,000. Trail Run. Shaft, 150,000 tons; steam. George Harrison, supt.
"	"	Enterprise Coal Co. (local). Shaft; steam.
"	"	Huntington Coal Co., Cleveland, Ohio, Western Reserve Bldg. Cap. \$50,000. Cambridge. Shaft, 184,800 tons; steam. George Harrison, supt.
"	"	Pioneer Coal Co., Cleveland, Ohio, cor. Bank and Superior sts. S. Granger, pres.; C. S. Barnett, secy. and treas. Cap. stk. \$100,000. Pioneer slope, 200,000 tons. W. H. Davis, supt.
Cambridge Ry. 42, 174.	Guernsey	Ohio Coal Co. A. J. Warner, pres. and treas.; George S. Jones, secy.; S. C. Hoyt, mgr. Cap. stk. \$100,000. Nickolson, Marksburg, Glenwood. Shaft, drift, 89 tons; steam. J. B. Ousting, supt.

## COAL—BITUMINOUS—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, COKE OVENS, AND NAME OF MINE SUPERINTENDENT.
TOWNS AND COUNTY.	
Cambridge.....Guernsey (Continued.)	Standard Coal Co., Columbus, Ohio, 25 Wesley Block, 101 N. High st., J. Mathews, pres.; Charles Ratzel, secy. and treas. Cap. stk. \$100,000. Standard, No. 3. Open pit, 115,000 tons; horse. O. P. Mathews, supt.
Campbell.....Lawrence Ry. Mt. Vernon 156.	Campbell Iron Co., Ironton, Ohio. J. H. Moulton, pres.; H. H. Campbell, secy. and treas.; J. W. Campbell, mgr. and supt. Cap. stk. \$100,000. Mt. Vernon Furnace. Open pit, 5,000 tons; hand.
Canal Doyer.....Tuscarawas Ry. 171, 174, 363.	Ben Devan. Wagner. Tunnel, 5,000 tons; horse.
"....."	Crown Fire Clay Co., J. F. Townsend, pres.; H. B. Manton, secy. and treas.; Thomas Kemp, mgr. Cap. stk. \$100,000. Tunnel, 7,000 tons; horse. Martin Clappert, supt.
"....."	Doyer Fire Brick Co., Cleveland, Ohio, 44 Mercantile Bank Bldg. C. S. Barrett, pres. and treas.; George H. Gibson, secy.; P. Arnold, mgr. Cap. stk. \$100,000. Barrett. Tunnel, 1,500 tons. George Bolan, supt.
"....."	James T. Patton (local). Open pit, 2,100 tons.
Canal Fulton.....Stark Ry. 171, 563, 533.	Ridgway Burton Co., Massillon, Ohio. J. P. Burton, pres. and treas.; D. Johns, secy. Cap. stk. \$30,000. Fern Brook. Shaft, 37,500 tons; steam. Wm. Crookston, supt.
Canton.....Stark Ry. 173, 563, 178.	H. S. Belden, 148 S. Market st. Orchard Hill. Slope, 6,000 tons; steam.
"....."	S. D. Price. Cap. \$2,000. East Hill. Slope, 4,000 tons; horse. S. L. Jenkins, supt.
"....."	Christian Warstler, Oberlin. Slope, 1,500 tons; water. Chas. L. Warstler, supt.
Carbondale.....Athens Ry. 42.	P. J. Beckler. Cap. \$5,000. Trace Run. Tunnel, 6,000 tons; horse.
Carlton H.H.....Hoeking Ry. 181.	Columbus & Hoeking Coal & Iron Co., Columbus, Ohio, Board of Trade Bldg. J. O. Moss, pres.; S. A. McManigal, secy.; W. J. Redington, treas.; R. H. Johnson, v.-pres. and gen. mgr. No. 21. Drift, 60,000 tons; steam, horse. Vint Ferguson, supt.
Carrollton.....Carroll Ry. 173.	Franklin Coal Co., Cleveland, Ohio, 802 Society Savings Bldg. Z. Doll, pres. and mgr.; C. W. Baine, secy.; F. K. Moore, treas. Cap. stk. \$25,000. Scott. Open pit, 40,000 tons; horse. Irvin Baysinger, supt.
Centerville.....Gallia (P. O. Thurman) Ry. Oak Hill 42, 156.	Thos. E. & E. D. Evans (local). Tunnel, 600 tons; hand. Thomas E. Evans, supt.
"....."	D. D. Morgan (local). Cap. \$2,000. Open pit; hand.
Clinton.....Summit Ry. 42, 103, 533.	Fox Lake Coal Co., Cleveland, Ohio, 506 Western Reserve Bldg. J. P. Burton, pres.; E. E. Barney, secy.; J. B. Zerbe, treas. and mgr. Cap. stk. \$30,000. Clover Hill. Shaft, 150,000 tons; steam. John Featherstone, supt. Messenger. Shaft, 150,000 tons; steam. George J. Huber, supt.
Coaldale.....Muskingum Ry. Zanesville 170.	Geo. & S. E. Porter (local). Tunnel, 1,500 tons; hand.
Coal Grove.....Lawrence Ry. 523.	Phillip Carey (local). Tunnel, 3,600 tons; hand.
"....."	John Peters jr. Cap. \$40,000. Coal Grove. Tunnel, 20,000 tons; horse. C. Palmer, supt.
Coalton.....Jackson Ry. 156, 535.	Buckeye Coal Co., M. Kisinger, mgr. Cap. \$13,000. Drift, 10,000 tons; horse.
"....."	Gosline & Barlow, Toledo, Ohio, 422 Madison st. Victor. Slope, 50,000 tons; horse. T. J. Evans, supt.
"....."	John F. Hall. Cap. \$8,000. Coalton. Slope, drift, 24,000 tons; steam. N. Cameron, supt.
"....."	Hippel Coal Co. Cap. stk. \$40,000. Hippel. Slope, 40,000 tons; steam. W. D. Hippel, supt.
"....."	W. A. Jones, Garfield. Open pit, 400 tons; horse.
"....."	Poling Coal Co., Dayton, Ohio, H. J. Poling, pres. Cap. stk. \$10,000. Tunnel, 12,000 tons; horse. Wm. Ellis, supt.
"....."	Southern Ohio Coal & Iron Co., Dayton, Ohio, 302 E. Third st. A. A. Thomas, pres.; W. L. Cafen, secy., treas. and mgr. Cap. stk. \$300,000. Tunnel, 60,000 tons; steam, horse. F. D. McKinniss, supt.
Coleman.....Columbiana Ry. 533.	New Lisbon Mining Co., C. C. Hatch, pres.; W. H. Warner, treas.; Thomas Prosser, mgr. and supt. Cap. stk. \$5,000. Coleman. Slope, 25,000 tons; steam.
"....."	Union Fire Clay & Stone Co., C. Coleman, pres.; C. S. Coleman, secy., treas. and mgr. Cap. stk. \$10,000. Coleman. Tunnel, 3,000 tons; hand. J. T. Griffiths, supt.
Conesville.....Coshocton Ry. 173, 584.	David Davis. Cap. \$40,000. Conesville. Tunnel, 65,000 tons; horse.
Congo.....Pickaway Ry. Kingston 306, 523.	Congo Coal Mining Co., Columbus, Ohio. H. D. Turney, pres.; T. W. Guthrie, secy.; G. S. Besson, treas.; Thomas Corcoran, mgr. Cap. stk. \$250,000. Congo. Shaft, 300,000 tons; electricity. Thomas Corcoran, supt.
Conneville.....Muskingum (P. O. Dillon) Ry. 182.	Columbus & Brush Creek Coal Co., Columbus, Ohio. H. S. Maynard, pres.; B. L. Maynard, secy. and treas. Cap. stk. \$20,000. Brush Creek. Slope, 60,000 tons; horse. Bruce Mauck, supt.
Corning.....Perry Ry. 182, 344, 565.	Sunday Creek Coal Co., Columbus, Ohio, Board of Trade Bldg. J. S. Morton, pres.; J. F. Stone, secy. and treas.; J. E. Martin, mgr. Cap. stk. \$40,000. Sunday Creek and 3 others. Shaft, 700,000 tons; steam. Fred Miller, supt.
Corwin.....Jackson (P. O. Glen Roy) Ry. Coalton 156, 535.	Tom Corwin Coal Co., Dayton, Ohio, 235 S. Ludlow st. S. J. Patterson, pres.; H. J. Dreesse, secy.; J. A. Murphy, treas.; J. W. Lowe, v.-pres. Cap. stk. \$30,000. Tom Corwin. Shaft, 58,332 tons; steam. William E. Davis, supt.
Coshocton.....Coshocton Ry. 173, 584.	C. L. Cassingham. Cap. \$15,000. Tunnel, 54,000 tons; horse.
"....."	Diamond Coal Co., J. W. Cassingham, pres.; C. L. Cassingham, secy., treas., mgr. and supt. Cap. stk. \$10,000. Diamond. Drift, 45,000 tons; horse.

## COAL—BITUMINOUS—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, TOWN AND COUNTY.	
TOWN	AND COUNTY.		
Coshocton	Coshocton (Continued.)	Wm. G. Hay, Cap. \$12,000, Tunnel, 30,000 tons; horse, Charles West, supt.	
"	"	Thomas Leer, Tunnel, 225 tons; horse.	
"	"	Morgan Run Coal & Mining Co., Cleveland, Ohio, 11 Bratenahl Bldg., F. C. Goff, prest. and mgr.; H. D. Dennis, secy. and treas. Cap. stk. \$50,000, Morgan Run, Tunnel, 50,000 tons; electricity, D. P. Jones, supt.	
Coventry Twp., P. O., Akron	Summit Ry. 778.	Summit Bank Coal Co., Cleveland, Ohio, 121 Superior st. Isaac Newton, mgr. Summit, Slope, 20,000 tons; steam, James H. Bart, supt.	
Creola	Vinton Ry. 181.	John Moreland (local), Cap. \$1,500, Tunnel, 800 tons; hand.	
Crooksville	Perry Ry. 164, 182.	Star Coal Co., Shawnee, Ohio, John Baillie, prest. and supt.; James L. Baillie, secy.; A. Garlinger, treas.; R. W. Jones, mgr. Cap. stk. \$10,000, Star, Tunnel; horse (developing).	
"	"	Zanesville Coal Co., Zanesville, Ohio, 42 N. Fourth st., O. F. McKinney, prest.; F. E. Huggins, secy.; J. B. W. Amsden, treas. Cap. stk. \$100,000, Drift; horse, Thomas Opie, supt. developing.	
Cumberland	Guernsey Ry. 55, 236.	M. B. Hunter, Slope, 500 tons; hand.	
Dell Roy	Carroll Ry. 173.	S. Allen's Sons, Cleveland, Ohio, 11 Bratenahl Bldg., Empire No. 3, Tunnel; horse, E. M. White, supt.	
Dennison	Tuscarawas Ry. 584.	Monarch Coal Co., Canton, Ohio, McKinley Bldg., Mrs. Mary Allen, prest.; J. A. Wamm, secy. and treas.; F. Rucht, mgr. Cap. stk. \$45,000, Monarch, Tunnel, 40,000 tons; steam, Sebastian Shane, supt.	
"	"	C. M. Totten (local), Open pit; horse (developing).	
Dillon	Muskingum Ry. 182.	Weaver, Getz & Co., Chicago, Ill., 217 Dearborn st., Franklin, Slope, 150,000 tons; horse, W. E. Reeder, supt.	
Dillonvale	Jefferson Ry. 809.	Whedding, Lake Erie & Pittsburgh Coal Co., Toledo, Ohio, W. R. Woodford, prest.; Downer Adams, secy. and treas. Cap. stk. \$1,000,000, Dillon, Tunnel, 155,000 tons; horse, George Atherton, supt.	
Don	Belmont Ry. Martin's Ferry 533, 563.	August Henschel, Open pit, 3,000 tons; horse.	
Doylestown	Wayne Ry. 42, 503.	Scheibling, Miller & Co. (local), California, Drift, 3,000 tons; horse, Jacob Santrock, supt.	
E. Fairfield	Columbiana Ry. NewWaterford 563.	Wm. Moore (local), Moore, Shaft, 1,500 tons; horse.	
E. Liverpool	Columbiana Ry. 583, 563.	Faulk Bros. (local), Cap. \$4,000, Dry Run, Tunnel, 400 tons.	
E. Palestine	Columbiana Ry. 563.	East Palestine Coal Co., A. Hicks, prest.; A. W. Hicks, treas.; James Sutherland, mgr. and supt. Cap. stk. \$14,000, Carbon Hill, Drift, 75,000 tons; horse.	
"	"	John Jones (local), Chamberlin, Open pit, 720 tons; horse.	
"	"	State Line Coal Co., James Mullins, mgr. Cap. stk. \$80,000.	
"	"	James Sutherland, Prospect Hill, Slope, 60,000 tons; steam, George D. Sutherland, supt.	
Elko, P. O. and Ry. Vinton Station 43.	Vinton	Madeira Coal Co., Chillicothe, Ohio, Madeira, Shaft; steam, John Hall, supt.	
Fairpoint	Belmont Ry. 392.	D. R. Bently (local), 300 tons.	
Flushing	Belmont Ry. 171.	Joseph Bailly (local), Open pit, 50 tons.	
"	"	Flushing Coal Co., Theo. S. Faxton, prest. and mgr.; Isaac D. Faxton, secy. and treas. Cap. stk. \$200,000, Tunnel, 100,000 tons; compressed air, W. G. Williams, supt.	
"	"	Moses Still (local), Tunnel, 800 tons; horse.	
"	"	Handel & Co., Cap. \$2,000, Flushing, Slope, 14,000 tons; horse; washer.	
Franklin Sta Ry. 584.	Coshocton	Columbus Coal & Mining Co., 331 N. High st., F. N. Barnes, prest., treas. and mgr., C. F. Barnes, secy. Cap. stk. \$75,000, Franklin, Tunnel, 24,875 tons; horse, F. Barnes, supt.	
Frazesburg	Muskingum Ry. 584.	T. J. Buchanan (local), Frazesburg, Open pit, 2,454 tons; hand.	
Glen Ebon, Ry. 181.	Athens	Chicago & Ohio Coal & Car Co., Chicago, Ill., 1016 Chamber of Commerce Bldg., S. H. Grayes, prest., F. C. Elliott, secy. and treas.; E. M. Luce, mgr. Cap. stk. \$400,000, Glen Ebon, Slope, 100,000 tons; steam, Thomas N. Black, supt.	
Glen Roy Ry. 156, 545.	Jackson	Ada Coal Co., Ira A. Sternberger, prest. and gen. mgr.; E. E. Dwight, v.-prest.; M. D. Jones, secy. and treas. Cap. stk. \$50,000, Ada, Shaft, 50,000 tons; steam.	
"	"	Jones & Morgan, Cap. stk. \$25,000, Slope, 21,494 tons; steam, D. L. Jones, supt.	
"	"	Northern Coal Co., M. E. Morgan, secy.; Moses Morgan, treas.; D. C. Jones, mgr. Cap. stk. \$30,000, Northern, Shaft, 27,800 tons; steam, John M. Morgan, supt.	
"	"	Standard Coal Co., M. E. Morgan, secy.; Moses Morgan, treas.; D. C. Jones, mgr. Cap. stk. \$25,000, Standard, Shaft, 12,575 tons; steam, D. L. Jones, supt.	
Gloster Ry. 344, 765.	Athens	Sedalia Coal Co., A. L. Hart, secy. and treas.; Wm. Palmer, mgr. Cap. stk. \$4,000, Sedalia, Open pit, 15,000 tons; steam.	
Gore Ry. 181.	Hoeking	Baird Iron Co. (local), F. B. Baird, prest.; F. B. McEl Hinnie, secy.; C. R. Baird, treas. Tunnel, 22,000 tons; horse.	

## COAL. BITUMINOUS—(CONTINUED)

LOCATION OF MINE. RAILWAYS, WATER ROUTES AND SHIPPING POINTS.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, CORE OVENS, AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Gore ..... Hocking (Continued.)	Columbus & Hocking Coal & Iron Co., Columbus, Ohio, Board of Trade Bldg. J. O. Moss, pres.; S. A. McManigal, secy.; W. J. Redington, treas.; R. H. Johnson, v.-pres. and gen. mgr. Nos. 43 and 45. Drift, 120,000 tons; steam, horse. Vinit Ferguson, supt.
Green ..... Mahoning P. O. and Ry. Salem 263.	David Coy (local). Sears. Slope, 3,000 tons; horse.
Green ..... Summit (P. O. Inland) Ry. Greentown 778.	Joseph Whitticar (local). Cap. \$1,000. Drift, 700 tons; horse.
Greentown ..... Stark Ry. 778.	Lewis E. Smith. Cap. \$10,000. Summit Hill. Drift, 30,000 tons; horse. Peter Deerolf, supt.
Gullford ..... Columbiana (P. O. Bucks) Ry. New Lisbon 503, 586.	Nelson Bronson. Cold Run. Slope; horse.
Hamley Run ..... Athens Ry. 181.	Chicago & Ohio Coal & Car Co., Chicago, Ill., 1016 Chamber of Commerce Bldg. S. H. Graves, pres.; F. C. Elliott, secy. and treas.; E. M. Lince, mgr. Cap. stk. \$430,000. Hamley Run. Shaft, 100,000 tons; steam. Thomas N. Black, supt.
Hanging Rock Lawrence Ry. 523, 533.	Means, Kyle & Co. E. B. Willard, pres.; James Bull, secy. and treas.; Hugh Shields, mgr. and supt. Cap. stk. \$500,000. New Castle. Tunnel, 50,000 tons; horse.
Hawk's ..... Vinton Ry. 181.	Keck & Stevenson. Cap. \$3,000. Star No. 2. Tunnel, 2,000 tons; horse. E. W. Keck, supt.
Hemlock ..... Perry Ry. 182, 344.	Columbus & Shawnee Coal Co., Columbus, Ohio, Clinton Bldg. C. G. Kearns, pres. and supt.; C. C. Collins, secy. and treas. Cap. stk. \$15,000. Hemlock. Slope, 77,000 tons; steam.
Henking ..... Gallia Ry. Cheshire 181, 344, 333.	C. A. Carl's Sons. Cap. stk. \$15,000. Carl. Drift, 17,800 tons; horse. H. V. Carl, supt.
Hollister ..... Athens Ry. 765.	Courtright, Kistler & Co., Columbus, Ohio, Rooms 3 to 7 Clinton Bldg. Shaft, 200,000 tons; steam. D. C. Thomas, supt.
Hopewell ..... Muskingum Ry. Zanesville, 42, 35, 104, 109, 173, 182, 834.	Frank Dick (local). Tunnel, 1,600 tons; hand.
" ..... " S. R. Porter (local). Cap. \$8,000. Tunnel, 700 tons; hand.	
Hovestine ..... Stark Ry. 778.	Ridgway Burton Co., Massillon, Ohio. J. P. Burton, pres. and treas.; D. Johns, secy. Cap. stk. \$30,000. Willow Spring. Slope, 23,000 tons; horse. Edward Jones, supt.
Hubbard ..... Trumbull Ry. 383, 503.	P. Jacob & Son, Youngstown, Ohio, P. O. Box 272. Jacob. Shaft; steam. Orrin Jacob, supt.
Irontdale ..... Jefferson Ry. 563.	Wm. Lacey, Cleveland, Ohio, 77 and 79 River st. Cap. \$100,000. Lacey. Open pit, 12,000 tons; steam; breaker.
Ironton ..... Lawrence Ry. 156, 329, 523, 533.	Belford Iron Works Co. John G. Peebles, pres.; S. G. Gillfillan, secy. and treas.; B. H. Burr, v.-pres. and gen. mgr. Cap. stk. \$225,000. Belford. Tunnel, 36,000 tons; horse. John W. Farmer, supt.
" ..... " Joe Gillen. Tunnel, 5,000 tons; hand.	
" ..... " James Allen Richey, 307 S. Third st. Cap. \$5,000 (local). Tunnel, 10,000 tons; hand.	
" ..... " W. F. Wilson, 44 W. Fifth st. Cap. \$4,000 (local). Tunnel, 644 tons; hand.	
Jackson ..... Jackson Ry. 43, 535.	Chapman Coal Co. H. L. Chapman, pres. and mgr.; C. J. Benton, secy. Cap. stk. \$100,000. Grace, Chapman, Springfield and 3 others. Slope, shaft, tunnel, 125,000 tons; steam. John E. Hayes, supt.
" ..... " Emma Coal Co. Ed. H. Zarheers, pres.; Edwin Jones, treas., mgr. and supt. Cap. stk. \$50,000. Emma. Shaft, 30,000 tons; horse.	
" ..... " Globe Iron Co. Eben Jones, pres.; J. E. Jones, secy.; Elias Crandall, gen. mgr.; L. T. Murfin, mgr. Cap. stk. \$75,000. Globe, Huron. Shaft, 50,000 tons; hand.	
" ..... " Gostine & Barlow, Toledo, Ohio, 422 Madison st. Price. Slope, 40,000 tons; horse. W. H. Owens, supt.	
" ..... " Jackson Hill Coal Co. Ed. H. Zurlhorst, pres.; W. E. Keenan, secy.; Edwin Jones, treas. and mgr. Cap. stk. \$50,000. Jackson Hill. Drift, 21,500 tons; horse. John D. Richards, supt.	
" ..... " McKitterick Bros. Cap. \$15,000. Slope, 15,000 tons; steam. James Harper, supt.	
" ..... " Ohio Coal Co. Ira A. Sternberger, pres. and mgr.; H. S. Willard, secy. and treas. Cap. stk. \$20,000. Ohio. Slope, 30,000 tons; steam. N. M. White, supt.	
" ..... " Price Bros. Cap. \$5,000. Drift, 4,000 tons; horse. J. E. Price, supt.	
" ..... " J. N. Simpson. Cap. \$1,500. Open pit, 50,000 tons; hand.	
" ..... " Star Furnace Co. B. Kalm, pres.; Charles O. Brown, secy.; L. V. Brown, mgr. Cap. stk. \$60,000. Star No. 2. Shaft, 25,000 tons; steam, compressed air. Henry Price, supt.	
Jeddo ..... Jefferson Ry. 175.	D. O. Findley (local). Tunnel, 6,250 tons.
" ..... " D. A. Moreland (local). Open pit, 400 tons; hand.	
Jordon ..... Jackson Ry. Weston 43, 156, 235.	Southern Ohio Coal & Iron Co., Dayton, Ohio, 312 E. Third st. A. A. Thomas, pres.; W. L. Caten, secy. and treas. Cap. stk. \$250,000. No. 9. Tunnel, 30,000 tons; horse. R. D. Thomas, supt.
Junction City ..... Perry Ry. 42, 164, 765.	John Green. Cap. \$2,000 (local). Tunnel, 800 tons; hand.
" ..... " Jerome Rowe (local). Tunnel, 320 tons; hand.	
Kittanning ..... Hocking Ry. Shaft 181.	Racoon Coal Co. L. A. Culver, pres. and treas.; G. C. Weitzel, secy., mgr. and supt. Cap. stk. \$200,000. Racoon. Tunnel, 54,000 tons; steam, horse.



## COAL—BITUMINOUS—(CONTINUED)

LOCATION OF MINE, RAILWAY, WATER ROUTES AND SHIPPING POINT.		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, COKE OVENS, AND NAME OF MINE SUPERINTENDENT.
TOWN	AND COUNTY.	
Krumroy	Summit Ry. 778.	C. H. Gregg (local). Gregg. Shaft; horse (developing).
Lathrop	Athens Ry. 766.	Black Diamond Coal & Coke Co., Columbus, Ohio, Board of Trade Bldg., Robert W. Gilbert, pres.; Milton Hopkins, secy.; J. H. Earnshaw, treas. and mgr. Cap. stk. \$200,000. Black Diamond. Tunnel; electricity; breaker, 50 coke ovens, capacity 15,000 tons (developing). James Fox, supt.
"	"	McKinney Coal & Coke Co., Zanesville, Ohio, 42 N. Fourth st., O. F. McKinney, pres. and mgr.; F. E. Higgins, secy. and treas. Cap. stk. \$100,000. Slope; steam (developing). Thomas Opie, supt.
Laurelton	Jefferson Ry. Portland Station 563.	Wheeling, Lake Erie & Pittsburg Coal Co., Toledo, Ohio, W. R. Woodford, pres.; Downer Adams, secy. and treas. Cap. stk. \$1,000,000. Laurelton. Tunnel, 150,000 tons; horse. George Atherton, supt.
Loesville	Carroll Ry. 869.	McCreary & Moore (local). Ball. Open pit, 1,379 tons; hand. G. C. McCreary, supt.
"	"	A. Preston (local). Open pit, 600 tons; hand.
Longstreth	Hocking Ry. 181.	Columbus & Hocking Coal & Iron Co., Columbus, Ohio, Board of Trade Bldg., J. O. Moss, pres.; S. A. McManigal, secy.; W. J. Redington, treas.; R. H. Johnson, v.-pres. and gen. mgr. No. 19. Drift, 60,000 tons; steam, electricity. Vint, Ferguson, supt.
Lyonsdale	Perry Ry. 164.	M. Meenan. Cap. \$10,000. Lyonsdale. Tunnel, 30,000 tons; horse.
McArthur	Vinton Ry. 181.	Benjamin Newlan (local). Tunnel, 172 tons; horse.
McAnnville	Perry Ry. 42.	Craeford, Gayer Bros. & Co. Cap. \$1,000. Eagle. Tunnel; horse (developing). Wm. Gayer, supt.
McLaney	Perry Ry. 164.	J. H. Jones. Cap. \$15,000. Beech Grove. Tunnel, 35,749 tons; horse. George Savage, supt.
Malvern	Carroll Ry. 175.	Phoenix Fire Clay Co., C. A. Weaver, pres.; R. Roberts, secy. and treas.; Samuel Hodgkinson, mgr. Cap. stk. \$5,000. Phoenix. Slope, 1,500 tons; hand.
Mammoth	Summit P. O. Akron Ry. Clinton 169, 42, 563, 563.	Brewster Coal Co., Akron, Ohio, 200 S. Main st., Alexander Brewster, pres.; A. K. Brewster, secy. and treas.; A. A. Brewster, mgr. Cap. stk. \$100,000. Turkeyfoot. Shaft, 70,000 tons; steam. John F. Meacham, supt.
Martins Ferry	Belmont Ry. 171, 175.	Gaylord Coal Co., G. Edwards, pres.; Theodore Snodgrass, secy. and treas.; Jonah Lewis, mgr. Cap. stk. \$20,000. Open pit.
Massillon	Stark Ry. 171, 585, 809.	Howells Coal Co., Anthony Howells, pres.; John C. Adright, secy.; J. D. Welter, treas. Cap. stk. \$20,000. Anderson. Shaft, 10,000 tons; steam. Evan J. Evans, supt.
"	"	E. G. Kransé & Co., cor. Sheriff and Prospect sts., West Massillon. Shaft, 50,000 tons; steam.
"	"	Massillon Pigeon Run Coal Co., A. Howells, pres. and mgr.; E. S. Howells, secy.; J. D. Welter, treas. Cap. stk. \$200,000. Pigeon Run. Shaft, 15,000 tons; steam. A. H. Owens, supt.
"	"	John Moore. Bridgeport. Tunnel, 1,450 tons; hand.
"	"	Upper Pigeon Run Coal Co., W. K. L. Warwick, pres. and treas.; Reinhard Keller, secy., mgr. and supt. Cap. stk. \$100,000. Upper Pigeon Run. Shaft; steam (developing).
"	"	Warwick Coal Co., Reinhard Keller, pres., mgr. and supt.; W. K. L. Warwick, secy. and treas. Cap. stk. \$100,000. Warwick. Shaft; steam (developing).
"	"	Wheeling, Lake Erie & Pittsburg Coal Co., Toledo, Ohio, Cherry st., W. R. Woodford, pres.; Downer Adams, secy. and treas. Cap. stk. \$1,000,000. Forrest. Shaft, 27,300 tons; horse. R. H. Wainwright, supt.
Middleport	Meigs Ry. 181, 344, 533.	Michael & Edwards (local). Diamond. Tunnel; horse.
"	"	Silver Run Coal Co., Silver Run. Drift, 12,000 tons; horse. A. Hysell, supt.
Millersburg	Holmes Ry. 169.	Bilderback Bros. (local). McElroy. Tunnel, 500 tons; hand.
"	"	Cary & Unson (local). Slope, 10,000 tons.
"	"	John Chevalard. Cap. \$10,000. Drift, horse.
"	"	John Craft & Co. Cap. \$5,000. Open pit; hand.
"	"	John Horn. Tunnel, 1,000 tons; hand.
"	"	E. B. Skelly. Open pit, 1,350 tons; hand.
Mineral Point	Tuscarawas Ry. 173, 778.	Briek Bros. Cap. \$1,500. Tunnel and slope, 24,000 tons; steam. John Briek, supt.
"	"	Edward Holden. Cap. \$50,000. Shaft, 15,000 tons; horse. Thomas Osborne, supt.
"	"	Ohio Coal Mining Co., Akron, Ohio, E. A. Selberling, pres.; L. C. Miles, secy. and treas.; T. W. McCue, mgr. Cap. stk. \$500,000. Mineral Ridge, Clover Dell, Acme. Tunnel (developing). George J. Markley, supt.
"	"	Ridgway Burton Co., Massillon, Ohio, J. P. Burton, pres. and treas.; D. Johns, secy. Cap. stk. \$30,000. Huff Run. Slope, 30,200 tons; horse. J. J. Klein, supt.
Mineral Ridge	Trumbull Ry. 563.	William Powers (local). Langan. Slope, 300 tons; horse.
Minersville	Meigs Ry. Pomeroy 181.	Eli Roush (local). Eureka. Open pit; horse.
"	"	John J. Williams (local). Tunnel, 2,000 tons; hand.
Minerva	Stark Ry. 173, 173, 376.	J. W. Shaw. Cap. \$500. Rustic Mountain. Tunnel, 480 tons; hand, horse. John Mills, supt.

## COAL BITUMINOUS—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, COKE OVENS, AND NAME OF MINE SUPERINTENDENT.
TOWN	AND COUNTY.	
Monday	Hoeking Ry. 181.	Somers Coal Co., Columbus, Ohio, 11 E. Town st. A. Bronhoffs, prest.; James O. Somers, secy. and treas. Cap. stk. \$90,000. Monday. Drift, 80,000 tons; horse. F. Williams, supt.
Mt. Pleasant	Jefferson Ry. 809.	Wheeling, Lake Erie & Pittsburg Coal Co., Toledo, Ohio. W. R. Woodford, prest.; Dwyer Adams, secy. and treas. Cap. stk. \$1,000,000. Long Run. Tunnel, 155,000 tons; horse. George Atherton, supt.
Murray	Hoeking Ry. 181.	Columbus & Hoeking Coal & Iron Co., Columbus, Ohio, Board of Trade Bldg. J. O. Moss, prest.; S. A. McManigal, secy.; W. J. Redington, treas.; R. H. Johnson, v.-prest. and gen. mgr. Nos. 39 and 41. Drift, 60,000 tons; steam, horse. Vint. Ferguson, supt.
"	"	Greendale Furnace Co., Columbus, Ohio, V. M. C. A. Bldg. J. A. Long, prest.; J. A. Long, prest.; secy. and treas.; C. H. Boardman, mgr. Cap. stk. \$25,000. Murray City. Slope, 200,000 tons; steam. John Hopkins, supt.
Navarre	Stark Ry. 173, 171, 809.	Levi Hair. Tunnel, 240 tons; hand.
"	"	Ridgway Burton Co., Massillon, Ohio. J. P. Burton, prest. and treas.; D. Johns, secy. Cap. stk. \$30,000. South Massillon. Shaft, 30,500 tons; steam. Wm. Hardgrove, supt.
Neffs Siding	Belmont (P. O. Shields) Ry. 42.	George Neff (local). Cap. \$1,000. Open pit, 40 tons; hand.
Negley	Columbiana Ry. Holley 586.	Suthers Mining Co., A. H. Davis, prest.; James Suthers, treas., mgr. and supt. Cap. stk. \$10,000. Pleasant Valley. Drift, 75,000 tons; horse.
Nelsonville	Athens Ry. 181.	Buckeye Coal Co., Geo. E. Hall, prest.; Geo. O. Shoemaker, secy.; John Ginity, treas.; H. A. Crippen, mgr. Cap. stk. \$85,000. Buckeye. Tunnel, 75,000 tons; horse. John Ginity, supt.
"	"	Columbus & Hoeking Coal & Iron Co., Columbus, Ohio, Board of Trade Bldg. J. O. Moss, prest.; S. A. McManigal, secy.; W. J. Redington, treas.; R. H. Johnson, v.-prest. and gen. mgr. Nos. 15, 17, 27, 29. Drift, 180,000 tons; steam, electricity.
"	"	Hoeking Valley Coal Co., Columbus, Ohio, 44 E. Broad st. E. A. Cole, gen. mgr. Cap. stk. \$300,000. Minkes Run, Hawkes. Tunnel, 200,000 tons; steam, compressed air.
"	"	Johnson Hill Coal Co., Wm. Myers, prest.; Frank W. Poston, secy.; John W. Bennett, treas.; Wm. Dalrymple, mgr. and supt. Cap. stk. \$9,000. Johnson Hill. Slope, 30,000 tons; horse.
"	"	J. M. Lama. Cap. \$6,000. Tunnel, 15,000 tons; hand.
"	"	Last Run Coal Co., James Dew, prest.; Charles F. Myers, secy.; C. H. Doan, treas.; Joseph Slater, v.-prest. and gen. mgr. Cap. stk. \$30,000. Last Run. Drift; electricity (developing). Wm. G. Halbert, supt.
"	"	Nelsonville Sewer Pipe Co. (local). James Dew, prest.; C. H. Doan, secy. and treas. Cap. stk. \$25,000. Steam.
"	"	C. L. Poston & Co. Cap. stk. \$100,000. C. L. Poston, mgr. Green Brier. Drift, 150,000 tons; steam. Cal. Mellinger, supt.
"	"	Springfield Coal & Ice Co., Springfield, Ohio, 33 S. Limestone st. E. S. Kelly, prest.; F. W. Ludlow, secy.; H. Voges, mgr. Cap. stk. \$50,000. Springfield. Tunnel, 25,000 tons; horse. Thomas Jones, supt.
New Albany	Mahoning (P. O. Salem) Ry. Co- lumbus 42, 169, 170, 181, 182, 323, 585, 765.	George Godward & Sons (local). Tunnel, 3,680 tons; horse.
New Berlin	Stark Ry. 778.	Clayton Hall (local). Cap. \$2,000. New Berlin. Slope, 740 tons; horse.
"	"	Richard Warburton (local). Graham. Open pit, 700 tons; hand.
New Comerstown	Tuscarawas Ry. 174, 584.	Thomas Langhead. Tunnel, 250 tons; horse.
New Franklin	Stark Ry. Moultrie 503.	Wm. Sommerville (local). Cap. \$8,000. Slope, 1,800 tons.
New Lexington	Perry Ry. 164, 765.	D. E. Davis. Cap. \$1,000. Drift, 1,000 tons; hand.
"	"	Wales, Hammon & Collat. Nugent. Tunnel, 1,680 tons; hand. W. J. Ruddock, supt.
New Lisbon	Columbiana Ry. 303, 386.	Edward Broughton (local). Cap. \$1,000. Tunnel, 1,500 tons; hand.
"	"	P. March & Son. Cap. \$5,000. March. Tunnel, 4,100 tons; hand. H. A. March, supt.
"	"	Sterling Mining Co., N. F. Wood, prest.; H. D. Hileman, secy.; W. H. Warner, treas. and mgr. Cap. stk. \$100,000. Central Mine. Slope, 15,000 tons; steam. Jos. Farmer, supt.
New Philadelphia	Tuscarawas Ry. 171, 175.	Goshen Coal Co., Cleveland, Ohio, 253 Superior st. J. A. Belder, prest. and treas.; A. W. Brown, secy. Cap. stk. \$100,000. Goshen. Drift, 100,000 tons; steam. C. J. Brokenshire, supt.
"	"	G. W. Mathias. Cap. \$15,000. Slope, 2,000 tons; horse, hand. Ed. Mathias, supt.
"	"	H. S. Odbert & Co., Cleveland, Ohio, Western Reserve Bldg. Cap. stk. \$50,000. Odbert. Drift, 225,000 tons; steam. John Price, supt.
New Pittsburg	Hoeking (P. O. Blatchford) Ry. 181.	New Pittsburg Coal Co., Columbus, Ohio, 11 and 12 Clinton Bldg. Thomas Johnson, prest. and treas.; G. D. Preston, secy.; Edward Johnson, v.-prest., gen. mgr. and supt. Cap. stk. \$100,000. Powell's Run. Drift, 500,000 tons; steam, compressed air.
New Straitsville	Perry Ry. 181.	Columbus & Hoeking Coal & Iron Co., Columbus, Ohio, Board of Trade Bldg. J. O. Moss, prest.; S. A. McManigal, secy.; W. J. Redington, treas.; R. H. Johnson, v.-prest. and gen. mgr. Rock Run, Nos. 5, 7, 9, 11, 13, 17, 39. Drift, 600,000 tons; steam, electricity, horse.
"	"	Ohio Coal Co., Columbus, Ohio, Board of Trade Bldg. Black Diamond. Drift, 50,500 tons; horse. David Wiems, supt.

## COAL, BITUMINOUS—(CONTINUED)

LOCATION OF MINE, RAILWAY, WATER ROUTES AND SHIPPING POINT			NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, CORE OVENS, AND NAME OF MINE SUPERINTENDENT.
TOWNS	AND	COUNTY.	
North Industry	Stark	Ry. 778.	Wade Coal Co., Cleveland, Ohio, 11 Bratenahl Block, H. D. Dennis, prest.; John C. Allen, secy. and treas. Cap. stk. \$7,500. Wade. Tunnel; horse. James Perkins, supt.
North Lawrence	Stark	Ry. Lawrence 563.	James Mullins & Sons, Wooster, Ohio. Cap. \$50,000. Mingledow Nos. 1 and 2. Slope, shaft, 75,000 tons; steam. T. H. Elser, supt.
"	"	"	Ridgway Barton Co., J. P. Barton, prest. and treas.; D. Johns, secy. Cap. stk. \$30,000. Palermo. Shaft, 41,000 tons; steam. John Hodgson, supt.
North Lima	Mahoning	Ry. 156.	Adam Little and others (local). Spaidville. Shaft, 850 tons; horse.
"	"	"	Daniel Little & Son (local). Cap. \$3,000. Shaft, 800 tons; steam.
"	"	"	Solomon Paulin (local). Open pit, 1,000 tons; horse.
Oakdale	Athens	Ry. 182.	Somers Coal Co., Columbus, Ohio, 11 E. Town st. A. Brenhofts, prest.; James O. Somers, secy. and treas. Cap. stk. \$90,000. Sunday Creek. Shaft, 50,000 tons; steam. F. Williams, supt.
Oak Hill	Jackson	Ry. 43.	Etna Fire Brick & Coal Co., John D. Davlos, prest.; Elias Morgan, secy.; J. J. Jones, treas. and mgr. Cap. stk. \$21,000. Etna. Slope, 2,800 tons; hand.
Olive Furnace	Lawrence	Ry. 156.	McGugin & Co. (local). Olive Furnace. Tunnel, 1,000 tons. W. H. McGugin, supt.
Orbiston	Hocking	Ry. 181.	Raybould Coal Co., Columbus, Ohio, 17 19 Clinton Bldg. Samuel Raybould, prest. and mgr.; Frank A. Prendergast, secy.; D. C. Postle, treas. Cap. stk. \$40,000. Slope; steam, electricity (developing). Wm. Raybould, supt.
Osnaburg	Stark	Ry. 173.	John Carruthers (local). Miller's. Drift, 1,200 tons.
Palmira	Portage	Ry. 376.	Hutson Coal Co., Cleveland, Ohio, Room 50 Willshire Bldg. H. D. Hutson, prest. and mgr.; H. D. Marble, secy. and treas. Cap. stk. \$25,000. Nos. 1 and 2. Shafts, 30,000 tons; steam. Thos. J. Williams, supt.
"	"	"	Palmira Coal Co., Youngstown, Ohio, 114 N. Market st. Henry Wick, prest.; Wilford P. Ames, secy., treas. and mgr. A and B. Shaft, 50,000 tons; steam. H. B. Evans, supt.
Petersburg	Carroll	(P. O. Algouquin) Ry. 523.	Charles W. Lewis, Allen. Slope; horse (developing).
Pike	Stark	P. O. and Ry. North Industry 778.	Wm. Sutz (local). Open pit, 100 tons; hand.
Point Pleasant	Guernsey	(P. O. name Dysons) Ry. 171, 236.	Cisco Mining Co., Cleveland, Ohio, Western Reserve Bldg. W. R. Huntington, prest.; N. H. Foote, secy. and treas.; H. S. Odbert, mgr. Cap. stk. \$25,000. Cisco. Shaft, 50,000 tons; steam. John Price, supt.
Pomeroy	Meigs	Ry. 181.	Coal Ridge Salt Co., M. B. Wells, prest.; John M. Davis, secy.; J. W. Thomas, mgr. Cap. stk. \$25,000. Coal Ridge. Tunnel, 14,408 tons; horse. Daniel W. Daniels, supt.
"	"	"	B. Koehler (local). Cap. \$2,000. Excelsior. Tunnel, 8,800 tons; horse. Dan Diehl, supt.
"	"	"	Peacock Coal Co., N. Benzal, prest.; Fred Ebersbach, secy. and treas.; Martin Ebersbach, mgr. Cap. stk. \$25,000. Peacock. Slope, 10,000 tons; horse. Wm. Ebersbach, supt.
Powhatan Point	Belmont	Ry. 533.	John E. Schnegg & Bros. (local). Cap. \$2,000. Schnegg. Shaft, 380 tons; steam.
Quaker City	Guernsey	Ry. 42.	Alex. Cochran. Cap. \$20,000. Tunnel, 75,000 tons; horse.
Radehill	Vinton	Ry. 181.	John Blore. Blore. Tunnel, 800 tons; hand. H. C. Booth, supt.
Redfield	Perry	Ry. 182.	Columbus & Eastern Coal Co., Columbus, Ohio, J. F. Harris, prest.; S. J. Flickenger, secy.; James Cochran, treas.; C. A. Benn, mgr. and supt. Cap. stk. \$450,000. Drift, 17,000 tons; horse.
"	"	"	James Coyle & Son, Cap. \$5,000. Chestnut Grove. Drift, 12,000 tons; horse. G. W. Coyle, supt.
"	"	"	Cratry Coal Co., Columbus, Ohio, Cap. stk. \$20,000. Wallace. Drift, 25,000 tons; horse. Wm. Wallace, supt.
"	"	"	Davis Mining Co., B. J. Davis, prest. and supt.; D. J. Williams, secy. and treas.; John M. Taylor, mgr. Cap. stk. \$1,000. Davis. Open pit, 25,000 tons; horse.
"	"	"	Standard Coal Co., Columbus, Ohio, 26 Wesley Block, 101 N. High st. D. Mathews, prest.; Charles Ratzel, secy. and treas. Cap. stk. \$100,000. Union No. 1. Open pit, 40,000 tons; horse. John Koppis, supt.
"	"	"	Wallace Coal Co., Columbus, Ohio, John B. Hamilton, prest.; Joseph Cratty, secy. and treas.; Wm. Wallace, mgr. and supt. Cap. stk. \$20,000. Wallace. Shaft, 40,000 tons; horse.
Rendville	Perry	Ry. 182, 765.	W. P. Rend & Co., Chicago, Ill., 152 Madison st. Sunday Block No. 3. Shaft, slopes; steam. James McLaughlin, supt.
Riverton	Jackson	Ry. Wellston 43, 156, 585.	Riverton Coal Co., E. A. Hockett, prest. and mgr.; J. E. Gimpertling Jr., secy. and treas. Cap. stk. \$5,000. Riverton. Tunnel; steam. J. J. Donahue, supt.
Rogers	Columbiana	Ry. 586.	Quaker Valley Mining Co., Youngstown, Ohio, 17 Public Square. Ralph J. Wick, prest.; M. C. McNabb, secy.; N. F. Wood, treas.; J. M. Walter, mgr. Quaker. Drift, 35,000 tons; horse. James Thompson Sr., supt.
Romine	Muskingum	(P. O. Carlwick) Ry. 55.	Diamond Coal Co., Conesville, Ohio. Cap. \$6,000. Diamond. Tunnel, drift, 30,000 tons; horse. David Davis, supt.
"	"	"	O. F. McKinney, Zaniesville, Ohio, 42 N. Fourth st. Oak Grove. Drift, 50,000 tons; horse and hand. H. N. Houk, supt.
Roscoe	Coshocton	Ry. Coshocton 173, 584.	James H. Gillen (local). Treadway. Drift, 800 tons; hand.
Roseville	Perry	Ry. 164.	Standard Coal Co., Columbus, Ohio, 26 Wesley Block, 101 N. High st. D. Mathews, prest.; Charles Ratzel, secy. and treas. Cap. stk. \$100,000. Standard No. 2. Open pit, 80,000 tons; horse. T. C. Hilliards, supt.

## COAL—BITUMINOUS (CONTINUED)

TOWN	AND COUNTY.	LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINTS.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, COKE OVENS, AND NAME OF MINE SUPERINTENDENT.
St. Clairsville	Belmont Ry. 42, 171, 609.		Black Diamond Coal Co. C. Trolle Sons, proprietors. Cap. \$50,000. Black Diamond, 100,000 tons; horse, hand.
"	"		Ohio & West Virginia Coal Co. C. Trolle Sons, proprietors. Cap. \$50,000. Ohio and West Virginia, 100,000 tons; horse, hand.
Salem	Columbiana Ry. 585.		Bomer Dunn (local). Dunn. Slope, 6,000 tons; horse.
"	"		Howells & Ashmar (local). Cap. \$3,000. Greenamyer. Shaft, 3,000 tons; steam. J. K. Ashmar, supt.
"	"		Sheldon Parker (local). Parker, 300 tons; horse.
"	"		Salem Co. Cap. stk. \$50,000. Slope. Wm. Dunn, supt.
"	"		Stephen Stone (local). Drift, 900 tons; hand.
Salineville	Columbiana Ry. 175.		S. S. Carnahan. Cap. \$8,000. Empire. Open pit, 37,000 tons; steam, horse.
"	"		T. P. Francis (local). Slope, 2,000 tons; horse.
"	"		H. H. Kirk (local). Drift, 3,000 tons; horse. A. D. Fotheringham, supt.
Sandusky	Hocking Ry. 181.		Columbus & Hocking Coal & Iron Co., Columbus, Ohio, Board of Trade Bldg. J. O. Moss, pres.; S. A. McManigal, secy.; W. J. Redington, treas.; R. H. Johnson, v.-pres. and gen. mgr. Nos. 21 and 37. Drift, 120,000 tons; steam; electricity.
Sarahsville	Noble Ry. 55.		J. H. Young. Cap. \$800. Raceoon. Tunnel, 2,000 tons; horse. Levi Vandyne, supt.
Seaford	Muskogean (P. O. Philo) Ry. 834, 533.		Zanesville Coal Co., Zanesville, Ohio, 42 N. Fourth st. O. F. McKinney, pres. and mgr.; F. E. Huggins, secy.; J. B. W. Amsden, treas. Cap. stk. \$100,000. No. 7. Open pit, 55,500 tons. Thomas Opie, supt.
Shawnee	Perry Ry. 42, 182.		Columbus & Hocking Coal & Iron Co., Columbus, Ohio, Board of Trade Bldg. J. O. Moss, pres.; S. A. McManigal, secy.; W. J. Redington, treas.; R. H. Johnson, v.-pres. and gen. mgr. Nos. 31 and 37. Drift, 120,000 tons; steam; electricity.
"	"		Gosline & Barlow, Toledo, Ohio, 422 Madison st. Furnace. Slope, 100,000 tons; steam. J. P. Meredith, supt.
"	"		J. H. Hazleton. Rock Run. Tunnel; horse.
"	"		New York & Perry Coal & Iron Co., New York City, 2 Wall st. New York. Tunnel, drift, 150,000 tons; steam. Samuel W. Butt, supt.
"	"		Shawnee Valley Coal & Iron Co., Newark, Ohio. John C. Hamilton, pres.; L. J. Johnson, secy.; James H. Smith, treas.; Thomas Phillippe, mgr. and supt. Drift, 140,000 tons; steam.
"	"		H. D. Turney & Co., Columbus, Ohio. H. D. Turney, pres.; T. W. Guthrie, secy.; G. S. Beeson, treas.; Thomas Coe, mgr. and supt. Cap. stk. \$250,000. XX. Drift, 300,000 tons; hand.
"	"		Upson Coal Co. Upson. Tunnel, 125,000 tons; hand, horse, steam, electricity. R. E. Williams, supt.
Sherodsville	Carroll Ry. 173, 809.		Fuller Coal Co., Toledo, Ohio. D. W. Fuller, pres.; James McClean, secy. and treas. Nos. 2 and 3. Tunnel, 125,000 tons; steam, horse. R. H. Wainwright, supt.
"	"		Somers & Wainwright, Cleveland, Ohio, 8 Euclid av. Cap. \$25,000. No. 4. Slope, 5,200 tons; steam. Frank McIntosh, supt.
Smith	Mahoning (P. O. Beloit) Ry. 156.		Ralph Urison (local). Slope, 3,000 tons; horse.
Steenbenville	Jefferson Ry. 175, 584, 809.		Jefferson Coal & Iron Co. Wm. P. Hays, pres.; Geo. W. McCook, secy. and mgr.; Wm. Stanton, treas. Cap. stk. \$50,000. Bustard. Shaft, 43,136 tons; steam. John Kelly, supt.
"	"		Steenbenville Coal Mining Co. R. Sherrard jr., pres.; George W. McCook, secy. and treas.; Wm. Smurthwaite, mgr. and supt. Cap. stk. \$50,000. Shaft, 60,000 tons; steam; 6 coke ovens, capacity 1,000 tons.
"	"		H. L. Wilson (local). Cap. \$5,000. Wilson. Open pit, 5,000 tons; horse.
Stewartsville	Belmont Ry. Franklin 42.		Robert Clark (local). Slope, 60 tons; hand.
"	"		Owen Meehan. Cap. \$30,000. Franklin. Tunnel, 45,000 tons; horse. W. T. Smith, supt.
Syracuse	Meigs Ry. 533.		Syracuse Coal & Salt Co. Ralph Cheney, pres.; P. W. Robbins, secy. and treas.; L. H. Bridgeman, mgr. Cap. stk. \$100,000. Syracuse. Shaft, 52,500 tons; steam, horse. Adam Duerkworth, supt.
Tallmadge	Summit Ry. 503.		W. L. Thomas & Son. Cap. stk. \$12,000. Fairview. Shaft, 5,000 tons; steam. W. L. Thomas, supt.
Thurman	Gallia Ry. Oak Hill 43, 703.		D. D. Morgan (local). Open pit, 500 tons; hand.
Trundle	Athens Ry. 344.		Cresecent Coal Co., Columbus, Ohio, Board of Trade Bldg. L. R. Doty, pres.; A. O. Mauek, secy. and treas. Cap. stk. \$100,000. Cresecent. Shaft, 200,000 tons; electricity; steam. S. F. Knox, supt.
Tuscarawas	Tuscarawas Ry. 584.		A. Herning. Cap. \$4,000. Diamond. Tunnel, 625 tons; horse. J. M. Herning, supt.
"	"		Nicholas Hert. Cap. \$12,000. Mineral Ridge. Open pit, 20,000 tons; horse. A. Stuber, supt.
"	"		C. P. Minnich. Cap. \$10,000. Mt. Carbon. Tunnel, 10,000 tons; hand. Benner Minnich, supt.
Uhrichsville	Tuscarawas Ry. 171, 584.		Diamond Fire Clay Co. James Ball, pres.; J. M. Cooper, secy., treas. and mgr. Cap. stk. \$25,000. Diamond. Tunnel, 7,000 tons; horse. George Ross, supt.
"	"		D. Dunlavey (local). Drift, 1,000 tons; hand.
"	"		John W. Fetter (local). Cap. \$1,000. Fetter. Open pit, 650 tons; hand.
"	"		Ebenezer H. Gowin (local). Fruit Hill. Open pit; hand.

## COAL—BITUMINOUS—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, COKE OVENS, AND NAME OF MINE SUPERINTENDENT.
TOWN AND	COUNTY.	
Uhrichsville.	Tuscarawas	Jacob Huston (local). Cap. \$5,000. Huston. Open pit, 550 tons; horse.
"	"	John M. Smith (local). Scott. Drift, 1,40 tons; horse.
"	"	Uhrichsville Fire Clay Co. W. B. Thompson, pres.; T. J. Evans, secy.; George Beck, treas. Cap. stk. \$30,000. Slope, 5,000 tons.
Utley Ry. 763.	Athens	Federal Valley Coal Co., New York, N. Y., 41 Dey st., Clarence Stephens, pres.; Samuel Snow, secy.; Melvin Stephens, treas. Cap. stk. \$1,000,000. Federal Creek No. 2. Tunnel, 30,000 tons; horse; breaker, washer, 125 coke ovens, capacity 5,000 tons. N. W. Musgrave, supt.
Vienna Ry. 506.	Trumbull	Home Block Coal Co., Youngstown, Ohio. Lute Hornlebeel, pres.; James Davis, secy. and treas.; John Bruns-wick, mgr. and supt. Cap. stk. \$1,000. Slope, steam (developing).
Wadsworth Ry. 503.	Medina	Akron Coal Co., Akron, Ohio, 112 S. Howard st., H. E. Loomis, pres. and mgr.; James P. Loomis, secy. and treas. Cap. stk. \$50,000. Stony Ridge. Slope, 60,000 tons; steam. V. Gerstenhager, supt.
"	"	Card & Barrett Coal Co., Cleveland, Ohio, 44 Enclid av. Cap. \$30,000. No. 1, Eldorado. Slope, shaft, 67,174 tons; steam. O. V. Dibble, supt.
"	"	W. B. Coleman, Raser Slope, 7,000 tons; steam. J. Jordan, supt.
"	"	Excess-for Mining Co. John J. Wagon, pres. and treas.; C. F. Wagon, secy. and mgr. Cap. stk. \$50,000. Excessfor. Slope, 100,000 tons; steam. Wm. Lydiard, supt.
Wakeup Ry. Broadwell 765.	Athens	J. R. Wlekham. Slope, 300 tons; horse.
Washingtonville Ry. 503.	Columbiana	Cherry Valley Iron Works, J. H. Klug, pres.; S. E. Welker, secy.; C. M. Schmieck, treas. Cap. stk. \$250,000. Cherry Valley. Slope, 120,000 tons; steam.
"	"	Fair View Mining Co., Youngstown, Ohio, 114 N. Market st., W. H. Warner, pres.; Wilford P. Ames, secy., treas. and mgr. Cap. stk. \$5,000. Fair View. Slope, 30,000 tons; steam. John Hillemann, supt.
"	"	Walter & Ferris Coal Co., Youngstown, Ohio, 17 Public Square, J. M. Ferris, pres. and treas.; J. H. Streeter, secy., J. M. Walter, mgr. Drift, 100,000 tons; steam, horse. James Thompson sr., mgr.
Waynesburg Ry. 175.	Stark	George Mincer (local). Cap. \$900. Baum. Slope, 1,000 tons; steam.
Wellston Ry. 42, 156, 535.	Jackson	Comet Coal Co., Dayton, Ohio, 101 Wayne av., W. W. Whitmore, pres.; J. D. Whitmore, secy., treas. and mgr. Cap. stk. \$200,000. indiv. cap. \$48,000. Comet. Shaft, 30,000 tons; steam. Peter Gallagher, supt.
"	"	Eliza Coal Co., Dayton, Ohio, 235 S. Lincoln st., S. J. Patterson, pres.; G. O. Richardson, secy.; D. Armstrong, treas.; John James, mgr. Cap. stk. \$50,000. Eliza. Shaft, 50,000 tons; steam.
"	"	Fulhart Coal & Mining Co., L. B. Boyd, pres.; A. T. Holcomb, secy.; John J. Roberts, treas.; Theo. Fulhart, mgr. Cap. stk. \$200,000. Shaft, 100,000 tons; steam.
"	"	Southern Ohio Coal & Iron Co., Dayton, Ohio, 302 E. Third st., A. A. Thomas, pres.; W. L. Caten, secy., treas. and mgr. Cap. stk. \$500,000. No. 3. Slope, 100,000 tons; steam. Allen Still, supt.
"	"	Superior Coal Co., M. S. Stumberger, pres.; H. S. Willard, secy. and mgr. Cap. stk. \$400,000. Shaft; steam, horse.
"	"	Wainwright Coal Co., R. H. Wainwright, pres.; D. J. Harry, mgr. and supt. Cap. stk. \$75,000. Wainwright. Shaft, 150,000 tons; steam.
Wellsville Ry. 175, 533.	Columbiana	C. B. Weaver (local). Cap. \$5,000. Tunnel, 10,000 tons; hand. A. L. Weaver, supt.
Western Star Ry. Akron 42, 169, 503, 582, 552, 778.	Summit	D. P. Davis (local). Slope, 2,000 tons; horse.
W. Lafayette Ry. 584.	Coshocton	Benj. C. Williams (local). Burt's Run. Tunnel, 1,000 tons; hand.
Yorkville Ry. 175.	Jefferson	Ohio & Pennsylvania Coal Co., Cleveland, Ohio. J. B. Zerbe, pres.; A. McGarry, secy. Open pit; horse, W. H. Ewing, supt.
Youngstown Ry. 383, 503, 563, 592.	Mahoning	Witch Hazel Coal Co., 114 N. Market st., Henry W'ick, pres.; Wilford P. Ames, secy., treas. and mgr. Witch Hazel. Shaft, 40,000 tons; steam. David Jacobs, supt.
Zaleski Ry. 43.	Vinton	Zaleski Co., W. T. McCutlick, pres.; Amos Smith, secy. and treas.; Robert Thompson, mgr. Cap. stk. \$150,000. Zaleski. Drift, 35,000 tons; horse. T. L. Watkins, supt.
Zanesville Ry. 42, 173, 543, 169, 182, 834.	Muskingum	James H. Alexander (local). Open pit, 100 tons; hand.
"	"	Bridewell & Barton, 265 E. Pike st. Slope, 4,000 tons; hand. George Jones, supt.
"	"	J. A. Detenbeck. Cap. \$10,000. Oak View. Tunnel, 4,000 tons; horse. Thomas Toole, supt.
"	"	Theo. Dietz (local). Slope, 35 tons.
"	"	John German (local). Tunnel, 2,000 tons; hand. George German, supt.
"	"	Geo. H. Harper (local). Open pit, 1,800 tons; horse.
"	"	Thomas Potts, 67 Adams st. (local). Tunnel, 1,500 tons; hand.
"	"	Wm. A. Werner, 66 Eighth st. (local). Cap. \$8,000. Tunnel, 14,000 tons; hand. James Foutz, supt.
Zoar Ry. 174, 175, 809.	Tuscarawas	Wm. R. Jones. Cap. \$8,000. Eagle Hill. Tunnel, 11,236 tons; horse.
"	"	Zoar Society (local). Tunnel, 375 tons; hand.

## COAL CANNEL

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, COKE OVENS, AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Pigeon Run Stark Ry. Massillon 171, 563.	O. Young Coal Co., Cleveland, Ohio, 725 Society Savings Bldg. Cap. stk. \$60,000. Camp Creek. Shaft, 50,000 tons; steam. Joseph Collier, supt.
Warsaw Coshocton Ry. 161.	Pinkney Cannel Coal Co., Cleveland, Ohio, 505 Western Reserve Bldg. J. B. Zerbe, prest. and treas.; E. E. Barney, secy. Cap. stk. \$50,000. Warsaw. Drift. 30,000 tons; horse. W. G. Jones, supt.

## FIRE CLAY

LOCATION OF MINE OR BANK, RAILWAYS, WATER ROUTES, AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE OR BANK, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, ETC., AND NAME OF SUPERINTENDENT.
TOWN AND COUNTY.	
Canal Dover, Tuscarawas Ry. 171, 174, 175.	Dover Fire Brick Co., Cleveland, Ohio, cor. Bank and Superior sts., C. S. Barrett, prest. and treas.; G. H. Ganson, secy.; P. Arnold, mgr. Cap. stk. \$100,000. Barretts. Tunnel, 30,000 tons; hand.
Canton Stark Ry. 173, 385, 478.	Canton Brick Co. H. S. Belden, prest.; J. L. Higley, secy. and treas.; Peter Miller, mgr. Shale clay.
Coleman Columbiana Ry. 569.	Union Fire Clay and Stone Co. C. Coleman, prest.; C. S. Coleman, supt. and treas.; Wm. Douglas, mgr. Cap. stk. \$10,000. Coleman. Tunnel, 17,000 tons; steam. J. T. Griffiths, supt.
Cuyahoga Falls, Summit Ry. 169, 592.	Camp & Thompson. Cap. \$100,000. Open pit, 18,000 tons; water, steam.
E. Palestine, Columbiana Ry. 563.	State Line Sewer Pipe Co. James Mullins, prest.; Robert F. Taggart, secy. and treas.; Hugh Laughlin, mgr. and supt. Cap. stk. \$50,000. State Line. Slope, 50,000 tons; steam.
Empire Jefferson Ry. 175.	Congo Fire Clay Co. B. U. Wilkinson, prest. and mgr.; Thos. Wilkinson, secy. and treas. Cap. stk. \$30,000. Congo. Slope, 800,000 tons.
" " "	Minor Fire Clay Co. Tunnel, 8,000 tons; horse.
Freeman Jefferson Ry. 175.	Freeman Fire Clay Co. C. A. Freeman, prest.; J. M. Freeman, secy. Cap. stk. \$80,000. Tunnel, 15,000 tons.
Greenford Mahoning Ry. 563.	Greenford Fire Clay Co. Cap. stk. \$5,000. Slope, 2,000 tons; steam.
Haydensville, Hoeking Ry. 181.	Haydensville Mining & Manufacturing Co. Charles H. Hayden, prest.; J. W. Jones, secy., treas. and mgr. Cap. stk. \$40,700. Mingo. Open pit, tunnel, 65,000 tons; steam.
Irontdale, Jefferson Ry. 563.	Wm. Lacey, Cleveland, Ohio, 77 and 79 River st. Cap. stk. \$100,000. Lacey, sandstone and fire clay. Shaft, 18,000 tons; steam.
Lilly Scioto Ry. Geplart 43.	R. H. & G. C. Cook. Cap. \$5,000. Enterprise. Slope, 6,500 tons; steam. R. H. Cook, supt.
Logan Hoeking Ry. 181.	Joe Bartholow. No. 6. Open pit, 10,000 tons.
Magnolia Carroll (Not a P. O.) Ry. 175.	Beatty Fire Clay Co., Canton, Ohio. W. M. Beatty, prest., mgr. and supt.; J. J. Whitacre, secy. and treas. Cap. stk. \$10,000. Beatty. Tunnel, 8,000 tons; horse.
Malvern Carroll Ry. 175.	Malvern Clay Co. John H. Wilson, prest.; George H. Aller, secy., treas. and mgr. Cap. stk. \$6,500. Malvern. Slope, 20,000 tons; horse. Peter Reich, supt.
" " "	Phoenix Fire Clay Co. C. A. Weaver, prest.; R. Roberts, secy. and treas.; Samuel Hodgkinson, mgr. Cap. stk. \$75,000. Phoenix. Slope, 900,000 tons; steam. John Connor, supt.
Massillon Stark Ry. 171, 585, 809.	Massillon Stone & Fire Brick Co., Pittsburg, Pa., 333 Penn. av. R. P. Duff, prest.; Wm. G. Hepp, secy. and mgr.; E. A. Kitzmiller, treas. Cap. stk. \$80,000. Tunnel, 25,000 tons; steam.
Maxville Perry Ry. Winona Furnace 181.	L. M. Butt. Tunnel; hand.
Mineral Point, Tuscarawas Ry. 175, 778.	C. E. Brothers (local). Open pit.
Mogadore Summit Ry. 173.	Myers & Hall. Fire clay. 5,000 tons.
McVern Furn., Lawrence (P. O. Campbell) Ry. 156	Campbell Iron Co., Ironton, Ohio. J. H. Moulton, prest.; H. H. Campbell, secy. and treas.; J. W. Camp- bell, mgr. Cap. stk. \$100,000. Mt. Vernon Furnace. Open pit, 6,000 tons; hand.
Navarre Stark Ry. 173, 809.	Akron Fire Brick Co., Akron, Ohio, 106 Bank st. C. A. Allison, prest.; B. M. Allison, secy., treas. and mgr. Cap. stk. \$50,000. Navarre. Slope, 5,000 tons; hand.
Nelsonville Athens Ry. 181.	Nelsonville Sewer Pipe Co. James Dew, prest. and mgr.; C. H. Doan, secy. and treas. Cap. stk. \$25,000. Tunnel, 45,000 tons; steam.
New Lisbon, Columbiana Ry. 503, 586.	Keystone Fire Clay Co. Fred H. Pritchard, prest. and mgr.; Willis Jordan, secy. and treas. Cap. stk. \$25,000. Keystone. Tunnel, 15,000 tons; horse. John Gillis, supt.
Portsmouth Scioto Ry. 42, 165, 523, 539.	Scioto Star Fire Brick Works. E. B. Greene, prest.; R. A. Mitchell, secy. and mgr. Cap. stk. \$48,000. Tunnel, 15,000 tons.
Sandy Tuscarawas P. O. and Ry. Mineral Point 173, 778.	Edward Holden. Point Savage. Tunnel, 5,000 tons; horse. Wm. Holden, supt.
Springfield Summit (P. O. Akron) Ry. 42, 169, 563, 582, 592, 778.	Akron Clay Co. Archie Markle, secy. and treas.; Geo. W. Markle, mgr. Cap. stk. \$6,000. Harshberger. Open pit; steam. John Grant, supt.
Toronto Jefferson Ry. 175.	John Franey's Sons Co. Cap. \$150,000. Forest City. Slope, 25,000 tons; steam.

## FIRE CLAY—(CONTINUED)

LOCATION OF MINE OR BANK, RAILWAYS, WATER ROUTES, AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE OR BANK, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, ETC., AND NAME OF SUPERINTENDENT.
TOWN AND COUNTY.	
Toronto Jefferson	Great Western Fire Clay Co. Cap. \$150,000. Shaft, 24,000 tons; steam.
" (Continued) "	Jefferson Fire Clay Co. Cap. \$53,000. Jefferson. Shaft, 10,000 tons; steam. D. H. Kerr, supt.
Urbichsville Tuscarawas	Diamond Fire Clay Co., James Ball, prest.; J. M. Cooper, secy., treas. and mgr. Cap. stk. \$25,000. Tunnel, 20,000 tons; horse.
Ry. 171, 384.	Urbichsville Fire Clay Co. W. B. Thompson, prest.; T. J. Evans, secy. and mgr.; George Beck, treas. Cap. stk. \$30,000. Slope; steam.
" " "	
Walkers Columbiana	N. C. Walker Clay Manufacturing Co. N. C. Walker, prest., treas. and mgr.; M. J. Ryan, secy. Cap. stk. \$270,000. Walker. Open pit, 15,000 tons; steam.
Ry. 565.	

## IRON

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, BLAST FURNACES, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Blackband, Tuscarawas	Ridgway Burton Co., Massillon, Ohio. J. P. Burton, prest. and treas.; D. Johns, secy. Cap. stk. \$80,000. Ankeny, black band ore. Tunnel, 25,000 tons; horse. Christian Maupier, supt.
Ry. 174.	
Bloom Switch, Scioto	Clare Iron Co., Portsmouth, Ohio. J. D. Clare, prest. and treas.; E. H. Clare, secy. and mgr. Cap. stk. \$100,000. Black ore. Open pit, 10,000 tons; hand; charcoal furnace, capacity 3,000 tons. J. N. Foster, supt.
Ry. 43.	
Campbell, Lawrence	Campbell Iron Co., Ironton, Ohio. J. H. Moulton, prest.; H. H. Campbell, secy. and treas.; J. W. Campbell, mgr. and supt. Cap. stk. \$100,000. Mt. Vernon Furnace, iron ore. Open pit, 10,000 tons; hand.
Ry. Mt. Vernon Furnace 156.	
Canal Diver, Tuscarawas	Penn Iron & Coal Co. J. P. Burton, prest.; H. S. Esim, secy.; S. W. Croxton, treas. and mgr. Cap. stk. \$200,000. Bather, black band ore. Slope, open pit, 15,000 tons; horse, hand, furnace. George Beck, supt.
Ry. 171, 174, 175.	
Fairfield, Tuscarawas	G. V. Kollar. Cap. \$5,000. Black band ore. Tunnel, 3,000 tons; hand.
(P. O. New Philadelphia) Ry. Reed's Run 784.	
Hanging Rock, Lawrence	Mears, Kyle & Co. E. B. Willard, prest.; James Ball, secy. and treas. Cap. \$90,000. Pine Grove, carbonate iron ore. Open pit, tunnel, 25,000 tons; hand; charcoal furnace. A. R. Mackintosh, supt.
Ry. 523.	
Mt. Vernon Furn., Lawrence	Campbell Iron Co., Ironton, Ohio. J. H. Moulton, prest.; H. H. Campbell, secy. and treas.; J. W. Campbell, mgr. Cap. stk. \$100,000. Mount Vernon Furnace, iron ore. 10,000 tons; hand.
(P. O. Campbell) Ry. 156.	
New Philadelphia, Tuscarawas	George V. Kollar. Cap. \$5,000. Black band ore. Tunnel, 3,000 tons; hand.
Ry. 171, 175.	
Olive Furnace, Lawrence	McGuen & Co. Olive Furnace, limonite. Tunnel, 10,000 tons; charcoal furnace.
Ry. 167.	
Post Boy, Tuscarawas	Black Band Iron Co., Marietta, Ohio. A. J. Warner, prest.; Geo. H. Jones, secy. Cap. stk. \$100,000. Post Boy, black band ore. Drift, 10,000 tons; horse. A. J. Onstine, supt.
Ry. 174.	
" " "	Morris & Howells, Canal Diver, Ohio. Cap. stk. \$10,000. Camp Morris, black band ore. Tunnel, 25,000 tons; horse. William Morris, supt.
" " "	
Rudell, Vinton	D. H. Pearce. Iron ore. Tunnel, open pit, 5,000 tons; hand. L. Arbaugh, supt.
Ry. 181.	

## SALT

LOCATION OF MINE OR WELL, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF PRODUCT, KIND OF MINE OR WELL, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Pomeroy	Buckeye Salt Co., George McQuigg, prest.; A. D. Brown, secy., treas. and mgr. Cap. stk. \$65,000. Course, fine, dairy. 75,000 brls.; steam.
Ry. 181.	
" " "	Coal Ridge Salt Co., M. B. Wells, prest.; John M. Davis, secy. and treas.; J. W. Thomas, mgr. Cap. stk. \$25,000. Coal Ridge. 50,000 brls.; steam.
" " "	Ebersbach, Schaefer & Co. Cap. \$25,000. Pomeroy. Common, fine, dairy. Well, 60,000 brls.; steam.
" " "	Excelsior Salt Works, B. Koehler, propr. Cap. \$3,000. Excelsior, Dairy, common, fine, 4 wells, 11,000 tons; horse.
" " "	John J. Juhler, Cap. \$30,000. White Rock. Common, fine. Artesian wells, 50,000 brls.; steam.
Syracuse	Syracuse Coal & Salt Co. Ralph Cheney, prest.; P. W. Robbins, secy. and treas.; L. H. Bridgeman, mgr. Cap. stk. \$100,000. Syracuse. Common, fine, dairy. Shaft; well, 42,500 brls.; steam, horse. Adam Dickworth, supt.
Ry. 533.	

## STONE, MARBLE, GRANITE AND ONYX

LOCATION OF MINE OR QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE OR QUARRY, KIND OF STONE, KIND OF MINE OR QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF FUEL USED, STONE OR MARBLE MILLS, LIMESTONES AND CAPACITY, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Akron..... Summit Ry. 322, 169, 42, 506.	J. Hugill, 114 South College st. Cap. stk. \$20,000. Sandstone. Open pit, 4,800 tons; horse.
Amherst..... Lorain Ry. 383.	Ohio Stone Co., Cleveland, Ohio, 204 Superior st. J. M. Hughes, pres.; L. P. Haldeman, v.-pres. and secy.; C. C. Caskey, treas.; D. D. Haldeman, mgr. Cap. stk. \$200,000. Sandstone. Open pit, 14,600 tons; steam; mill.
Amity..... Montgomery Ry. Trotwood 170, 584.	A. J. Shaffer (local). Limestone. Hand; mill.
Barr's Mills. Tuscarawas Ry. 173.	Kitzmiller Stone Co., Canton, Ohio, 18 W. Eighth st. John W. Gabriel, pres., secy. and treas.; H. A. Kitzmiller, mgr. Cap. stk. \$22,500. Kitzmiller, sandstone. Open pit, 18,000 tons; steam; mill. John Saunders, supt.
Berea..... Cuyahoga Ry. 170, 383.	Cleveland Stone Co., Cleveland, Ohio, Wilshire Bldg. J. M. Worthington, pres.; Geo. H. Worthington, secy. and treas. Cap. stk. \$2,250,000. Berea, sandstone. Open pit, 42,000 tons; steam; mill. James Nicholl, gen. supt.
Berlin Heights..... Erie Ry. Ceylon 383.	G. A. Baillie. Sandstone. Slope, 16,000 tons; steam.
Bluestone..... Cuyahoga Via Cleveland 170, 173, 175, 383, 502, 503, 778.	Maxwell Rolf & Co., Cleveland, Ohio, 5 Euclid av. Cap. stk. \$20,000. Bluestone. Open pit, 100,000 tons; steam; mill.
Bluffton..... Allen Ry. 378, 582.	Siddall & Townsend. Limestone. Open pit, 45,000 tons; steam; limekiln, capacity 2,400 tons.
Bowling Green..... Wood Ry. 156, 700.	Murphy & Mercer. Cap. stk. \$3,000. Limestone. 20,000 tons; steam; mill. George E. Mercer, supt.
Briggs..... Washington Ry. 43.	D. B. Calder. Cap. \$2,000. Constitution, sandstone. 200 tons; steam
"..... "	F. W. Knowles (local). Grindstones. 200 tons; hand; mill.
Brookfield..... Trumbull Ry. 383.	Hamilton & Dailey Stone Co. Cap. stk. \$8,000. Whittaker, sandstone. Open pit, 2,000 tons; steam; mill.
Brownhelm..... Lorain Ry. 383.	Cleveland Stone Co., Cleveland, Ohio, Wilshire Bldg. J. M. Worthington, pres.; George H. Worthington, secy. and treas. Cap. stk. \$2,250,000. Brownhelm, sandstone. Open pit, 42,000 tons; steam; mill. James Nicholl, gen. supt.
Buena Vista..... Scioto Ry. 533.	Buena Vista Freestone Co., Adolph Cadm, pres.; W. L. Cadm, secy. Cap. stk. \$50,000. Buena Vista, freestone. Open pit, 20,000 tons; steam; mill. Adolph Cadm, supt.
"..... "	John Miller & Sons, Cap. stk. \$25,000. Buena Vista, freestone. Open pit, 5,000 tons; steam.
Campbell..... Lawrence Ry. Mt. Vernon Furnace 156.	Campbell Iron Co., Ironton, Ohio. J. H. Moulton, pres.; H. H. Campbell, secy. and treas.; J. W. Campbell, mgr. and supt. Cap. stk. \$100,000. Mt. Vernon Furnace, limestone. Open pit, 20,000 tons; hand.
Carthage..... Hamilton Ry. 156, 170.	F. E. Wiehe (local). Cap. \$2,000. Limestone. Open pit, 578 tons; hand.
Centreville. Montgomery Ry. Douds 158.	James Maurel. Sandstone. 1,400 tons.
Clarksfield..... Huron Ry. 809.	Furlong Stone Co. Cap. stk. \$10,000. Furlong quarry, sandstone. Open pit; steam and horse; mill. Daniel Malloy, supt.
Cold Springs..... Clarke Ry. 170.	Moores & Co. Limestone. Slope; steam. W. H. Kennedy, supt.
Columbia Station. Lorain Ry. 170.	Cleveland Stone Co., Cleveland, Ohio, Wilshire Bldg. J. M. Worthington, pres.; George H. Worthington, secy. and treas. Cap. stk. \$2,250,000. Columbia, sandstone. Open pit, 42,000 tons; steam; mill. James Nicholl, gen. supt.
Constitution. Washington Ry. 43.	Constitution Stone Co. M. J. O'Connor, pres. and treas.; Thomas Cleary, secy. and supt. Sandstone 2,000 tons; steam; mill.
Covington..... Miami Ry. 156, 584.	J. W. Ruhl. Cap. \$20,000. Rocky Branch, limestone. Open pit, 18,000 tons; steam; mill. limekilns capacity 2,625 tons; J. R. Rench, supt.
Edinburg..... Portage Ry. 153.	W. B. Davis. Red sandstone. Open pit; hand.
Effort..... Scioto Ry. 43.	W. E. Marsh & Co. Limestone. Open pit, 30,000 tons; hand. W. E. Marsh, supt.
Ellsworth..... Mahoning Ry. 563.	M. J. Barnes. Cap. \$8,000. Sandstone, limestone. Open pit; hand.
Elyria..... Lorain Ry. 171, 383.	George E. Bryant, 13 W. Third st. Cap. \$10,000. Sandstone. Open pit, 800 tons; steam; mill.
"..... "	H. E. Mussey & Co. Mussey, sandstone. Open pit; steam.
Forest Dale. Lawrence Ry. Ironton 156, 329, 529, 533.	Edward Adkins. Limestone. Open pit, 50,000 tons; hand.
Fostoria..... Seneca Ry. 42, 181, 502, 765.	D. P. Lloyd Co. Cap. \$30,000. Limestone. Open pit, 15,000 tons; steam; limekiln, capacity 9,000 tons.
Freemont..... Sandusky Ry. 378, 383, 802.	Gottrom Bros. Limestone. Open pit, 6,400 tons; steam, hand; limekiln, capacity 60,000 brls.
Fulton..... Morrow Ry. 765.	J. B. Rinehart. Cap. \$2,000. Fulton, sandstone. Open pit, 14,000 tons; steam. B. J. Lyons, supt.



## STONE, MARBLE, GRANITE AND ONYX—(CONTINUED)

LOCATION OF MINE OR QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT.		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE OR QUARRY, KIND OF STONE, KIND OF MINE OR QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STONE OR MARBLE MILLS, LIMEKILNS AND CAPACITY, ETC., AND NAME OF MINE SUPERINTENDENT.	
TOWNS	AND COUNTY.		
Fultonham	Muskingum	Hoover Bros.	Fultonham, limestone. Open pit, 10,000 tons; steam; limekiln.
Grafton	Lorain	Elyria Stone Co., Elyria, Ohio.	H. E. Corning, pres.; W. L. Fay, secy., treas. and mgr. Cap. stk. \$165,000. Elyria, sandstone. Open pit, 320,000 tons; steam; mill. Charles F. Peckles, supt.
"	"	Grafton Stone Co., E. S. Flint, pres.; W. S. Miller, secy.; Col. S. Bliss, treas.; W. E. Miller, v.-pres. and mgr.	Sandstone, 80,000 tons; Cap. stk. \$120,000; steam; mill.
Greenfield	Huron	Coit & Graham.	Steuken, sandstone. Open pit, 500 tons; hand.
(P. O. Steuben)	Ry.		42, 535.
Hanging Rock	Lawrence	Means, Kyle & Co., E. B. Willard, pres. and mgr.; James Bull, secy. and treas.	Cap. stk. \$500,000. Junior Hearth Stone, sandstone. Hand (developing).
Ry. 523.			
Independence	Cuyahoga	J. Bender (lessee).	Smiths, sandstone. Open pit, 300 tons; horse.
Ry. 778.			
"	"	Little & Pettibone, Cleveland, Ohio, 5 Euclid av.	In dependence, freestone. Mill
"	"	Ohio Stone Co., Cleveland, Ohio, 204 Superior st., J. M. Hughes, pres.; L. P. Haldeman, v.-pres. and secy.; C. C. Caskey, treas.; D. D. Haldeman, mgr.	Cap. stk. \$200,000. Sandstone. Open pit, 14,000 tons; steam; mill.
Killbuck	Holmes	Killbuck Brown Stone Co., Chas. E. Duer, secy.; Z. T. Duer, treas. and mgr.	Killbuck, sandstone. Open Ry. 162.
"	"		hand; mill. Enos Schlorff, supt.
La Grange	Lorain	Cleveland Stone Co., Cleveland, Ohio, Wilshire Bldg., J. M. Worthington, pres.; George H. Worthington, secy. and treas.	Cap. stk. \$2,250,000. La Grange, sandstone. Open pit, 42,000 tons; steam; mill. Jas. Nichol, gen. supt.
Ry. 170.			
Lamaster	Fairfield	F. C. Nerb.	Cap. \$50,000. Alleghany, sandstone. 75,000 tons; steam, horse. Wm. Strachan, supt.
Ry. 164, 181.			
Lime City	Wood	Lime City Co., C. H. Sawyer, pres.; J. P. Bronson, secy. and treas.	G. S. Breed, mgr. Cap. stk. \$50,000. Lime City, limestone. Open pit, 60,000 tons; steam; 4 limekilns. J. Heffernan, supt.
Ry. 760.			
"	"	Michigan Stone & Supply Co., Detroit, Mich., 4 W. Fort st., Gus. F. Smith, pres. and mgr.; Cameron Currie, secy. and treas.	Cap. stk. \$100,000. Home-stead Quarry, limestone. Open pit, 50,000 tons; steam. Orlando Edmon, supt.
Lucas	Richland	Richland Stone Co., Mansfield, Ohio, Savings Bank Bldg., H. C. Post, pres.; Ed H. Zurlhorst, secy.; Geo. E. St. John, treas.; Chas. W. French, mgr.	Cap. stk. \$500,000. Lucas, Sandstone; slope and steam.
Ry. 585.			
Lykens	Crawford	A. J. Brown.	Limestone; open pit; steam.
Ry. 582.			
McArthur	Vinton	J. H. Pileher (local).	Pileher, limestone. Open pit; hand.
Ry. 181.			
McClainville	Belmont	Joseph McClain & Son, Bellaire, Ohio, 3322 Guernsey st., Joseph McClain, pres. and mgr.; Wm. G. McClain, secy. and treas.	Cap. stk. \$100,000. McClainville, sandstone. Open pit, 20,000 tons; steam. Henry Hally, supt.
Ry. 42.			
Marble Cliff	Franklin	T. J. Price & Co., Columbus, Ohio, 72 N. 8-500 st.	Marble Cliff, limestone. Open pit, 30,000 tons; steam, limekiln, capacity, 5,000 tons. J. E. Price, supt.
Ry. 584.			
Marblehead	Ottawa	Kunz & Johnson, Sandusky, Ohio, Water st., Cap. \$75,000.	Limestone. Open pit, 10,000 tons; hand; limekiln, capacity 150,000 brls. John Burns, supt.
Ry. 384.			
"	"	Sloss Marblehead Lime Co., S. Sloss, pres. and treas.; F. Vandervell, mgr.	Sloss Marblehead, limestone. Open pit.
Massillon	Stark	Vogt Stone Co., Wm. H. Vogt, pres.; Wm. McMillan, secy. and treas.; F. T. Vogt, mgr. and supt.	Cap. stk. \$8,400. Sandstone. Open pit, 15,000 tons; steam; mill.
Ry. 171, 583, 800.			
"	"	Warthorst & Co., Sandstone, sand.	
Mt. Vernon Furn.	Lawrence	Campbell Iron Co., Ironton, Ohio., J. H. Moulton, pres.; H. H. Campbell, secy. and treas.; J. W. Campbell, mgr.	Cap. stk. \$100,000. Mt. Vernon Furnace, limestone. Open pit, 12,000 tons; hand.
(P. O. Campbell)	Ry. 156.		
Newark	Licking	George Havens.	Newark, freestone. Open pit, 2,000 tons; hand.
Ry. 42, 584.			
New Lisbon	Columbiana	John H. O'Mara.	Cap. \$5,000. Excelsior, sandstone. Open pit, 1,000 tons; hand.
Ry. 560, 586.			
Newport	Adams	Highland Stone Co., Norwood, Ohio., F. J. McFarlan, pres. and secy.; John W. Tidball, secy., mgr. and supt.	Cap. stk. \$5,000. Lime-tone. Open pit, 19,500 tons; mill.
(P. O. name Wilson)	Ry. 165.		
"	"	L. & F. Tueting, Cincinnati, Ohio, 50 Webster st.	Cap. stk. \$10,000. Shinar, limestone. Open pit, 2,000 tons; hand. F. Tueting jr., supt.
North Amherst	Lorain	Cleveland Stone Co., Cleveland, Ohio, Wilshire Bldg., J. M. Worthington, pres.; George H. Worthington, secy. and treas.	Cap. stk. \$2,250,000. North Amherst, sandstone. Open pit, 15,000 tons; steam; mill. James Nichol, gen. supt.
Ry. 383.			
Olmstead Falls	Cuyahoga	Cleveland Stone Co., Cleveland, Ohio, Wilshire Bldg., J. M. Worthington, pres.; George H. Worthington, secy. and treas.	Cap. stk. \$2,250,000. Olmstead Falls, sandstone. Open pit, 42,000 tons; steam; mill. James Nichol, gen. supt.
Ry. 384.			
Otway	Seloto	W. R. Smith & Sons, Freeman, sandstone.	Open pit, 65,000 tons; steam, horse, hand. F. C. Smith, O. F. Smith and James Barker, supts.
Ry. 165.			
Owen	Marion	D. Owens & Son, Owens, limestone, sandstone.	32,850 tons; steam; limekiln, capacity 2,400 tons. Daniel Owens, supt.
Ry. 181.			
Peninsula	Summit	Cleveland Stone Co., Cleveland, Ohio, Wilshire Edg., J. M. Worthington, pres.; George H. Worthington, secy. and treas.	Cap. stk. \$2,250,000. Peninsula, sandstone. Open pit, 42,000 tons; steam; mill. James Nichol, gen. supt.
Ry. 778.			

## STONE, MARBLE, GRANITE AND ONYX (CONTINUED)

LOCATION OF MINE OR QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE OR QUARRY, KIND OF STONE, KIND OF MINE OR QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, SIZES OR MARBLE MILLS, LIMEkilNS AND CAPACITY, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Peninsula ..... Summit (Continued.)	Ohio Stone Co., Cleveland, Ohio, 29 Superior st., J. M. Hughes, pres.; L. P. Haldeman, v.-pres. and secy.; C. C. Caskey, treas.; D. D. Haldeman, mgr., Cap. stk. \$200,000. Sandstone. Open pit, 14,000 tons; steam; mill.
Plymouth ..... Richland Ry. 42, 582.	Plymouth Stone Co., D. L. Critten, pres.; Jacob Wallace, secy. and treas.; C. H. Whittier, mgr. and supt. Cap. stk. \$6,000. Sandstone. Open pit; steam, horse.
Point Pleasant ..... Clermont Ry. 533.	Gallbreath & Bushman, Cap. \$3,000. Limestone. Open pit, 6,000 tons; horse, hand.
" .....	Point Pleasant Stone quarry. Limestone. Open pit, 750 tons; hand. George F. Knabb, supt.
Ridgeville ..... Lorain (P. O. Cement) Ry. Shawville 383.	Dallas Beebe, Cap. \$3,000. Beebe, sandstone. Open pit, 75,000 tons; horse, hand.
Rockbridge ..... Hoeking Ry. 181.	Detroit & Hoeking Valley Red & Brown Stone Co., Detroit, Mich., 55 Champlain st., Joseph S. Visger, pres.; Richard J. Sinclair, secy.; G. Chirra, treas.; Charles C. Canny, mgr., Cap. stk. \$100,000. Hoeking Valley, sandstone. Open pit, 15,000 tons; steam. H. A. Flowers, supt.
St. James ..... Morrow Ry. 179.	Buckeye Stone Co., J. J. McClarren, pres.; A. W. Monroe, secy. and treas.; J. H. McClarren, mgr. and supt. Cap. stk. \$20,000. Buckeye, sandstone. Open pit, 15,000 tons; steam.
Silverton ..... Hamilton Ry. 158.	J. K. Galloway, Limestone. Open pit.
Springfield ..... Clarke Ry. 179, 503, 533, 584.	Wm. K. Duke, 97 W. Mulberry st., Mill Creek, limestone. Open pit; hand; mill.
" .....	Mills Bros., 107 S. Limestone st., Cap. stk. \$40,000. Limestone. Open pit, 25,000 tons; steam and hand; mill, kiln, 8,500 tons. Henry Hoss, supt.
Stony Ridge ..... Wood Ry. 765.	Luckey Stone Co., Elmore, Ohio, J. B. Luckey, proprietor. Luckey, limestone. Open pit, 40,000 tons; steam; mill.
Sugar Grove ..... Fairfield Ry. 181.	R. L. Sharp Stone Co., Sandstone. Open pit; hand, horse.
" .....	Wm. Sharp, Buckeye. Open pit, 2,000 tons; hand.
Sulphur Grove ..... Montgomery Ry. Dayton 156, 170, 297, 543, 584.	D. P. Oram, Limestone. Open pit, 1,000 tons; hand.
Sunbury ..... Delaware Ry. 169.	Sunbury Stone Co., William Bunyan, pres.; Edward T. Bunyan, secy. and mgr. Cap. stk. \$25,000. Sunbury. Open pit, 4,800 tons; steam; mill. John Hunter, supt.
Thompson ..... Geauga Ry. Madison 383, 502.	Chrys Sidley, Cap. \$2,000. Sandstone. 20,000 tons; horse and hand; mill.
Tiffin ..... Seneca Ry. 42, 170, 530.	J. Poling, Cap. \$3,000. Limestone. Open; hand.
Vincent ..... Washington Ry. 765.	Hayes Bros., Cap. \$15,000. Sandstone. Open pit, 1,000 tons; steam; mill.
Wakeman ..... Huron Ry. 383.	Cleveland Stone Co., Cleveland, Ohio, Wilshire Bldg., J. M. Worthington, pres.; George H. Worthington, secy. and treas. Cap. stk. \$2,250,000. Wakeman, sandstone. Open pit, 42,000 tons; steam; mill. Jas. Nicholl, gen. supt.
Waverly ..... Pike Ry. 323, 535.	Waverly Stone Co., W. S. Jones, pres.; J. W. Logan, secy. and treas.; R. E. Sharpe, mgr. and supt. Cap. stk. \$5,000. Sandstone. Open pit, 24,000 tons; steam, horse, hand; mill. R. E. Sharpe, supt.
West View ..... Cuyahoga Ry. 170.	Cleveland Stone Co., Cleveland, Ohio, Wilshire Bldg., J. M. Worthington, pres.; George H. Worthington, secy. and treas. Cap. stk. \$2,250,000. West View, sandstone. Open pit, 42,000 tons; steam; mill. Jas. Nicholl, gen. supt.
Whitehouse ..... Lucas Ry. 784.	J. L. Pray & Son, Cap. stk. \$3,000. Sandstone. Open pit, 10,000 tons; hand; mill. J. E. Pray, supt.
Youngstown ..... Mahoning Ry. 382, 503, 563, 591.	Youngstown Stone Co., R. T. Walker, pres.; F. P. Hood, secy.; Wm. Cornelius, treas.; George W. Canfield, mgr. Cap. stk. \$5,000. Youngstown, sandstone. Open pit; steam; sand mill.
Zanesville ..... Muskingum Ry. 42, 164, 170.	E. M. Ayers, 108 Main st., Cap. \$10,000. Dillon Falls, sandstone. Open pit, 10,000 tons; steam. Harry Lucas, supt.
" .....	A. Emery, Cap. \$10,000. Putnam, sandstone. Slope, 7,000 tons; hand.
" .....	John W. King, 15 N. Fourth st., Kings, fire clay, sandstone. Open pit, 3,000 tons. George Smith, supt.
" .....	Phillip Mowrin (local), 93 Elm st., Cap. \$1,500. Mowrin, limestone. Open pit, 9,000 tons; hand. Limekiln, 6,000 tons capacity.

SEE ALSO SUPPLEMENTARY LIST

## OREGON

## COPPER

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, FURNACES, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Gold Beach, .. . Curry Ry. 552.	N. Huntley. Black Diamond. Open pit. 40 tons; refractory; hand.

## GOLD AND SILVER

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Applegate, .. . Jackson Ry. Jacksonville 776 (17 miles).	John T. Layton. Cap. \$30,000. Farris Gulch, gold. Placer; hydraulic.
Ashland, .. . Jackson Ry. 692.	Ashland Mining Co., Portland, Ore., 13 Stark st. P. Kelly, pres.; H. T. Collin, secy. and treas. Cap. stk. \$200,000. Patton and A. N. King, gold and silver. Shaft and tunnel; free. Joseph A. Wilson, supt.
Auburn, .. . Baker Ry. Baker City 776.	Jas. V. Wells. Gold. Shaft, horse.
Baker City, .. . Baker Ry. 776.	Balsley-Elkhorn Mining Co., Portland, Ore., 140 First st. L. W. Nelson, pres.; mgr. and supt. S. J. Barber, secy. Cap. stk. \$1,000,000. Elkhorn, gold and silver. Shafts, tunnels and levels, 20,000 tons; free and refractory; steam. Bryan and Huntington mills.
"	" Baker City Gold & Silver Mining Co., Isidor Fuchs, pres.; A. B. Elmer, secy.; A. H. Terry, treas. Cap. stk. \$200,000. Monumental and Ticht Squawk, gold and silver. Shaft and tunnels; free (developing).
"	" Elkhorn Gold Mining Co., Portland, Ore., 181 First st. L. W. Nelson, pres.; Geo. X. Wolfe, secy.; North-Western Lead & Trust Co., treas.; Lewis O. Nelson, mgr. and supt. Cap. stk. \$100,000. Gold Medal and Gold Eagle, gold and silver. Shafts, tunnels, drifts and slopes, 9,000 tons; free and refractory; steam, mill.
" (12 miles).	" Elkhorn Mining Co., Portland, Ore. J. H. Robbins, pres.; mgr. and supt.; W. L. Harmon, secy.; I. G. Davidson, treas. Cap. stk. \$50,000. Elkhorn, gold and silver. Tunnel; free and refractory; water; mill.
" (37 miles).	" Eureka & Excelsior Consolidated Mining Co., St. Louis, Mo., 703 Orjel Bldg. R. C. Keuss, pres.; C. H. Smith, secy.; C. M. Donaldson, mgr. Cap. stk. \$30,000,000. Eureka and Excelsior, gold and silver. Tunnels, refractory; steam, 20 stamps.
" (35 miles).	" Geisler Estate. Albert Geisler, mgr. Bonanza, gold. Tunnel, 7,500 tons; free; steam; 10 stamps.
"	" Hodgins & Rohner. G. R. Hodgins, pres. and mgr.; John Rohner, secy.; P. R. Beship, treas. and supt. Cap. \$30,000. Cow Bay, gold and silver. Tunnel; free (developing).
"	" Jones & Carpenter. Cap. \$60,000. Never Sweat, gold. Placer, deep; hydraulic and water. Moses Carpenter, supt.
"	" Robinson Gold Mining Co. Geo. W. Robinson, pres. and secy.; D. W. C. Nelson, mgr. and supt. Cap. stk. \$1,000,000. North Star, gold. Tunnel, 1,600 tons; refractory.
" (16 miles).	" Robinson Mining Co. S. Ottenheimer, pres.; E. F. Waring, secy.; D. W. C. Nelson, treas., mgr. and supt. Cap. stk. \$1,000,000. Robinson, gold. Drift; refractory (developing).
"	" Snowstorm Consolidated Gold Mining Co., Bedford, Indiana. Thomas V. Thornton, pres.; Edmund B. Thornton, secy. and treas.; J. E. Menelam, mgr. and supt. Cap. stk. \$500,000. Snowstorm, Golden Chariot, Thornton, Windsor, Lily White, St. Albans and Eureka, gold. Slope and shaft, 9,000 tons; horse, water; 10 stamps.
"	" Washington Gulch Mining Co., Portland, Ore., 354 E. Oak st. S. M. Keenan, pres.; A. L. Keenan, secy. and treas.; Wm. Deemer, mgr. and supt. Cap. stk. \$125,000. Washington Gulch, gold. Placer; hydraulic.
Bolt, .. . Jackson Ry. Woodville 692.	Alexander Orme. Brother, gold. Placer; water.
Bridgeport, .. . Baker Ry. Baker City 776 (20 m.).	Burnt River Mining Co. Archie J. Murray, pres.; William Cox, secy.; J. H. Murray, treas., F. Caylin, mgr. and supt. Cap. \$10,000. Chicken Bar, gold. Placer; hydraulic.
"	" Henry Heisy. Blue Bar, gold. Tunnel, placer.
Cable Cove, .. . Baker (P. O. Baker City) Ry. McEwen, 776 (16 m.).	Eagle Mining Co. L. U. Cobath, pres.; W. S. Crismon, secy. and treas.; John O. Young, mgr. Cap. \$1,000,000. Eagle Group, gold and silver. Shafts and tunnels, 10 tons; free and refractory.
Caleb, .. . Grant Ry. The Dalles, 776.	Owens, Erierson & Taswell. Spanish Gulch, gold. Placer; hydraulic.
Canyon City, .. . Grant Ry. Baker City 776 (75 m.).	Hugh Cannon. Gold. Placer; water, hydraulic.
"	" Clark & Rulison. Last Chance, gold. Placer; hydraulic.
"	" William Halm. Quartz Gulch, gold. Placer; hydraulic.
"	" Humboldt Mining Association. H. W. Sloan, mgr. Cap. stk. \$25,000. Humboldt, gold. Placer; hydraulic. J. A. Whitman. Cap. \$1,000. Whitmans, gold. Placer; hydraulic, water.
Canyonville, .. . Douglas Ry. Riddles 692.	Ash & McWilliams. Cap. \$15,000. McWilliams and 1 Ash, gold. Placer; hydraulic.

## GOLD AND SILVER—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.			NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN	AND	COUNTY.	
Canyonville	Douglas	D. J. Bollenbough. Pickune, gold. Placer; hydraulic, water.	
"	"	(Continued.)	
"	"	Last Chance Mining Co. Last chance, gold, silver and copper. Tunnel; free; water. E. L. Goodridge, supt.	
"	"	D. A. Levens. Douglas, gold. Shaft and tunnel; free; water.	
"	"	James Yokum. Cap. \$500. Gold. Placer; hydraulic (developing).	
Connor Creek Ry. Huntington 776 (20 miles).	Baker	Connor Creek Mining & Milling Co., Portland, Ore., Abington Bldg. S. G. Reed, pres.; Marlin Wynch, secy. and treas.; J. Myrick, mgr. and supt. Cap. stks. \$1,000,000. Connor Creek, gold. Tunnel; 16,000 tons; free; water; 35 stamps.	
"	"	Dinning & Thomas. Cap. stks. \$2,000. Albatross, gold. Open pit, placer; water.	
Cornucopia Ry. Union 776 (40 m.).	Union	Companion Mining Co. Gold and silver. Shaft and tunnel; free and refractory; steam; 5 stamps. E. P. Torrey, supt.	
"	Baker City 776 (60 m.).	Last Chance Mining Co. Last Chance, gold. Tunnels; free and refractory (developing).	
"	"	New Discovery Mining Co. New Discovery, gold and silver. Tunnels; free and refractory (developing). R. Kelly, supt.	
"	"	Norway Mining Co. Cap. stks. \$6,000. Norway, gold. Tunnel, 3,000 tons; free and refractory; water; Huntington mill. Geo. Lindgreen, supt.	
"	"	Nyanza Mining Co. Nyanza, silver. Shaft; free and refractory (developing). Robert Kelly, supt.	
"	"	Oregon Gold Mining Co., Louisville, Ky., 514 W. Main st. Geo. H. Dietz, pres.; H. W. Bohmer, secy.; A. L. Schmidt, treas.; O. P. Steen, mgr. Cap. stks. \$300,000. Red Jacket and Whitman, gold and silver. Tunnel, 10,000 tons; free and refractory; steam and water; 20 stamps. J. H. Wilson, supt.	
"	"	Queen of the West Mining Co., gold. Shafts and inclines; free; hand (developing). Robert Kelly, supt.	
"	"	Stella Mining Co. Stella, gold and silver. Tunnel; free and refractory (developing). W. S. Wilson, supt.	
"	"	Union Mining Co. Anstead, Tice & Burdett, proprs. Union, gold and silver. Tunnel; free and refractory (developing).	
Eugene	Douglas	Myrtle Creek Hydraulic Gold Mining & Manufacturing Co., Eugene, Ore. L. W. Brown, pres., mgr. and supt.; J. F. Robinson, secy.; T. G. Hendricks, treas. Cap. stks. \$20,000. Myrtle Creek, gold. Placer; hydraulic.	
P. O. and Ry. Myrtle Creek 692.			
Glendale	Douglas	J. T. C. Nash. Nash, gold. Placer; hydraulic, water.	
Ry. 692.			
Granite	Grant	Balsley & Klopp. Cap. stks. \$30,000. Balsley & Klopp, gold. Placer, deep; hydraulic, water. Isaac Klopp, supt.	
Ry. Baker City 776 (35 m.).			
"	"	Fairview Ophir Mining Co., Pendleton, Ore., Calvin cor. W. R. R. st. Peter Parmentier, pres.; R. R. Dixon, secy.; David Horn, treas.; Frank Duprat, mgr. and supt. Cap. stks. \$150,000. Encouragement, gold, silver, copper and lead. Shaft; hand and horse; mill, 40 stamps.	
"	"	Granite & Greenhorn Milling and Mining Co., A. G. Taylor, pres.; C. S. Miller, secy., mgr. and supt. Cap. stks. \$1,250,000. Monumental and Morris Consolidated, silver. Shafts and tunnels; refractory; steam; 20 stamps.	
"	"	Grant Silver Mining Co., Portland, Ore., cor. Front S. st. Geo. W. Weidler, pres.; Thomas Gray, secy. and treas.; J. C. Powers, mgr. and supt. Cap. stks. \$100,000. Intrinsic and others, gold and silver. Shafts and tunnel; refractory; steam.	
"	"	G. H. Gutridge & Co. G. H. Gutridge, pres.; Harry Mack, secy.; M. Thornburg, treas.; E. E. Thornburg, mgr. Cap. stks. \$5,000. Camp Mason, gold. Placer; water. A. J. Dickson, supt.	
Grants Pass Ry. 692.	Josephine	T. J. & J. T. Clark. Cap. \$120,000. Quartz Boulder, gold. Placer, hydraulic. T. J. Clark, supt.	
"	"	Rogue River Mining & Developing Co. J. T. Flynn, pres.; A. C. Taylor, secy. and supt.; Robert G. Smith, treas. Cap. stks. \$100,000. Conductor and Gray Mule, gold. Tunnel and shafts, 1,000 tons; free and refractory; steam; 10 stamps.	
Greenhorn (P. O. Austin) Ry. Me- Ewen 776 (50 miles).	Grant	C. G. Nelson, Austin, Ore. Greenhorn, gold. Placer; water.	
Harney Ry. 776.	Harney	Robert Drinkwater. Gold. Placer; water (developing).	
Idol Ry. Harney 776 (130 m.).	Harney	Brimer & Gilham, Main st. Cap. \$1,200. Big Boulder, gold and silver. Shaft; free; hand.	
"	"	Heath & Roberts, Harney City, Ore. E. A. Heath, pres.; John E. Roberts, secy. and treas.; D. A. Cawfield, mgr. and supt. Cap. stks. \$30,000. General Heath, gold. Placer; hand.	
"	"	J. A., J. E. & J. H. Loggan. Cap. \$1,200. Gold. Placer (developing).	
"	"	Ream, Black & Kitching, Portland, Ore., 150 Seventh st. C. R. Black, mgr. Charvont, gold and silver. Refractory. E. H. Ream, supt.	
"	"	Samuel Roach. Cap. \$4,000. Gold. Open pit, placer.	
Jacksonville Ry. 692.	Jackson	Jacksonville Mining & Milling Co. Jeremiah Numan, pres.; Silas J. Day, secy.; Thomas J. Kenney, treas.; D. Cronmiller, mgr. Cap. stks. \$30,000. Jacksonville, gold. Tunnel; free and refractory; hand (developing). Henry Kipple, supt.	
Joseph Ry. Elgin 776.	Wallowa	Royal Purple Mining Co. T. J. Dean, pres., mgr. and supt.; T. M. Dean, secy.; J. F. Cutler, treas. Cap. stks. \$1,000,000. Royal Purple, silver and copper. Tunnel; free and refractory; water; concentrator, crusher and turnace, 5 stamps.	
La Grande, Ry. 776.	Union	Chloride Mining & Milling Co., Portland, Ore., 33 Stark st. F. W. Paine, pres.; M. D. Wisdom, secy.; R. L. Durham, treas.; J. K. Romig, mgr. Cap. stks. \$300,000. Chloride, gold and silver. Tunnel, 350 tons; free; water. J. J. Taylor, supt.	
Leland, Ry. 692.	Josephine	Alta Ditch Co., Grants Pass, Ore. L. C. Windom, pres.; J. W. Sherer, secy. and treas.; John A. Niday, mgr. and supt. Cap. stks. \$3,000. Gold. Placer.	

## GOLD AND SILVER—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN	AND COUNTY.	
Leland	Josephine (Continued.)	L. N. Browning. Browning, gold. Placer.
Malheur	Malheur Ry. Baker City	Samuel & Hiram Colt. Cap. \$10,000. Tip Top, Humboldt and Autoerat, gold. Shaft, tunnel and slope, 200 tons; free; steam; 2 stamps.
Frairie City	Grant Ry. Baker City 776 07 miles).	W. E. Gifford. Present Need, gold and silver. Shaft and tunnel, 100 tons; free and refractory; steam.
"	"	Geo. E. Robinson & Co. Colorado, gold. Tunnel, 3,500 tons, refractory; steam; 5 stamps. Geo. E. Robinson, supt.
Riddles	Douglas Ry. 622 (32 miles).	Canyonville Mining, Water & Manufacturing Co., Eugene, Ore. E. C. Smith, pres.; Hon. A. C. Woodcock, secy. Cap. stk. \$500,000. Canyonville, gold. Placer; hydraulic developing.
"	"	S. S. Catching. Cap. \$500. Gold. Placer.
"	"	John Hudson. Cap. \$5,000. Gold. Open pit, water (developing).
Rock Creek	Baker P. O. and Ry. Baker City 776.	Robinson Mining Co. Geo. W. Robinson, pres.; D. W. C. Nelson, secy. and treas.; F. C. Smith, mgr. and supt. Cap. stk. \$1,000,000. North Star, gold. Tunnel, 400 tons; free and refractory, steam and water; mill.
Rye Valley	Baker Ry. Weatherly 776 (15 miles).	Cartwright Bros. (deceased). Rye Valley, gold. Placer.
"	"	H. B. Frans. Silver Blue and Extension, gold and silver. Tunnels; free; hand and arrastre.
"	"	John Frisco. Bonanza, gold. Placer; hydraulic.
Sanger	Union Ry. Union 776 (30 m.).	C. T. Bradley Mining Co., Daggett, Cal. C. M. Sanger, pres.; A. T. Sanger, secy.; C. T. Bradley, treas. Cap. stk. \$100,000. Summit, gold and silver. Shaft, 10,000 tons; free; steam; 10 stamps; W. J. Townley, supt.
"	"	Sturgill Bros., Baker City, Oregon. Bonanza, gold. Shaft; refractory; horse.
Sardine Creek	Jackson (P. O. Rock Point) Ry. Gold Hill 622.	N. & C. Ritter. Lucky Hill, gold. Tunnel; free; horse and hand; arrastre. N. Ritter, supt.
Spanish Gulch	Grant (P. O. Gales) Ry. The Balles 776.	Mule Gulch Mining Co. W. W. Cowne, pres. and mgr.; R. V. Gibbons, secy.; W. B. Cowne, treas. Cap. stk. \$20,000. Mule Gulch, gold. Placer; hydraulic. E. Seville, supt.
Spirita	Union Ry. Baker City 776.	E. H. Boyer, Walla Walla, Wash. Boyer's, gold. Placer, hydraulic. Edward Whitney, supt.
"	"	Eastern Oregon Gold Mining Co., Detroit, Mich. Geo. W. Robinson, pres.; Geo. H. Lathrop, secy. and treas. Cap. stk. \$100,000. Little Archie, gold. Shaft and tunnel, 200 tons; free; hand, F. C. Smith, supt.
"	"	Jay Guy Lewis. Silver Queen and Livingston, gold. Shafts, tunnels, 2,000 tons, free and refractory; horse.
"	"	Oro Dell Mining & Milling Co., Chicago, Ill., 225 Dearborn st. W. W. Watson, pres.; Chas. N. Hale, secy. and treas.; F. A. Hetherington, mgr. and supt. Cap. stk. \$1,000,000. Oro Dell, Belle of Kansas and 3 others, gold. Shaft and tunnel; free; steam, mill.
"	"	Snowstorm Consolidated Gold Mining Co., Bedford, Ind. T. B. Thornton, pres.; E. B. Thornton, secy. and treas.; J. E. Menckem, mgr. and supt. Cap. stk. \$500,000. Snowstorm, gold. Shaft and slope, free; water; 10 stamps.
Sterling	Jackson P. O. and Ry. Jackson- ville 622.	Sterling Mining Co., Portland, Ore. Vincent Cook, pres.; O. L. Cook, secy. and treas.; Henry E. Ankeny, mgr. and supt. Cap. stk. \$40,000. Sterling, gold. Placer; water.
Sumpter	Baker Ry. Baker City 776.	Mary Agnes Consolidated Placer Mining Co. Cap. stk. \$8,000. Mary Agnes, gold. Placer; hydraulic. A. Downie, supt.
Susanville	Grant Ry. Heppner 776.	Sloan & Haskell. Gold. Placer; 1 giant; steam.
Waldo	Josephine Ry. Grant's Pass 622.	Geo. Simmons & Z. Cameron. Geo. Simmons, mgr. and supt. Simmons & Co., gold.
"	"	Wimer Bros. & Co., Oakland, Cal., 1063 Washington st. Waldo, gold. Deep; hydraulic.
Wolf Creek	Josephine Ry. 622 (4 miles).	William & Ruth Rubbo. Cap. \$25,000. Rubbo, gold. Open pit, deep; water. S. C. Rubbo, supt. and hydraulic mine inspector.
Woodville	Jackson Ry. 622.	Alex. Wilson. Gold. Placer; water.

## IRON

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, BLAST FURNACES, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN	AND COUNTY.	
Oswego	Clackamas Ry. 622.	Oregon Iron & Steel Co., Portland, Ore., 106 Third st. Theo. B. Wilcox, pres.; J. Frank Watson, secy. and mgr.; Ladd & Tibon, treas. Cap. stk. \$1,500,000. Prosser and Duck Pond, brown hematite. Shaft and tunnel, 40,000 tons; steam. J. H. Pomroy, supt.

## KAOLIN

LOCATION OF MINE OR BANK, RAILWAYS, WATER ROUTES, AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE OR BANK, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, ETC., AND NAME OF SUPERINTENDENT.
Huntington, Baker (Mine in Malheur Co.) Ry. 776.		American Kaolin Co., Portland, Ore., 110 Second st. J. F. Edwards, pres.; Robert R. Tuttle, secy.; F. C. Brodie, treas.; James Sudweeks, mgr. Cap. stk. \$1,000,000. Kaolin (developing).

## LEAD AND ZINC

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, SMELTERS, ETC., AND NAME OF MINE SUPERINTENDENT.
Pendleton, Umatilla Ry. 776.		Golden Hill Mining & Milling Co., 113 Court st. Jacob Frazer, pres.; W. P. Lathrop, secy.; B. F. Renn, treas.; James A. Howard, v.-pres. and mgr. Cap. stk. \$750,000. Vulture, lead. Shaft and tunnel.

## MINERAL PAINT

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF PRODUCT, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, PAINT MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
Edna, Jackson Ry. Gold Hill 792.		H. Richardson. Mineral paint. Open pit.

## NICKEL

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, SMELTERS, ETC., AND NAME OF MINE SUPERINTENDENT.
Riddles, Douglas Ry. 692 (4 miles).		Edson Adams & Harvey S. Brown, San Francisco, Cal., Fourth and Townsend sts. Oregon (developing). W. Q. Brown, supt.
" " " "		International Nickel Mining Co., Chicago, Ill., Chamber of Commerce Bldg., cor. La Salle and Washington sts. James R. Ashley, pres.; Will. H. Taylor, secy., treas. and mgr. Cap. stk. \$5,000,000. Riddles. Shaft, tunnel and open pit, 600 tons; steam. Will Q. Brown, supt.

## PRECIOUS STONES

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF PRODUCT, KIND OF MINE, KIND OF POWER USED, ETC., AND NAME OF MINE SUPERINTENDENT.
Hardman, Morrow Ry. Heppner 776.		William A. Fisher. Peters, opals.

## STONE, MARBLE, GRANITE AND ONYX

LOCATION OF MINE OR QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINTS.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE OR QUARRY, KIND OF STONE, KIND OF MINE OR QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STONE OR MARBLE MILLS, LIMESTONES AND CAPACITY, ETC., AND NAME OF MINE SUPERINTENDENT.
Forest Grove, Washington Ry. 692.		Forest Grove Stone Co. J. G. Eoos, pres.; E. H. Heitzhanson, secy.; A. Vosper, treas.; J. Hauser, mgr. Cap. stk. \$50,000. Forest Grove, blue sandstone. Open pit; steam (developing).
Line Station, Baker (E. O. Huntington) Ry. 776.		Oregon Marble & Lime Co., Portland, Ore. T. F. Bourke, pres. and mgr.; Charles F. Beebe, secy.; C. E. S. Wood, treas. Cap. stk. \$50,000. Limestone. Open pit, 18,000 tons; hand; Kilns, 10,000 tons. W. L. Peaks, supt.
St. Helen, Columbia Ry. 552.		Burke's Quarry, Portland, Ore., 72½ Morrison st. Burke's, basalt rock. 2,000 tons.

SEE ALSO SUPPLEMENTARY LIST

## PENNSYLVANIA

## COAL—ANTHRACITE

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, CORE OVENS, AND NAME OF MINE SUPERINTENDENT.
TOWN	COUNTY.	
Alaska	Northumberland (P. O. Strong, Pa.) Ry. 578.	Philadelphia & Reading Coal & Iron Co., Philadelphia, Pa., 227 S. Fourth st., A. A. McLeod, pres't, and gen. mgr.; Franklin P. Kaercher, secy.; W. A. Church, treas. Alaska, 188,161 tons; steam; breaker and washer. John Veith, supt.
Alden Station	Luzerne Ry. 118.	Alden Coal Co., Richard Sharpe st., pres't.; George H. Myers, secy.; Richard Sharpe jr., treas. Cap. stk. \$200,000. Alden. Tunnel and shaft, 300,000 tons; steam; breaker. K. M. Smith, supt.
Archbald	Lackawanna Ry. 213, 505.	Delaware & Hudson Canal Co., Scranton, Pa., 230 Providence pl., R. M. Olyphant, pres't.; F. M. Olyphant, secy.; C. A. Walker, treas.; H. G. Young, mgr. Cap. stk. \$300,000. White Oak. Slope and tunnels, 165,400 tons; steam and horse; breaker. Andrew Nicol, supt.
"	"	Riverside Coal Co., Scranton, Pa., Jas. J. Williams, pres't.; Thos. E. Jones, secy. and treas.; John Reese, mgr. Cap. stk. \$200,000. Riverside. 125,000 tons; steam; breaker. Thos. J. Williams, supt.
Ashland	Schuylkill Ry. 393, 578.	Philadelphia & Reading Coal & Iron Co., Philadelphia, Pa., 227 S. Fourth st., A. A. McLeod, pres't, and mgr.; F. P. Kaercher, secy.; W. A. Church, treas. East, 118,500 tons; steam; breaker and washer. John Veith, supt.
Ashley	Luzerne Ry. 118.	Lehigh & Wilkes Barre Coal Co., New York City, Central Bldg., J. R. Maxwell, pres't.; W. T. Zell, secy. and treas.; Elmer H. Lawall, mgr. Jersey No. 8, Slopes, 131,776 tons; steam; breaker. M. R. Merriams, supt.
Audenried	Carbon Ry. 393, 578.	C. M. Dodson & Co., Bethlehem, Pa., C. M. Dodson, pres't.; A. S. Schropp, secy. and treas.; E. L. Bullock, mgr. Cap. \$200,000. Beaver Brook. Slope, 200,000 tons; steam, breaker and washer. D. J. Thomas, supt.
"	"	Lehigh & Wilkes Barre Coal Co., New York City, 143 Liberty st., J. R. Maxwell, pres't.; W. T. Zell, secy. and treas.; E. H. Lawall, mgr. Honey Brook. Slopes, 500,000 tons; steam; breaker and washer. D. P. Roberts, supt.
Avoca	Luzerne Ry. 213, 252, 305.	Avoca Coal Co. Ltd., C. C. Bowman, pres't.; E. L. Bowman, secy. and treas.; W. H. Hollister, mgr. Cap. stk. \$200,000. Avoca. Shafts, slope and tunnel, 100,000 tons; steam; breaker. Solomon Bebble, supt.
"	"	Florence Coal Co. Ltd., Scranton, Pa., 322 Lackawanna av., W. B. Whitney, pres't.; E. P. Kinsbury, secy.; Chas. P. Matthews, treas.; Austin Moore, mgr. and supt. Cap. stk. \$48,000. Elmwood. Shaft, 116,250 tons; steam; breaker.
"	"	Langelite Coal Co., Scranton, Pa., Lackawanna av., R. G. Brooks, pres't.; T. R. Brooks, secy.; J. A. Myers, treas. Langelite. Shaft and tunnel; steam; breaker.
Beaver Meadows	Carbon Ry. 393.	William T. Carter & Co., Philadelphia, Pa., 302 Walnut st. Cap. \$400,000. Coleraine. Slopes, 120,000 tons; steam; breaker.
"	"	Coxe Bros. & Co., Drifton, Pa., Cross Creek Collieries. Tunnel, 192,000 tons; steam; coal breakers and washers. E. B. Coxe, supt.
"	"	Evans Mining Co., H. J. Boardman, pres't.; Chas. Haidt, secy.; John D. Evans, treas. mgr. and supt. Cap. stk. \$150,000. Evans. Slope, 50,000 tons; steam; breaker, washer.
Bernece	Sullivan Ry. 393.	State Linn & Sullivan R. Co., Towanda, Pa., J. Raymond Claghord, pres't.; O. A. Baldwin, secy. and treas.; L. O. Hight, mgr. and supt. Cap. stk. \$1,000,000. Bernice. Tunnel, 170,000 tons; steam; breaker and washer.
Blackwood	Schuylkill Ry. 579, 393.	Lehigh Valley Coal Co., Philadelphia, Pa., 228 S. Third st., Elsha P. Wilbur, pres't.; J. R. Fanshawe, secy.; Wm. C. Alderson, treas.; W. A. Lathrop, mgr. and supt. Cap. stk. \$650,000. Blackwood, 8,000 tons; steam; breaker.
Branch Dale	Schuylkill Ry. 578.	Philadelphia & Reading Coal & Iron Co., Philadelphia, Pa., 227 S. Fourth st., A. A. McLeod, pres't, and mgr.; F. P. Kaercher, secy.; W. A. Church, treas. Otto, 113,300 tons; steam; breaker. R. C. Lather, supt.
Brownsville	Schuylkill (P. O. Lost Creek) Ry. 578.	Lehigh Valley Coal Co., Philadelphia, Pa., 228 S. Third st., Elsha P. Wilbur, pres't.; J. R. Fanshawe, secy.; Wm. C. Alderson, treas.; W. A. Lathrop, mgr. and supt. Cap. stk. \$650,000. Packer No. 3 Colliery, 91,300 tons; steam; breaker.
Carbondale	Lackawanna Ry. 213, 503 and 505.	Delaware & Hudson Canal Co., Scranton, Pa., 230 Providence pl., R. M. Olyphant, pres't.; F. M. Olyphant, secy.; C. A. Walker, treas.; H. G. Young, mgr. Cap. stk. \$300,000. Clinton and Powderly slopes, Coal Brook, Wilson Creek and Barker's Brook tunnels, and Carbondale Nos. 1 and 3 shafts, 620,000 tons; steam and horse; breakers. Andrew Nicol, supt.
"	"	Northwest Coal Co., Scranton, Pa., C. D. Simpson, pres't.; A. F. Law, secy.; T. H. Watkins, treas. Cap. stk. \$100,000. Northwest. Slope, 300,000 tons; steam; breaker. James L. Crawford, supt.
"	"	Stroud & Chamberlain, Belmont st. and Oak av., G. F. Chamberlain, mgr. and supt. Cap. stk. \$50,000. Ontario and Belmont. Slope and tunnels, 68,000 tons; steam; breaker.
"	"	Wm. P. Williams, 109 S. Church st. Cap. \$1,000. Tunnel, 40,000 tons; hand; breaker.
Centralka	Columbia Ry. 393.	Lehigh Valley Coal Co., Philadelphia, Pa., 228 S. Third st., Elsha P. Wilbur, pres't.; J. R. Fanshawe, secy.; Wm. C. Alderson, treas.; W. A. Lathrop, mgr. and supt. Cap. stk. \$650,000. Continental.
"	"	Philadelphia & Reading Coal & Iron Co., Philadelphia, Pa., 227 S. Fourth st., A. A. McLeod, pres't, and gen. mgr.; F. P. Kaercher, secy.; W. A. Church, treas. North Ashland, 150,000 tons; steam; breaker and washer. John Veith, supt.
Coudale	Schuylkill Ry. 118.	Lehigh Coal & Navigation Co., Philadelphia, Pa., 234 S. Third st., Joseph S. Harris, pres't.; S. Shepherd, secy. and treas.; W. D. Zehner, mgr. Cap. stk. \$14,358,050. Lehigh Nos. 8, 9, 10, 11 and 12. 700,200 tons; steam and horse; breaker. R. C. Lather, supt.
Derringer	Luzerne (P. O. Drifton) Ry. 563.	Coxe Bros. & Co., Cross Creek. Shaft, 192,000 tons; steam; breakers and washers. E. B. Coxe, supt.
Dickson City	Lackawanna Ry. 213, 505.	Elk Hill Coal & Iron Co., Scranton, Pa., 3425 N. Main av., Wm. H. Richmond, pres't., treas. and mgr., E. K. Richmond, secy. Cap. stk. \$60,000. Richmond No. 4. Shaft, 365,000 tons; steam; breaker. Patrick Riley, supt.

## COAL—ANTHRACITE—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, COKE OVENS, AND NAME OF MINE SUPERINTENDENT.
TOWN	COUNTY.	
Drifton	Luzerne	Coxe Bros. & Co. Cross Creek. Shaft, 192,000 tons; steam. E. B. Coxe, supt.
Ry. 118, 393.		
Dunmore	Lackawanna	Murray & Co. M. J. Murray, prest. and supt.; Thomas Brown, seey.; John Carney, treas.; A. J. Murray, mgr. Cap. stk. \$25,000. Murray's. Shaft, 25,000 tons; steam; breaker.
Ry. 252.		
Durver	Luzerne	Babylon Coal Co., Scranton, Pa. T. H. Watkins, prest.; W. G. Parke, seey.; C. D. Simpson, treas. Cap. stk. \$200,000. Babylon. Shaft, 235,000 tons; steam; breaker. James L. Crawford, supt.
Ry. 260, 292, 393.		
"	"	Old Forge Coal Co., Ltd., New York City, 1 Broadway. John A. Mears, prest. and mgr.; J. Alton Davis, seey.; C. S. Crane, treas. Cap. stk. \$30,000. Columbia and Phoenix. Shafts and tunnel, 300,000 tons; steam; breaker.
Eagle Hill	Schuylkill	Philadelphia & Reading Coal & Iron Co., Philadelphia, Pa., 227 S. Fourth st. A. A. McLeod, prest. and mgr.; F. P. Kaercher, seey.; W. A. Church, treas. Eagle Hill. 167,000 tons; steam; breaker. R. C. Luther, supt.
Ry. and P. O. Pottsville 393, 563, 570, 578.		
Eckley	Luzerne	Coxe Bros. & Co., Drifton, Pa. Cross Creek Collieries. Slope, 192,000 tons; steam; breakers and washers. E. B. Coxe, supt.
Ry. 118, 393.		
Edwardsville	Luzerne	The Kingston Coal Co., Kingston, Pa. Daniel Edwards, prest. and mgr.; Elliott R. Morgan, seey. and treas. Cap. stk. \$1,000,000. Kingston. Shafts, 500,000 tons; steam and compressed air; 2 breakers. G. W. W. Edwards, supt.
Ry. and P. O. Kingston 360.		
Excelsior	Northumberland	Excelsior Coal Co., Shamokin, Pa. A. Robertson, prest.; C. W. Kingsley, seey. and treas.; A. D. Robertson, mgr. and supt. Excelsior. Slopes and tunnels, 268,000 tons; steam and horse; breaker.
Ry. 578.		
Exeter	Luzerne	Lehigh Valley Coal Co., Philadelphia, Pa., 228 S. Third st. Elisha P. Wilbur, prest.; J. R. Fanshawe, seey.; Wm. C. Alderson, treas.; W. A. Lathrop, mgr. and supt. Cap. stk. \$650,000. Exeter. Shaft, 47,225 tons; steam; breaker.
Ry. Pittston 260, 213, 303.		
"	"	Stevens Coal Co., Pittston, Pa. (West Side). Mito J. Wilson, prest.; C. W. Wesner, seey.; F. E. Stevens, treas.; A. B. Stevens, mgr. Cap. stk. \$200,000. Stevens. Slope; steam; breaker (developing).
Fell	Lackawanna	John Murrin. Fall Brook. Tunnel, 1,500 tons; steam; breaker.
Ry. and P. O. Carbon- dale 213, 302.		
Gilberton	Schuylkill	Draper Colliery, Pottsville, Pa. H. L. Williams, gen. mgr. and supt. Cap. \$500,000. Draper. Slopes and tunnels, 220,000 tons; steam; coal breaker and washer.
Ry. 263, 578.		
"	"	Philadelphia & Reading Coal & Iron Co., Philadelphia, Pa., 227 S. Fourth st. A. A. McLeod, prest. and mgr.; F. P. Kaercher, seey.; W. A. Church, treas. Gilberton. 255,000 tons; steam; breaker. John Veith, supt.
"	"	Stoddard Coal Co., Chas. E. Breckous, prest.; Guy C. Irish, seey. and treas.; Wm. J. McCarthy, mgr. and supt. Cap. stk. \$25,000. Stoddard. 75,000 tons; steam; breaker and washer.
Girardville	Schuylkill	Philadelphia & Reading Coal & Iron Co., Philadelphia, Pa., 227 S. Fourth st. A. A. McLeod, prest. and mgr.; F. P. Kaercher, seey.; W. A. Church, treas. Preston Nos. 2 and 3, Girard and Hammon. 296,800 tons; steam; breakers. John Veith, supt.
Ry. 393, 578.		
Glen Carbon	Schuylkill	Philadelphia & Reading Coal & Iron Co., Philadelphia, Pa., 227 S. Fourth st. A. A. McLeod, prest. and mgr.; F. P. Kaercher, seey.; W. A. Church, treas. Richardson. 135,000 tons; steam; breaker. R. C. Luther, supt.
Ry. 578.		
Gowen	Luzerne	Coxe Bros. & Co., Drifton, Pa. Cross Creek. 192,000 tons; steam; coal breakers and washers. E. B. Coxe, supt.
Ry. 363.		
Harwood	Luzerne	Pardee Sons & Co., Lattimer Mines, Pa. C. Pardee, mgr. Cap. \$500,000. Harwood. Slopes, 215,000 tons; steam; coal breaker and washer. A. W. Drake, supt.
Ry. 578.		
Highland	Luzerne	G. B. Markle & Co., Jeddo, Pa. Highland Nos. 1 and 2. Slopes, 200,000 tons; steam; coal breaker. John Markle, supt.
(P. O. Jeddo) Ry. 393.		
Hollywood	Luzerne	Calvin Pardee & Co., Lattimer Mines, Pa. C. Pardee, mgr. Cap. \$300,000. Hollywood. Slopes, 220,000 tons; steam; coal breaker and washer. A. W. Drake, supt.
(P. O. Lattimer Mines) Ry. 578.		
Humboldt	Luzerne	Linderman & Skeer, South Bethlehem, Pa. Cap. \$1,200,000. Humboldt Mine. Slope, 84,000 tons; steam and horse; breaker. Jas. E. Roderick, supt.
(P. O. Hazleton) Ry. 393.		
Loulett	Schuylkill	Philadelphia & Reading Coal & Iron Co., Philadelphia, Pa., 227 S. Fourth st. A. A. McLeod, prest. and mgr.; F. P. Kaercher, seey.; W. A. Church, treas. Good Spring. 54,000 tons; steam; breaker. R. C. Luther, supt.
Ry. and P. O. Pottsville 578, 393, 563, 570.		
Jeddo	Luzerne	G. B. Markle & Co., Jeddo Nos. 3 and 4. Shafts, 299,200 tons; steam; coal breaker. John Markle, supt.
Ry. 118, 393.		
Jermyn	Lackawanna	Delaware & Hudson Canal Co., Scranton, Pa., 291 Providence pl. R. M. Olyphant, prest.; F. M. Olyphant, seey.; C. A. Walker, treas.; H. G. Young, mgr. Cap. stk. \$30,000,000. Jermyn No. 1 shaft, 198,800 tons; steam and horse; breaker. Andrew Nicol, supt.
Ry. 213, 565.		
"	"	Edgerton Coal Co., Ltd., Scranton, Pa. C. D. Simpson, prest.; T. H. Watkins, seey.; W. G. Parke, treas. Cap. stk. \$20,000. Edgerton. Tunnels, 250,000 tons; steam; coal breaker. Jas. L. Crawford, supt.
"	"	Westside Coal Co. S. D. Davis, prest. and mgr.; J. Alton Davis, seey. Cap. \$4,000. Sunshine. Tunnel, 10,000 tons; steam; breaker. John F. Nicholson, supt.
Kingston	Luzerne	Lehigh Valley Coal Co., Philadelphia, Pa., 228 S. Third st. Elisha P. Wilbur, prest.; J. R. Fanshawe, seey.; Wm. C. Alderson, treas.; W. A. Lathrop, mgr. and supt. Cap. stk. \$650,000. Malby. Shaft, 31,000 tons; steam; breaker.
Ry. 260.		
Lafin	Luzerne	Annora Coal Co., Wilkes Barre, Pa. Charles Parrish, prest. and mgr.; Wm. C. Allen, seey.; Theo. F. Ryan, treas. Cap. stk. \$500,000. Annora. Slopes and tunnels, 165,000 tons; steam; breaker. John N. Conyngham, supt.
Ry. 213.		
Launston	Carbon	Lehigh Coal & Navigation Co., Philadelphia, Pa., 228 S. Third st. Jos. S. Harris, prest.; S. Shepherd, seey. and treas.; W. D. Zehner, mgr. and supt. Cap. stk. \$14,338,650. Collieries, Nos. 4, 5 and 6. 240,400 tons; steam and horse; breaker.
Ry. 118.		
Lattimer Mines	Luzerne	Pardee Bros. & Co., C. Pardee, mgr. Cap. \$500,000. Lattimer. Slopes, 215,000 tons; steam; breaker and washer. A. W. Drake, supt.
Ry. Milnesville 393.		



## COAL—ANTHRACITE—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, CORE OVENS, AND NAME OF MINE SUPERINTENDENT.
TOWN	COUNTY.	
Laurel Run (P. O. Wilkes Barre) By, Ashley Hs.	Luzerne	Red Ash Coal Co., Wilkes Barre, Pa., Is Coal Exchange. Geo. H. Parrish, pres't., W. Leavonworth, secy., and treas.; R. B. Williams, mgr.; Cap. stk. \$400,000. Red Ash, Nos. 1 and 2. Slopes, 358,400 tons; steam; 2 breakers, P. H. Garrahan, supt.
Lee By, 118.	Luzerne	Newport Coal Co., Wilkes Barre, Pa., Chas. Parrish, pres't. and mgr.; Wm. C. Allen, secy. and treas.; Cap. stk. \$300,000. Newport. Slopes, 85,000 tons; steam; coal breaker, John Williams, supt.
Llewellyn By, 578.	Schuykill	Albright Coal Co., James Arehbold, pres't.; Joseph A. Arehbold, secy. and treas. Cap. stk. \$200,000. Slopes, 290,000 tons; steam. James Arehbold jr., supt.
Loeast Dale By, 578.	Schuykill	Philadelphia & Reading Coal & Iron Co., Philadelphia, Pa., 227 S. Fourth st., A. A. McLeod, pres't. and mgr.; F. P. Kaereher, secy.; W. A. Church, treas. Keystone and Potts, 50,000 tons; steam; breaker, John Veith, supt.
Loeast Gap Northumberland By, 393, 528, 578.	Northumberland	Philadelphia & Reading Coal & Iron Co., Philadelphia, Pa., 227 S. Fourth st., A. A. McLeod, pres't. and mgr.; F. P. Kaereher, secy.; W. A. Church, treas. Monitor, Loeast Gap and Loeast Spring, 490,200 tons; steam; breaker, John Veith, supt.
Loeast Summit P. O. Pottsville By, 578.	Northumberland	Philadelphia & Reading Coal & Iron Co., Philadelphia, Pa., 227 S. Fourth st., A. A. McLeod, pres't. and mgr.; F. P. Kaereher, secy.; W. A. Church, treas. Merriam, 129,000 tons; steam; breaker, John Veith, supt.
Lorberry Jn. (P. O. Ravine By, 578.	Schuykill	Philadelphia & Reading Coal & Iron Co., Philadelphia, Pa., 227 S. Fourth st., A. A. McLeod, pres't. and mgr.; F. P. Kaereher, secy.; W. A. Church, treas. Old Lincoln, 182,800 tons; steam; breaker, R. C. Luthier, supt.
Lost Creek By, 293, 578.	Schuykill	Lehigh Valley Coal Co., Philadelphia, Pa., 228 S. Third st., Ellsha P. Wilbur, pres't.; J. R. Fainshaw, and mgr.; Wm. C. Alderson, treas.; W. A. Lathrop, mgr. and supt. Cap. stk. \$650,000. Packer Nos. 2 and 4. 225,000 tons; steam; breaker.
Luzerne By, 393.	Luzerne	Plymouth Coal Co., Wilkes Barre, Pa., Coal Exchange. Black Diamond, Shaft, 250,000 tons; steam and compressed air; breaker, James B. Davies, supt.
Lykens By, 628.	Dauphin	Lykens Valley Coal Co., Philadelphia, Pa., 233 S. Fourth st., I. J. Wistar, pres't.; N. Whiteman, secy.; A. Haviland, treas.; I. A. Stearns, mgr. Short Mountain, Tunnel, drift and slopes, 275,000 tons; steam and electricity; breaker and washer, F. M. Williams, supt.
Mahanoy City By, 393, 578.	Schuykill	Philadelphia & Reading Coal & Iron Co., Philadelphia, Pa., 227 S. Fourth st., A. A. McLeod, pres't. and mgr.; F. P. Kaereher, secy.; W. A. Church, treas. Elmwood, Mahanoy City, North Mahanoy, Schuykill, Tunnel Ridge, Mahanoy and Jig House, 645,000 tons; steam; breakers and washer, John Veith, supt.
Mahanoy Plane, Schuykill By, 578.	Schuykill	Philadelphia & Reading Coal & Iron Co., Philadelphia, Pa., 227 S. Fourth st., A. A. McLeod, pres't. and mgr.; F. P. Kaereher, secy.; W. A. Church, treas. West Bear Ridge, 88,000 tons; steam; breaker, John Veith, supt.
Maple Dale P. O. and Ry. Pottsville By, 578, 393, 563, 570.	Schuykill	Philadelphia & Reading Coal & Iron Co., Philadelphia, Pa., 227 S. Fourth st., A. A. McLeod, pres't. and mgr.; F. P. Kaereher, secy.; W. A. Church, treas. Ellanzowan, 416,285 tons; steam; breaker, John Veith, supt.
Marshwood, Lackawanna By, Dickson City 213.	Lackawanna	Moosic Mountain Coal Co., Scranton, Pa., E. B. Leisnering, pres't.; W. W. Watson, secy.; Chas. P. Ford, mgr. and supt. Cap. stk. \$100,000. Moosic Mountain, Slope and drifts, 75,000 tons; steam; breaker.
Middle Creek P. O. and Ry. Pottsville By, 578, 393, 562, 570.	Schuykill	Philadelphia & Reading Coal & Iron Co., Philadelphia, Pa., 227 S. Fourth st., A. A. McLeod, pres't. and mgr.; F. P. Kaereher, secy.; W. A. Church, treas. Middle Creek, Shaft, 52,000 tons; steam; breaker, R. C. Luthier, supt.
Middleport By, 578.	Schuykill	Lehigh Coal & Navigation Co., Philadelphia, Pa., 234 S. Third st., Jos. S. Harris, pres't., S. Shepherd, secy. and treas.; W. D. Zehner, mgr. and supt. Cap. stk. \$14,358,650. Kaska William, 57,400 tons; steam and horse; breaker.
Milnesville By, 393.	Luzerne	A. S. Van Winkle, Hazleton, Pa., Cap. \$200,000. Milnesville, Slope and open pit, 250,000 tons; steam; breaker and washer, J. I. Hollenbeck, supt.
Miners Mills By, 213.	Luzerne	Delaware & Hudson Canal Co., Scranton, Pa., 230 Providence pl., R. M. Olyphant, pres't.; F. M. Olyphant, secy.; C. A. Walker, treas.; H. G. Young, mgr. Cap. stk. \$90,000. Pine Ridge, Shaft, 180,000 tons; steam and horse; breaker, Andrew Xlrod, supt.
"	"	Waddell & Co., Pittston, Pa., Cap. \$100,000. Bennett, Shaft, 72,000 tons; steam; breaker, Robert McCutchen, supt.
Moacanina (P. O. Shickshinny) By, 563.	Luzerne	West End Coal Co., Shickshinny, Pa., Chas. M. Conyngnam, pres't.; Wm. C. Allen, secy.; M. H. Arnold, treas. John Treadwell, mgr. Cap. stk. \$90,000. West End, Tunnel, 250,000 tons; steam; breaker, Lewis L. Sarge, supt.
Moosic By, 213.	Lackawanna	Robertson & Law, Cap. \$15,000. Katy Dbd., Slopes, 25,000 tons; steam; breaker, John Hastie, supt.
Morea (P. O. Morea Colliery) By, 563.	Schuykill	Dodson Coal Co., Bethlehem, Pa., C. M. Dodson, pres't.; Josiah Bachman, secy. and treas.; E. L. Bullock, mgr. and supt. Cap. stk. \$391,000. Morea, Slope and open pit, 190,000 tons; steam; coal breaker.
Mt. Carmel Northumberland By, 393, 528, 578.	Northumberland	Ferndale Coal Co., E. J. Phillips, mgr. and supt. Cap. stk. \$100,000. Ferndale, Slopes, 100,000 tons; steam and horse; breaker.
"	"	Philadelphia & Reading Coal & Iron Co., Philadelphia, Pa., 227 S. Fourth st., A. A. McLeod, pres't. and mgr.; F. P. Kaereher, secy.; W. A. Church, treas. Reliance, 130,000 tons; steam; breaker and washer, John Veith, supt.
"	"	Thomas M. Righter & Co., Slopes, 50,000 tons; steam; breaker.
Mt. Laurel (P. O. Pottsville) By, 578.	Schuykill	Philadelphia & Reading Coal & Iron Co., Philadelphia, Pa., 227 S. Fourth st., A. A. McLeod, pres't. and mgr.; F. P. Kaereher, secy.; W. A. Church, treas. Beechwood, 65,000 tons; steam; breaker, R. C. Luthier, supt.
Nanticoke By, 563, 118.	Luzerne	Susquehanna Coal Co., Irving Stern, mgr. Susquehanna, Shafts and slopes; steam and horse; breaker, George Morgan, supt.
Nesquehoning By, 118.	Carbon	Lehigh Coal & Navigation Co., Philadelphia, Pa., 234 S. Third st., Joseph S. Harris, pres't.; S. Shepherd, secy. and treas.; W. D. Zehner, mgr. and supt. Cap. stk. \$14,358,650. Colliery No. 1, 250,500 tons; steam and horse; breaker and washer.

## COAL—ANTHRACITE—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, COKE OVENS, AND NAME OF MINE SUPERINTENDENT.
TOWNS AND COUNTY.	
Olyphant . . . . . Lackawanna Ry. 213 and 505.	Delaware & Hudson Canal Co., Scranton, Pa., 2301 Providence pl. R. M. Olyphant, prest.; F. M. Olyphant, secy.; C. A. Walker, treas.; H. G. Young, mgr. Cap. stk. \$30,000,000. Eddy Creek, Grassy Island and Olyphant No. 2. Shafts, 269,409 tons; steam and horse; breaker. Andrew Nicol, supt.
" . . . . . " . . . . . " . . . . . "	Orlando S. Johnson, Scranton, Pa., P. O. Box 425. Cap. \$230,000. Green Ridge. Slope, 150,000 tons; steam; breaker. Wm. S. Boyd sr., supt.
" . . . . . " . . . . . " . . . . . "	Lackawanna Coal Co., Scranton, Pa., P. O. Box 425. John S. Law, prest.; E. B. Sturges, secy. and treas.; O. S. Johnson, gen. mgr. Cap. \$400,000. Lackawanna. Shaft, 350,000 tons; steam. Wm. Harper, supt.
" . . . . . " . . . . . " . . . . . "	Moosie Mountain Coal Co., Scranton, Pa. E. B. Lelsensring, prest.; W. W. Watson, secy. and treas.; Charles P. Ford, mgr. and supt. Cap. stk. \$100,000. Moosie Mountain. Shaft, 100,000 tons; steam; breaker and washer.
Oneida . . . . . Schuylkill Ry. Hazelton 393, 533.	Coxe Bros. & Co. Cross Creek. Slope, 190,000 tons; steam; breaker and washer. E. B. Coxe, supt.
Parsons . . . . . Luzerne Ry. 118 and 213.	Delaware & Hudson Canal Co., Scranton, Pa., 2301 Providence pl. R. M. Olyphant, prest.; F. M. Olyphant, secy.; C. A. Walker, treas.; H. G. Young, mgr. Cap. stk. \$30,000,000. Laurel Run. Slope, 133,000 tons; steam and horse; breaker. Andrew Nicol, supt.
" . . . . . " . . . . . " . . . . . "	Lehigh Valley Coal Co., Philadelphia, Pa., 228 S. Third st. Elisha P. Wilbur, prest.; J. R. Fanshawe, secy.; Wm. C. Alderson, treas.; W. A. Lathrop, mgr. and supt. Cap. stk. \$650,000. Mineral Spring and Coal Brook. Slopes, 30,500 tons; steam; breaker.
Peckville . . . . . Lackawanna Ry. 565, 213.	Blue Ridge Coal Co., Scranton, Pa., 12 Liberty Block. James N. Rice, prest. and mgr.; H. C. Reynolds, secy.; N. E. Rice, treas. Cap. stk. \$100,000. Blue Ridge. Slope and shaft, 200,000 tons; breaker.
" . . . . . " . . . . . " . . . . . "	New York & Scranton Coal Co., Edward B. Sturges, prest.; John B. Kerr, v.-prest.; W. W. Paterson, secy., supt. and mgr. Cap. stk. \$300,000. Ontario and Sturges. Shafts, 160,000 tons; steam and electricity.
" . . . . . " . . . . . " . . . . . "	Rush Brook Coal Co., John S. Jenkins, prest. and mgr.; E. H. Coray Jr., secy.; John F. Collier, treas. Cap. stk. \$100,000. Rush Brook. Shafts and tunnel, 100,000 tons; steam; breaker. Thomas Langan, supt.
" . . . . . " . . . . . " . . . . . "	Sterrick Creek Coal Co., Scranton, Pa., 118 Wyoming av. J. J. Albricht, prest.; James Archibald Jr., secy., mgr. and supt.; Wm. T. Smith, treas. Cap. stk. \$100,000. Sterrick Creek. Shafts and drift, 150,000 tons; steam; breaker.
Phoenix Park . . . . . Schuylkill Ry. and P. O. Pottsville 393, 569, 570, 578.	Philadelphia & Reading Coal & Iron Co., Philadelphia, Pa., 227 S. Fourth st. A. A. McLeod, prest. and mgr.; F. P. Kaercher, secy.; W. A. Church, treas. Phoenix Park No. 3. 42,000 tons; steam; breaker. R. C. Luther, supt.
Pine Grove . . . . . Schuylkill Ry. 578.	John D. Flitz. Cap. \$1,200. Big Diamond. Open pit, 1,800 tons; horse. Samuel Gay, supt.
" . . . . . " . . . . . " . . . . . "	Philadelphia & Reading Coal & Iron Co., Philadelphia, Pa., 227 S. Fourth st. A. A. McLeod, prest.; Franklin P. Kaercher, secy.; W. A. Church, treas.; C. E. Henderson, mgr. Lincoln. Slope, 400,000 tons; steam; breaker and washer. John Maguire, supt.
Pittston . . . . . Luzerne Ry. 209, 213, 333.	Butler Mine Co., Ltd., Corning, N. Y., 203 Pine st. A. Houghton Jr., prest.; S. B. Bennett, secy. and mgr.; O. W. Bump, treas. Cap. stk. \$50,000. Butler, Schooley and Friaewood. Shafts, 255,000 tons; steam; breaker. Richard Appleby, supt.
" . . . . . " . . . . . " . . . . . "	Clear Spring Coal Co., 203 Exeter st. John L. Cook, prest., mgr. and supt.; W. H. Gerhart, secy.; A. Mel. Dermott, treas. Cap. stk. \$320,000. Clear Spring. Shaft, 250,000 tons; steam; breaker.
" . . . . . " . . . . . " . . . . . "	Lehigh Valley Coal Co., Philadelphia, Pa., 228 S. Third st. Elisha P. Wilbur, prest.; J. R. Fanshawe, secy.; Wm. C. Alderson, treas.; W. A. Lathrop, mgr. and supt. Cap. stk. \$650,000. Heidelberg. Shaft and slope No. 1, 60,000 tons; steam; breaker.
" . . . . . " . . . . . " . . . . . "	Newton Coal Mining Co., F. T. Patterson, prest.; E. L. Fuller, secy.; Wm. Hill, treas.; John A. Mears, mgr. Cap. stk. \$200,000. Seneca, Ravine and Twin. Shafts, 300,000 tons; steam; breaker. J. Michael Langham, supt.
Plainville . . . . . Luzerne Ry. 333.	Delaware & Hudson Canal Co., Scranton, Pa., 2301 Providence pl. R. M. Olyphant, prest.; F. M. Olyphant, secy.; C. A. Walker, treas.; H. G. Young, mgr. Cap. stk. \$30,000,000. Mill Creek and Delaware. Slope and shaft, 253,400 tons; steam and horse; breaker. Andrew Nicol, supt.
" . . . . . " . . . . . " . . . . . "	Lehigh Valley Coal Co., Philadelphia, Pa., 228 South Third st. Elisha P. Wilbur, prest.; J. R. Fanshawe, secy.; Wm. C. Alderson, treas.; W. A. Lathrop, mgr. and supt. Cap. stk. \$650,000. Enterprise, Prospect, Oakwood, Henry and Abivale. Shafts and slope, 358,200 tons; steam; breaker.
Plymouth . . . . . Luzerne Ry. 209.	Delaware & Hudson Canal Co., Scranton, Pa., 2301 Providence pl. R. M. Olyphant, prest.; F. M. Olyphant, secy.; C. A. Walker, treas.; H. G. Young, mgr. Cap. stk. \$30,000,000. Boston and Plymouth Nos. 2, 3, 4 and 5. Shafts, 679,200 tons; steam and horse; breakers. Andrew Nicol, supt.
" . . . . . " . . . . . " . . . . . "	Kingston Coal Co., Kingston, Pa. Daniel Edwards, prest. and mgr.; Elliott R. Morgan, secy. and treas. Cap. stk. \$1,000,000. Gaylord. Slope, 400,000 tons; steam and compressed air; breaker and washer. George Pictou, supt.
" . . . . . " . . . . . " . . . . . "	Lehigh & Wilkes Barre Coal Co., New York City, Central Bldg. J. R. Maxwell, prest.; W. T. Zell, secy. and treas.; Elmer H. Laval, gen. supt. Lance No. 11, Nottingham No. 15 and Reynolds No. 16. Shafts and slope, 1,000,000 tons; steam; breakers. M. R. Morgans, supt.
" . . . . . " . . . . . " . . . . . "	Parrish Coal Co., 235 W. Main st. Chas. Parrish, prest.; Geo. P. Lindsay, secy.; H. H. Ashley, treas. and mgr. Cap. stk. \$400,000. Parrish. Slopes, 360,000 tons; steam; breaker. Thos. R. Evans, supt.
" . . . . . " . . . . . " . . . . . "	Plymouth Coal Co., Wilkes Barre, Pa., Coal Exchange. Dodson. Shaft, 230,000 tons; steam and compressed air; 1 breaker. James B. Davies, supt.
Pottsville . . . . . Schuylkill Ry. 393, 578, 597, 570.	Lehigh Valley Coal Co., Philadelphia, Pa., 228 S. Third st. Elisha P. Wilbur, prest.; J. R. Fanshawe, secy.; Wm. C. Alderson, treas.; W. A. Lathrop, mgr. and supt. York Farm.
Priebeburg . . . . . Lackawanna Ry. Valley Junction 213.	John Jermyn, Scranton, Pa., 119 Wyoming av. W. M. Jermyn, mgr. Jermyn Nos. 3 and 4. Shaft and slope; steam; breakers. E. B. Jermyn, supt.
Rapahannock Schuylkill Ry. P. O. Girardville) Ry. 578.	Lehigh Valley Coal Co., Philadelphia, Pa., 228 S. Third st. Elisha P. Wilbur, prest.; J. R. Fanshawe, secy.; Wm. C. Alderson, treas.; W. A. Lathrop, mgr. and supt. Cap. stk. \$650,000. Packer No. 5 Colliery. 164,000 tons; steam; breaker.

## COAL, ANTHRACITE—(CONTINUED)

LOCATION OF MINE, RAILWAY, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, COKE OVENS, AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Raven Run..... Schuylkill Ry. 383.	Philadelphia & Reading Coal & Iron Co., Philadelphia, Pa., 227 S. Fourth st. A. A. McLeod, prest. and mgr.; F. P. Kaercher, seey.; W. A. Church, treas. Girard Mammoth. 112,000 tons; steam; breaker, John Veith, supt.
Rendham..... Lackawanna Ry. Minooka, 269, 213.	Jermyn & Co., Scranton, Pa., 119 Wyoming av. Cap. \$1,000,000. Jermyn Nos. 1 and 2. Shafts, 500,000 tons; steam; 2 breakers. Samuel Baker, supt.
Ridgewood..... Luzerne Ry. 563, 829.	Keystone Coal Co., Wilkes Barre, Pa., 202 E. Market st. S. L. Brown, prest.; Chas. H. Gardner, seey. and treas. Cap. stk. \$300,000. Keyston. Slope, 10,000 tons; steam; breaker. James H. Hughes, supt.
St. Clair..... Schuylkill Ry. 563 and 578.	Elm Creek Mining Co., Scranton, Pa., Commonwealth Bldg. Wm. H. Taylor, prest.; E. P. Kingsbury, seey. and treas. Elm Creek. Shaft (developing).
"....."	Philadelphia & Reading Coal & Iron Co., Philadelphia, Pa., 227 S. Fourth st. A. A. McLeod, prest. and mgr.; F. P. Kaercher, seey.; W. A. Church, treas. Pine Forest and Eagle. 13,000 tons; steam; breaker. R. C. Luther, supt.
St. Nicholas..... Schuylkill Ry. 578.	Philadelphia & Reading Coal & Iron Co., Philadelphia, Pa., 227 S. Fourth st. A. A. McLeod, prest. and mgr.; F. P. Kaercher, seey.; W. A. Church, treas. Boston Run, Bear Run, St. Nicholas, Suffolk and Maple Hill. 691,200 tons; steam; breakers. John Veith, supt.
Sandy Run..... Luzerne Ry. 118, 393.	N. S. Kemmerer & Co., Sandy Run. Slope, 110,000 tons; steam; breaker and washer. Walter Leisenring, supt.
Scranton..... Lackawanna Ry. 118, 269, 213, 305.	Clark Tunnel Coal Co., 219 W. Market st. Cap. stk. \$10,000. Clark. Tunnel, 5,000 tons; steam; breaker. James Flynn, supt.
"....."	Delaware and Hudson Canal Co., Scranton, Pa., 2307 Providence pl. E. M. Olyphant, prest.; F. M. Olyphant, seey.; C. A. Walker, treas.; H. G. Young, mgr. Cap. stk. \$300,000.00. Dickson, Leggett's Creek and Marvine shafts, Von Storch. Shaft and slope, 889,500 tons; steam and horse; breaker. Andrew Nicol, supt.
"....."	Elliott, McClure & Co., 323 Quincey av. Edward A. Sibley, treas.; James C. McClure, mgr. and supt. Sibley. Shaft, 140,000 tons; steam; breaker.
"....."	New York, Susquehanna & Western R. R. Co., New York City, 15 Cortlandt st. Simon Borg, prest.; J. P. Rafferty, seey.; R. C. Shimeall, treas.; F. P. Moore, gen. agt. 1,200,000 tons. Wm. J. Lewis, supt.
Shamokin Northumberland' Ry. 393, 528, 578.	J. Langdon & Co., Elmira, N. Y. C. J. Langdon, prest.; W. L. Sampson, seey.; C. L. Stillman, treas.; C. M. Underhill, mgr. Nelson. Shaft, 225,000 tons; steam; breaker, washer. H. S. Gay, supt.
"....."	Philadelphia & Reading Coal & Iron Co., Philadelphia, Pa., 227 S. Fourth st. A. A. McLeod, prest. and mgr.; F. P. Kaercher, seey.; W. A. Church, treas. Buck Ridge, Big Mountain, Peerless, Henry Clay, Sterling, Burnside and Bear Valley. 741,000 tons; steam; breakers and washer. John Veith, supt.
"....."	Union Coal Co., Erie, Pa. C. H. Strong, prest.; M. H. Taylor, seey.; T. M. Little, treas. Cap. stk. \$400,000. Pennsylvania "H" Ridge and "H" Swamp. Slopes and tunnels, 500,000 tons; steam; 3 breakers. Holden Chester, supt.
Shenandoah..... Schuylkill Ry. 393, 673, 578.	Cambridge Coal Co., G. D. Jones, prest.; K. Pierce, seey.; David R. James, treas.; J. C. McGinnis, mgr. and supt. Cap. stk. \$12,000. Cambridge. Drift, 18,000 tons; steam; breaker.
"....."	Philadelphia & Reading Coal & Iron Co., Philadelphia, Pa., 227 S. Fourth st. A. A. McLeod, prest. and mgr.; F. P. Kaercher, seey.; W. A. Church, treas. Indian Ridge, Kohinoor, Shenandoah City, Turkey Run and West Shenandoah. 1,045,324 tons; steam; breakers and washer. John Veith, supt.
Shikeshiny..... Luzerne Ry. 393.	E. S. Stackhouse, Salem. Tunnels, steam, breaker (developing).
Silver Creek..... Schuylkill Ry. New Philadelphia 578.	Philadelphia & Reading Coal & Iron Co., Philadelphia, Pa., 227 S. Fourth st. A. A. McLeod, prest. and mgr.; F. P. Kaercher, seey.; W. A. Church, treas. Silver Creek. Shaft; steam. R. C. Luther, supt.
Stockton..... Luzerne Ry. 393.	Coxe Bros. & Co., Drifton, Pa. Cross Creek. Slope, 192,000 tons; steam; breaker and washer. E. B. Coxe, supt.
"....."	Linderman & Skeer, South Bethlehem, Pa. Cap. \$1,200,000. East Sugar Loaf. Slope, 300,000 tons; steam and horse; breakers. Jas. E. Roderlek, supt.
Sugar Notch..... Luzerne Ry. 118, 393.	Lehigh & Wilkes Barre Coal Co., New York City, Central Bldg. J. H. Maxwell, prest.; W. T. Zell, seey. and treas.; Elmer H. Lawall, gen. supt. Sugar Notch, No. 3. Shaft, 183,400 tons; steam; breaker. M. R. Morgans, supt.
Taylorville..... Lackawanna (P. O. Minooka) Ry. 118, 269.	Greenwood Coal Co., Ltd., Scranton, Pa., P. O. Box 381. R. G. Brooks, prest.; T. H. Dale, seey. and treas. Cap. stk. \$100,000. Greenwood. Shaft and drift, 160,900 tons; steam; breaker. W. G. Thomas, supt.
Taylorville..... Schuylkill Ry. and P. O. Potts- ville 578, 393, 563, 550.	Philadelphia & Reading Coal & Iron Co., Philadelphia, Pa., 227 S. Fourth st. A. A. McLeod, prest. and mgr.; F. P. Kaercher, seey.; W. A. Church, treas. Glendower. 76,300 tons; steam; breaker. R. C. Luther, supt.
Thomaston..... Schuylkill (Not a P. O.) Ry. 57.	Philadelphia & Reading Coal & Iron Co., Philadelphia, Pa., 227 S. Fourth st. A. A. McLeod, prest. and mgr.; F. P. Kaercher, seey.; W. A. Church, treas. Thomaston. 81,000 tons; steam; breaker. R. C. Luther, supt.
Throop..... Lackawanna Ry. 365.	Panocoast Coal Co., C. M. Sanderson, prest.; E. R. Bellman, seey. and treas.; C. D. Sanderson, gen. supt. Panocoast. Shaft, 175,000 tons; steam; breaker. I. V. Birtley, supt.
Tonhocken..... Luzerne (P. O. Sugarloaf) Ry. 393, 563.	Coxe Bros. & Co., Drifton, Pa. Cross Creek. Slopes, 192,000 tons; steam; breaker and washer. E. B. Coxe, supt.
Tower City..... Schuylkill Ry. 578.	Philadelphia & Reading Coal & Iron Co., Philadelphia, Pa., 227 S. Fourth st. A. A. McLeod, prest. and mgr.; F. P. Kaercher, seey.; W. A. Church, treas. Brookside. 390,000 tons; steam; breaker. R. C. Luther, supt.
Tremont..... Schuylkill Ry. 578.	Philadelphia & Reading Coal & Iron Co., Philadelphia, Pa., 227 S. Fourth st. A. A. McLeod, prest. and mgr.; F. P. Kaercher, seey.; W. A. Church, treas. East Franklin, 34,500 tons; steam; breaker. R. C. Luther, supt.
Trevorton..... Northumberland Ry. 578.	Philadelphia & Reading Coal & Iron Co., Philadelphia, Pa., 227 S. Fourth st. A. A. McLeod, prest. and mgr.; F. P. Kaercher, seey.; W. A. Church, treas. North Franklin, 44,300 tons; steam; breaker. John Veith, supt.

## COAL—ANTHRACITE—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, CORE OVENS, AND NAME OF MINE SUPERINTENDENT.
TOWN	COUNTY.	
Wanamie	Luzerne Ry. 118.	Lehigh & Wilkes Barre Coal Co., New York City, Central Bldg. J. R. Maxwell, pres.; W. T. Zell, secy. and treas.; Elmer H. Lawall, gen. supt. Wanamie No. 18, Slopes, 163,400 tons; steam; breaker. M. R. Morgans, supt.
Wilburton	Columbia Ry. Central, 333, 578.	Midvalley Coal Co., Mauch Chunk, Pa. E. R. Leisenring, pres.; Geo. H. Myers, secy. and treas.; Mark G. Clemens, mgr. and supt. Cap. stk. \$300,000. Midvalley. Slope, 200,000 tons; steam; breaker.
Wilkes Barre	Luzerne Ry. 118, 209, 213, 393, 563.	Delaware & Hudson Canal Co., Scranton, Pa., 230 Providence pl. R. M. Olyphant, pres.; F. M. Olyphant, secy.; C. A. Walker, treas.; H. G. Young, mgr. 43p. stk. \$50,000,000. Baltimore. Slope, tunnel and shaft. Nos. 2, 3 and Conyngham. 263,000 tons; steam, horse; breakers. Andrew Nicol, supt.
"	"	Hanover Coal Co. Gen. H. Parrish, pres.; M. L. Dreisbach, secy. and treas.; J. Roberts jr., mgr. Cap. stk. \$100,000. Maffet. Shaft and tunnel, 150,000 tons; steam; breaker. Daniel Lerois, supt.
"	"	Hillman Vein Coal Co., Canal st. H. H. Ashley, pres.; S. J. Tonkin, secy. and mgr.; Chas. P. Hmt. treas. Cap. stk. \$200,000. Hillman Vein. Shaft and slope, 120,000 tons; steam; breaker. S. J. Tonkin, supt.
"	"	Lehigh Valley Coal Co., Philadelphia, Pa., 228 S. Third st. Elisha P. Wilbur, pres.; J. R. Fanshawe, secy.; Wm. C. Alderson, treas.; W. A. Lathrop, mgr. and supt. Cap. stk. \$650,000. Franklin. Slopes and Dorrance, 181,000 tons; steam; breaker.
"	"	Lehigh & Wilkes Barre Coal Co., New York City, Central Bldg. J. R. Maxwell, pres.; W. T. Zell, secy. and treas.; Elmer H. Lawall, gen. supt. Stanton No. 7, South Wilkes Barre No. 5, Empire No. 4 and Hollenbach No. 2. Mines, shafts and slope, 463,250 tons; steam; breakers. M. R. Morgans, supt.
"	"	Wyoming Valley Coal Co., Coal Exchange Bldg. Israel W. Morris, pres.; J. M. Crane, secy. and treas. Cap. stk. \$1,300,000. Harvey E. Nos. 1 and 2. Shaft, 225,000 tons; steam; breaker. Alfred Smith, supt.
Winton	Lackawanna Ry. 269, 505.	Dolph Coal Co., Ltd. Scranton, Pa., P. O. Box 427. W. G. Payne, pres.; E. S. Dolph, secy.; I. P. Hand, treas.; W. G. Robertson, mgr. and supt. Cap. stk. \$100,000. Dolph. Tunnel, 100,000 tons; steam; breaker.
"	"	Mt. Jessup Coal Co., Ltd., Scranton, Pa., Commonwealth Bldg. E. B. Leisenring, pres.; Chas. P. Ford, secy.; W. W. Wilson, treas.; Eli P. Conner, mgr. and supt. Cap. stk. \$70,000. Mt. Jessup. Slope, 80,000 tons; steam; breaker and washer.
"	"	Mt. Vernon Coal Co., Scranton, Pa., 2633 N. Main av. G. M. Lewis, pres.; W. H. Winton, secy.; B. M. Winton, treas. and mgr. Cap. stk. \$100,000. Mt. Vernon. Tunnel, 100,000 tons; steam; breaker. R. R. Griffith, supt.
"	"	Sterrick Creek Coal Co., Scranton, Pa., Third National Bank Bldg. Jos. A. Albright, pres.; James Archbald jr., secy., mgr. and supt. Wm. T. Smith, treas. Cap. stk. \$100,000. Sterrick Creek. Shafts and drift, 300,000 tons; steam; breaker.
"	"	Winton Coal Co., Ltd., Scranton, Pa., 2633 North Main av. W. W. Winton, pres.; A. H. Winton, secy.; B. M. Winton, treas. and mgr. Cap. stk. \$20,000. S. V. White. Tunnel, 130,000 tons; steam; breaker. A. S. Hartman, supt.
Wyoming	Luzerne Ry. 333, 209.	Lehigh Valley Coal Co., Philadelphia, Pa., 228 S. Third st. Elisha P. Wilbur, pres.; J. R. Fanshawe, secy.; Wm. C. Alderson, treas.; W. A. Lathrop, mgr. and supt. Cap. stk. \$650,000. Wyoming. Shaft, 81,000 tons; steam; breaker.
"	"	Mount Lookout Coal Co., Scranton, Pa. T. H. Watkins, pres.; W. G. Parke, secy.; C. D. Simpson, treas. Cap. stk. \$300,000. Mount Lookout. Shaft, 337,500 tons; steam; breaker. James L. Crawford, supt.
Yatesville	Luzerne (Not a P. O. Ry. Beach- wood Station 578.)	Crescent Coal Co., Wilkes Barre, Pa., Coal Exchange, Hollenback Bldg. Fred J. Beach, pres.; J. B. Woodward, secy.; J. M. Schappert, treas.; Jacob Schappert, mgr. Cap. stk. \$10,000. Crescent Mine No. 1. Tunnels, 65,000 tons; steam; breaker. David Bell, supt.
Yatesville	Schuylkill P. O. Pottsville Ry. 393.	Philadelphia & Reading Coal & Iron Co., Philadelphia, Pa., 227 S. Fourth st. A. A. McLeod, pres. and mgr.; F. P. Kaetcher, secy.; W. A. Church, treas. Kuleckerbocker. 204,800 tons; steam; breaker. John Veith, supt.

## COAL—BITUMINOUS

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, CORE OVENS, AND NAME OF MINE SUPERINTENDENT.
TOWN	COUNTY.	
Adrian	Armstrong Ry. East Brady 11.	Bell, Lewis & Yates Coal Mining Co., Buffalo, N. Y. Geo. H. Lewis, pres.; Chas. Clifton, secy. and treas.; S. B. Elliott, mgr. Cap. stk. \$1,000,000. Adrian. Slopes, 375,000 tons; steam; 280 coke ovens. J. S. Fleming, supt.
Anandale	Butler Ry. 588.	Hamilton Camel Coal Co., Boyer's, Pa. Harry Hamilton, treas.; W. K. Hamilton, mgr. and supt. Cap. stk. \$25,000. Boyce. Tunnel.
Antrim	Tioga Ry. 257.	Fall Brook Coal Co., Corning, N. Y. Geo. J. Magee, pres.; John Lang, secy. and treas.; Anton Harrit, mgr. Cap. stk. \$100,000. Antrim. Drifts, 240,000 tons; horse and steam; washer; 157 coke ovens, 55,000 tons. Jas. Follock, supt.
Bakersville	Somerset Ry. Somerset 42.	E. J. Baker (local). Baker. Open pit, 50 tons; hand. Solomon Ash, supt.
"	"	Robert T. Hull (local). Open pit, 2,800 tons; hand.
Baldwin	Allegheny (P. O. West Elizabeth) Ry. 563.	Joseph Walton & Co., Pittsburg, Pa., 134 Water st. I. N. Buntin, mgr. Cap. \$1,000,000. First Pool. Drift, 40,000 tons; steam, horse and hand. Morris Kapt, supt.
Banksville	Allegheny Ry. Pittsburg 11, E. 175, 583, 584, 585, 587, 592.	Roger Waitley, Pittsburg, Pa., Carson st. Chas. W. Waitley, secy. and treas.; Beecher Waitley, mgr. Cap. stk. \$300,000. Enterprise. Slope, 223,000 tons; steam; washer. John Johnson, supt.

## COAL—BITUMINOUS—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, COKE OVENS, AND NAME OF MINE SUPERINTENDENT.
Banning . . . . . Fayette Ry. 42, 501.	The Morgan, Moore & Baine Co., Cleveland, Ohio, 801 and 803 Society for Savings Bldg. Geo. W. Morgan, pres.; C. W. Balpe, secy.; F. K. Moore, treas., Cap. stk. \$100,000, Banning, Tunnel, 200,000 tons; steam, H. C. Burkett, supt.
Beadling . . . . . Allegheny Ry. 583.	Beadling Bros., Cap. \$200,000, Harrison, Slope, 100,000 tons; steam, Wm. Beadling, supt.
Beaver Falls . . . . . Beaver Ry. 583, 591.	James Clayton, Eleventh st. (locat.), Cap. \$12,000, Beaver Falls, Drift, 10,020 tons; horse; 3 coke ovens.
Beechtree . . . . . Jefferson Ry. 85.	Bell, Lewis & Yates Coal Mining Co., Buffalo, N. Y., Geo. H. Lewis, pres.; Chas. Chilton, secy. and treas.; S. P. Elliott, mgr., Cap. stk. \$1,000,000, Beechtree, Drifts, 355,000 tons; steam; breaker; 280 coke ovens, D. Fleming, supt.
Bellwood . . . . . Blair Ry. 583, 593.	Great Bend Coal Co., R. L. Holliday, pres.; Fleming Holliday, secy.; John E. Bell, treas., mgr. and supt., Cap. stk. \$20,000, Nos. 2 and 4, Tunnel, 120,000 tons; horse.
Berlin . . . . . Somerset Ry. 42.	B. D. Morgan & Co., C. J. Baker, mgr. and supt., Cap. \$5,000, Berlin, Open pit, 3,000 tons; hand.
Etumun . . . . . Clinton Ry. Westport 563.	Kettle Camp Coal Mining Co., Williamsport, Pa., Henry Parsons, pres.; I. C. Russell, secy.; F. E. Gilem, treas.; Geo. L. Miller, mgr. and supt., Cap. stk. \$750,000, Kettle Creek, Drift, 250,000 tons; horse.
Blairsville . . . . . Indiana Ry. 563.	Maher Coal & Coke Co., Thomas Maher, supt., Maher, Open pit, 24,000 tons; horse.
" . . . . . "	J. M. Turner, Cap. \$25,000, Turner's, Drift, 20,000 tons; hand and horse.
Brislin . . . . . Clearfield Ry. 563.	Leonard & Craig, Cap. \$10,000, Sterling No. 2, Drift, 31,000 tons; steam, Michael Craig, supt.
" . . . . . "	John Maurice & Son, Cap. stk. \$5,000, Ferndale, Open pit, 16,000 tons; horse, John V. Jones, supt.
Broad Top . . . . . Huntingdon Ry. Robertsdale 235.	E. Eichelberger, Cap. \$4,000, Fisher, Tunnel, 20,000 tons; horse, John Loyd, supt.
Brownsville . . . . . Fayette Ry. 563.	C. L. Spowden & Co., Cap. \$25,000, Umpire, Drift, 92,350 tons; steam, 211 coke ovens, J. D. Simpson, supt.
California . . . . . Washington Ry. 563.	California Coal Co., T. M. Jenkins, pres.; L. Z. Birmingham, secy.; John W. Ailes, treas., Cap. stk. \$50,000, Vigilant and Crescent, Slope, 750,000 tons; steam.
" . . . . . "	Cedar Hill Coal Co., Cap. \$3,000, Cedar Hill, Tunnel, 84,000 tons; horse, Chas. Bradford, supt.
Calumet . . . . . Westmoreland Ry. 563.	Calumet Coke Co., Pittsburg, Pa., cor. Third av. and Wood st., M. K. Salsburg, pres. and treas.; W. S. Greene, secy., Cap. stk. \$20,000, Calumet, Shaft, steam, 225 coke ovens, 120,000 tons, S. M. Hawkins, supt.
Cambden . . . . . Allegheny Ry. 563.	Bailey, Wilson & Co., James Wilson, mgr., Alleghenipit, Drift, 11,000 tons; steam, W. W. Wilson, supt.
Cameron . . . . . Cameron Ry. 563.	Simonshoning Iron & Coal Co., Emporium, Pa., E. M. Parrott, pres., Tunnel, steam, washer, 100 coke ovens.
Camerton . . . . . Beaver Ry. 586.	The Sterling Mining Co., New Lisbon, Ohio, N. F. Wood, pres.; H. D. Hileman, secy.; W. H. Warner, treas. and mgr., Cap. stk. \$100,000, Sterling, Tunnel, 75,000 tons; electricity, Gen. Gould, supt.
Canonsburg . . . . . Washington Ry. 586.	Canonsburg Coal Co., H. F. A. Upstill, secy. and treas., Cap. stk. \$48,000, Boon, Open pit, 125,000 tons; steam, E. T. Hileman, supt.
Charleroi . . . . . Washington Ry. 563.	Charleroi Coal Co., J. W. Moore, pres.; M. J. Alexander, secy.; C. H. Uery, treas.; Jesse K. Johnston, mgr., Cap. stk. \$100,000, Open pit, 108,000 tons; steam.
Chartiers . . . . . Allegheny Ry. 583, 591.	W. J. Steen, Pittsburg, Pa., O. I. C., Open pit, 36,000 tons; horse, J. H. Bates, supt.
Clemont . . . . . McKean Ry. 563, 563.	Buffalo Coal Co., Buffalo, N. Y., 257 Washington st., S. G. DeCoursey, pres.; F. S. Ruell, treas., C. D. R. Stovvits, mgr., Cap. stk. \$1,000,000, Instanta, Drift, 175,000 tons; horse, James Mahoney, supt.
Clinton . . . . . Beaver P. O. Rock Point Ry. 563, 591.	L. S. Hoyt, Cap. \$35,000, Baker, Open pit, 75,000 tons; horse, C. H. Sewell, supt.
Coddale . . . . . Bedford P. O. Sax Mile Run Ry. 317.	David Fluke, Elmira, Cap. \$9,000, Open pit, 10,000 tons; horse, Wm. Swope jr., supt.
Coalport . . . . . Huntingdon Ry. 317.	A. H. & A. G. Hickes, Hickes, Tunnel, 12,930 tons; horse, A. George Hicks, supt.
Coalport . . . . . Clearfield Ry. 85, 195.	Sammel Hegarty, Oakland, Tunnel, 50,000 tons; horse, J. McIntire, supt.
" . . . . . "	Irvona Coal Co., Philadelphia, Pa., 420 Walnut st., W. J. Nicolls, pres.; J. F. Cooper, secy.; J. O. Nicolls, treas., Cap. stk. \$50,000, Irvona, Nos. 1 and 2, Tunnel, 100,000 tons; horse; 80 coke ovens, 30,000 tons, John McNulty, supt.
Collier . . . . . Allegheny P. O. Hickman Ry. 566.	E. W. Powers, Cap. \$30,000, Hickman, Tunnel, 65,000 tons; horse, J. Johns, supt.
Condron Station . . . . . Cambria P. O. Dysart Ry. 195.	Richland Mining Co., Altoona, Pa., cor. Twenty-fourth st. and Oak av., L. K. Evans, secy., treas. and mgr., Cap. stk. \$5,000, Richland Mine No. 1, Tunnel, steam, George Bell, supt.
Courtney . . . . . Washington Ry. 563.	Corey Gas Coal Co., Pittsburg, Pa., 95 Fifth av., J. B. Corey, treas. and mgr., Cap. stk. \$200,000, Buffalo, Tunnel, 60,000 tons; horse, Henry Gowyer, supt.
Crosson . . . . . Cambria Ry. 563, 195.	Crosson Coal & Coke Co., John K. Powell, mgr. and supt., Cap. stk. \$75,000, Crosson, Shaft, 50,000 tons; steam.
Dehane . . . . . Bedford Ry. Riddlesburg 317.	Sweet & Brown, Huntingdon, Pa., Cap. \$20,000, Brown, Nos. 1 and 2, Tunnel and slope, 97,700 tons; horse and steam, W. H. Sweet, supt.
Dravosburg . . . . . Allegheny Ry. 563.	S. S. Crump & Co., Pittsburg, Pa., 8 Wood st., Amity, Open pit, 105,000 tons; horse, S. S. Crump, supt.

## COAL—BITUMINOUS—(CONTINUED)

LOCATION OF MINE, RAILWAY, WATER ROUTES AND SHIPPING POINTS	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, COKE OVENS, AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Du Bois ..... Clearfield Ry. 11, 85, 413.	Bell, Lewis & Yates Coal Mining Co., Buffalo, N. Y. Geo. H. Lewis, pres.; Chas. Clifton, secy. and treas.; S. B. Elliott, mgr. Cap. stk. \$1,000,000. Rochester. Slope, 500,000 tons; steam. John Reed, supt.
Dudley ..... Huntington Ry. 317.	E. F. Gould. Cap. \$5,000. Huntington. Open pit, 25,000 tons; horse and hand.
" .....	W. H. Swett. Cap. \$10,000. Oceans, Nos. 1 and 2. Tunnel, 50,000 tons; horse.
Dumbar ..... Fayette Ry. 563, 42.	Leid Bros. Uniondale. Slope, 30,000 tons; steam; 74 coke ovens, 27,500 tons. Jas. L. Allen, supt.
Dunlo ..... Cambria Ry. Johnstown, 42, 563.	Yellow Run Coal Co., Greensburg, Pa. J. Schall Wilhelm, pres.; W. A. Huff, secy. and treas.; D. W. Luke, mgr. and supt. Cap. stk. \$75,000. Yellow Run. Shaft; steam (developing).
East Brady ..... Clarion Ry. Brady 11.	Brady's Bend Mining Co. C. F. Hartwell, mgr. Brady's Bend. Tunnel, 110,000 tons; horse.
Edgewood ..... Allegheny (P. O. Swissvale) Ry. 563.	Corey Coal Co., Pittsburg, Pa., Fifth av. J. B. Corey, pres.; W. L. Dixon, mgr. and supt. Cap. stk. \$50,000. Duquesne. Tunnel, 150,000 tons; steam.
Eleanor ..... Jefferson Ry. Big Run 85.	Bell, Lewis & Yates Coal Mining Co., Buffalo, N. Y. Geo. H. Lewis, pres.; Chas. Clifton, secy. and treas.; S. B. Elliott, mgr. Cap. stk. \$1,000,000. Eleanor. Drift, 200,000 tons; 100 coke ovens. Samuel Rime, supt.
Elk Lick ..... Somerset Ry. West Salisbury 42.	Hamilton & Cochrane, Baltimore, Md., 12 South st. Hamilton. Tunnel, 30,000 tons; horse. James Cochrane, supt.
Elm Grove ..... Fayette Ry. and P. O. Connells- ville 42, 563.	W. J. Rainey, Cleveland, Ohio, Mercantile Bank Bldg. Elm Grove. Slope, 120,000 tons; steam; 100 coke ovens, 72,000 tons. T. J. Mitchell, supt.
Emblem ..... Allegheny Ry. Osceola 42.	Osceola Coal Co. James W. Shields, propr., Pittsburg, Pa., P. O. Box 502. Cap. stk. \$25,000. Osceola. Open pit, 100,000 tons; steam.
Fairchance ..... Fayette Ry. 563.	Fairchance Furnace Co. Geo. R. Sheldon, pres.; W. H. De Forest jr., secy. and treas.; Robt. L. Martin, mgr. Cap. stk. \$250,000. Fairchance. Slope, 92,000 tons; horse; 133 coke ovens, 75,000 tons. John W. Stirling, supt.
Fall Brook ..... Tioga Ry. 257.	Fall Brook Coal Co., Corning, N. Y. Geo. J. Magee, pres.; John Lang, secy. and treas.; Anton Harll, mgr. Cap. stk. \$100,000. Fall Brook. Drifts, 85,000 tons; horse and steam; washer. R. Russell, supt.
Falls Creek ..... Clearfield Ry. 11, 85, 563, 618.	Reynoldsville Coal Co. Henry K. Weck, pres.; Frank Morrison, secy., mgr. and supt.; J. H. Corbett, treas. Cap. stk. \$10,000. Sherwood. Drift; horse (developing).
Federal ..... Allegheny Ry. 583.	Federal Coal Co. Wilfrid Stewart, mgr. and supt. Federal. Tunnel, 100,000 tons; horse.
Fort Hill ..... Fayette (P. O. Vanderbil) Ry. 42	W. J. Rainey, Cleveland, Ohio, Mercantile Bank Bldg. Fort Hill. Slope, 200,000 tons; steam; 100 coke ovens, 120,000 tons. T. J. Mitchell, supt.
Fragality ..... Cambria Ry. 195.	Cresson & Clearfield Coal & Coke Co., New York City, 1 Broadway Hon. John Dean, pres.; B. O. Hagan, secy.; R. J. Cross, treas.; P. H. Walls, mgr. Ainsley and Fragality Nos. 1, 2, 3, 4, 5. Tunnels, 100,000 tons; steam and horse; breaker, 125 coke ovens, 60,000 tons.
Gallitzin ..... Cambria Ry. 563.	Taylor & McCoy, Cap. \$250,000. Shaft, 210,000 tons; steam and horse; 240 coke ovens, 135,000 tons. John F. McCoy, supt.
Glen Campbell ..... Indiana Ry. 563.	Cush Creek Coal & Coke Co., Altoona, Pa., cor. Twenty-fourth st. and Oak av. H. E. Clark, pres.; I. K. Evans, secy., treas. and mgr. Cap. stk. \$6,000. Cush Creek Nos. 1 and 2. Tunnel; horse.
Glen Richey ..... Clearfield Ry. Oshanter 52	Bloomington Mining Co., Philadelphia, Pa., 411 Walnut st. F. I. Gowen, pres.; W. R. Teller, secy.; Rembrandt Peale, treas. and mgr. Cap. stk. \$100,000. Glen Richey. Drift, 200,000 tons; horse. John Dunsmore, supt.
Glenshaw ..... Allegheny Ry. 592.	Robbins Coal & Coke Co., Pittsburg, Pa., 708 Penn av. F. L. Robbins, gen. mgr. Glenshaw, slope, 100,000 tons; steam. G. W. Schlueterberg, supt.
Gomeral ..... Butler Ry. 588.	Gomeral Coal Co., Ltd., Youngstown, Ohio, H. O. Bonnell, pres. and treas.; Harry Bonnell, secy. Gomeral. Open pit, 52,000 tons; horse. Wm. Ferguson, supt.
Gosford ..... Armstrong Ry. (Columbian) Sta- tion 11.	Turner Coal & Mining Co. J. L. Turner, mgr. Turner. Tunnel, 20,000 tons; horse. Richard Lewis, supt.
Graceton ..... Indiana Ry. 563.	McCreary Coke Co., Harry McCreary, treas. and mgr. Cap. \$200,000. Graceton Nos. 1 and 2. Drift, 700 tons; steam and horse; 181 coke ovens, 120,000 tons.
Greensburg, Westmore'ld Ry. 563.	Alexandria Coal Co., Philadelphia, Pa., Bullitt Bldg. Geo. F. Huff, pres.; Fred McOwen, secy. and treas.; Thos. Donohoe, mgr. and supt. Cap. stk. \$500,000. Alexandria. Tunnel, 207,000 tons; steam; 293 coke ovens, 150,000 tons.
" .....	Carbon Coal Co., Philadelphia, Pa., 333 Walnut st. David E. Williams, pres.; W. A. Smith, secy.; James C. Clarke, treas. Cap. stk. \$300,000. Carbon. Slope, 160,000 tons; steam, 48 coke ovens; 26,000 tons. Frank I. Kimball, supt.
" .....	Jamison Coal Co. R. S. Jamison, pres.; John M. Jamison, secy. and treas.; Thos. S. Jamison, mgr. and supt. Cap. stk. \$150,000. Jamison. Slope; steam; 30 coke ovens, 15,000 tons (developing).
" .....	Madison Gas Coal Co. G. Brinton Roberts, pres.; W. A. Smith, secy.; W. A. Huff, treas. Cap. stk. \$100,000. Madison. Tunnel, 98,000 tons; horse. Thos. Donohoe jr., supt.
Grindstone ..... Fayette Ry. 563.	Redstone Oil, Coal & Coke Co., Philadelphia, Pa., 201 Walnut pl. J. B. Ridgway, pres.; J. I. Bishop, v.-pres.; Geo. W. Dolmert, treas. Redstone. Shaft, 180,000 tons; steam and electricity; 31 coke ovens, 15,500 tons. J. F. Cook, supt.
Grove City ..... Mercer Ry. 588.	Filer, Saffill & Co., Sharon, Pa., Enoch Filer, mgr. Cap. \$60,000. Diamond, No. 1 and No. 2. Shafts, 140,000 tons; steam. Frank P. Filer, supt.
" .....	Westerman, Filer & Co., Sharon, Pa., Enoch Filer, mgr. Cap. \$60,000. Chestnut Ridge. Shaft, 70,000 tons; steam and horse. Enoch D. Filer, supt.
Gurnee ..... Tioga Ry. 3.	Gaines Coal & Coke Co., Addison, N. Y. T. C. Platt, pres.; Frank M. Baker, mgr. Drifts Nos. 2 and 3. Tunnel, 5,730 tons; horse. P. Smith, supt.

## COAL—BITUMINOUS—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, CORE OVENS, AND NAME OF MINE SUPERINTENDENT.
TOWN	AND COUNTY.	
Hamilton	.....Tioga	Morris' Run Coal Mining Co., Corning, N. Y. Geo. J. Magoor, pres.; W. S. Neuring, secy. and supt., Daniel Beach, treas. Cap. stk. \$100,000. Morris Run. Slope, 4,000 tons; horse and steam.
Hastings	.....Cambria	Dunwiddie & Campbell. Cap. \$12,000. Oak Ridge. Slope, 25,000 tons; horse. Jas. Campbell, supt.
Hermitage	.....Mercer	Dunham & Evans (local). Cap. \$500. Hermitage. Shaft, 1,000 tons; horse.
"	....."	N. L. Wiesen (local). Wiesen. Slope, 1,000 tons; horse.
Hekman	.....Allegheny	Beechmont Coal Co. Cap. \$10,000. Beechmont. Slope, 60,000 tons; steam and horse. J. C. McMichael, supt.
Hooverville	.....Somerset	Win. Hoover & Bros. (local). Valley Mines.
"	....."	D. D. Jones. Ocean. Slope, 50 tons; horse.
"	....."	Joseph Meyers (local). Cap. \$50. Tunnel, 60 tons; hand.
"	....."	Frank Rodgers (local). Open pit; hand.
Hopewell	.....Bedford	Huntingdon & Broad Top Mountain Railroad & Coal Co., Philadelphia, Pa. S. E. cor. Fourth and Walnut sts. Spencer M. Lanney, pres.; J. P. Donaldson, secy. and treas.; Geo. F. Gage, gen. mgr. Cap. stk. \$3,571,750. Cumberland and Mount Equity. Tunnels, 200,000 tons; horse. John Langdon, supt.
"	....."	Lambirth Coal Mining Co., Philadelphia, Pa. 131 S. Fourth st. H. W. Lambirth, pres.; Geo. E. Scott, secy. and treas.; John Langdon, mgr. Cap. stk. \$12,000. Crescent and Chevington. Slope and drift, 125,000 tons; steam and horse. Lee Ott, supt.
Houtzdale	.....Clearfield	H. K. Myers, Tyrone, Pa. Cap. \$15,000. Belvern, Nos. 1 and 3. Drift, 100,000 tons; steam. Robert Whitehead, supt.
"	....."	Sterling Coal Co., Philadelphia, Pa. 119 Walnut st. D. H. Has-Engs, pres.; L. L. Patterson, secy.; W. H. Metzger, treas.; Edward McHugh, mgr. Cap. stk. \$200,000. Sterling Mines (10). Drifts and slopes, 600,000 tons; steam and horse. Thos. E. McHugh and J. L. Spangier, supts.
Imperial	.....Allegheny	Imperial Coal Co., Pittsburg, Pa. 95 Fifth av. C. A. Andrews, pres.; W. H. Hosmer, secy. and treas.; Wm. Bald, mgr. and supt. Bower Hill, Montour and Cliff. Drift, 200,000 tons; steam; 102 coke ovens.
Irwin	.....Westmoreland	Penn. Gas Coal Co., Philadelphia, Pa. 20 S. Third st. F. A. Dinger, pres.; A. K. Gregory, secy. and treas.; John F. Wolf, mgr. and supt. Coal Run, Nos. 1, 2 and 4. Shafts, 800,000 tons; steam and horse, 50 coke ovens.
Jacob's Creek	.....Westmoreld	Eureka Coal Co., Pittsburg, Pa. 83 Fourth av. Wm. H. Graham, pres.; W. A. Dinker, secy. and treas.; Wm. McTune, mgr. and supt. Cap. stk. \$70,000. Eureka. Tunnel, 100,000 tons; steam and horse.
Johnstown	.....Cambria	William Barnett (local), Eighth ward. Grabtown. Tunnel, 400 tons; hand.
"	....."	A. J. Haws & Son (local). Cap. \$130,000. Shaft, 25,200 tons; steam.
"	....."	W. J. Williams (local). Water st. Cap. \$800. Williams. Open pit, 4,500 tons; horse. John Retallick, supt.
Kearney	.....Bedford	Joseph E. Throppe, Philadelphia, Pa. 119 S. Fourth st. Kearney. Slopes and tunnels; 110 coke ovens. Thos. A. Jones, supt.
Lafrore	.....Westmoreland	Derry Coal & Coke Co. M. Saxman jr., pres.; D. Watts, secy. and treas.; E. Saxman, mgr. and supt. Cap. stk. \$150,000. Derry. Shaft, 188,000 tons; steam; 152 coke ovens, 108,000 tons.
"	....."	Lafrore Coal Co., Altoona, Pa. J. G. Cassatt, pres.; John Lloyd, secy. and treas. Slope, 180,000 tons; steam; 100 coke ovens. D. W. Jones, supt.
"	....."	M. Saxman jr. & Co. Cap. \$150,000. Saxman. Shaft, 97,700 tons; steam; 60 coke ovens, 32,000 tons. F. Kienan, supt.
Lawsonham	.....Clarion	Keystone Coal Mining Co., East Brady, Pa. Geo. E. Henry, pres.; secy. and supt.; John Henry, mgr. Cap. stk. \$20,000. Keystone. Open pit, 50,000 tons; hand.
Ligonier	.....Westmoreland	Michael Keller (local). Keller. Open pit, 600 tons; hand.
"	....."	William C. Knox (local). Knox. Open pit, 724 tons; hand.
Lilly	.....Cambria	E. W. Mentzer, Hollidaysburg, Pa. Bens Creek Plain. Drift, 68,500 tons; horse. John A. Leap, supt.
"	....."	W. H. Piper & Co., Philadelphia, Pa. 413 Walnut st. Soman, Nos. 1, 2 and 3. Tunnel, 200,000 tons; steam and horse. John Leasley, supt.
Listonburg	.....Somerset	Listie Mining & Manufacturing Co., Somerset, Pa. Simon Krebs, pres., mgr. and supt.; Joseph Tate, secy. and treas. Cap. stk. \$50,000. Krebs. Tunnel.
"	....."	Jesse Liston (local).
Lloydville	.....Cambria	Cambria Fire Brick Co., Lock Haven, Pa. N. W. Fredericks, pres.; R. L. Bower, secy.; R. W. Fredericks, treas.; H. G. Hurd, mgr. Cap. stk. \$82,000. Drift, horse and hand (developing).
Lobbs Run	.....Allegheny	Joseph Walton & Co., Pittsburg, Pa. 134 Water st. L. N. Banton, mgr. Cap. stk. \$1,500,000. Upper. Drift, 50,000 tons; steam, horse and hand. John W. P. ke, supt.
Long Valley	.....Bradford	Long Valley Coal Co., Towanda, Pa. J. Raymond Claghorn, pres.; Edwin Ackley, secy.; E. O. MacFarlane, treas. and mgr. Cap. stk. \$125,000. Long Valley. Drift, 68,600 tons; horse. W. R. Jones, supt.
Loyalhanna	.....Westmoreld	Loyal Hanna Coal & Coke Co., Philadelphia, Pa. 141 S. Fourth st. John Plecinar, pres. and treas.; C. C. Watt, secy. and gen. mgr. Cap. stk. \$800,000. Loyal Hanna and Pandora. Shafts; horse, steam and elevator; coal washer, 236 coke ovens. J. C. Menolin, supt.
McDonald	.....Washington	Patterson & Sauters. Cap. \$75,000. Brier Hill. Tunnel, 100,000 tons; steam. J. D. Sauters, supt.

## COAL—BITUMINOUS—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, COKE OVENS, AND NAME OF MINE SUPERINTENDENT.
TOWN	AND COUNTY.	
McDonald	Washington (Continued.)	Pittsburg Consolidated Coal Co., Pittsburg, Pa., 708 Penn av. F. L. Robbins, gen. mgr. Jumbo, No. 1. Slope, 200,000 tons; steam; 16 coke ovens. G. W. Schluederberg, supt.
"	"	J. D. Sauters, Cap. \$75,000. Nickel Plate. Tunnel, 80,000 tons; steam.
McGovern	Washington Ry. Allison 584.	Cook & Sons. Cap. \$15,000. Allison. Drift, 45,000 tons; horse. R. M. Cook, supt.
Madera	Clearfield Ry. 563.	Moshannon Vein Coal Mining Co., Philadelphia, Pa., Fourth st., Bulfill Bldg. J. Chester Wilson, pres.; R. A. Zentmyer, secy. and treas.; P. B. Zentmyer, mgr. and supt. Cap. stk. \$50,000. Chester Nos. 1 and 2. Open pit, 100,000 tons; horse.
"	"	Vulcan Coal & Coke Co., Philadelphia, Pa., 228 S. Fourth st. Wm. H. Wigton, prest. and mgr.; F. H. Wigton, secy. and treas. Cap. stk. \$50,000. Vulcan Nos. 1 and 2. Tunnel, 300,000 tons; steam. Chas. E. Sharpless, supt.
Madison	Westmoreland Ry. 563.	Arona Gas Coal Co., Philadelphia, Pa., 333 Walnut st. G. Brinton Roberts, prest.; W. A. Huff, secy. and treas.; Thomas Donohoe, mgr. and supt. Cap. stk. \$160,000. Arona. Open pit; horse (developing).
Madison	Armstrong (P. O. Cosmopolitan) Ry. Red Bank 11.	River View Coal & Mining Co., Buffalo, N. Y., 22 W. Swan st. John Peterson, prest.; L. V. Biggs, secy.; James S. Moore, mgr. Cap. stk. \$75,000. Drift, 100,000 tons; gravity.
Marion Centre	Indiana Ry. Indiana 563.	John Vanbeer (local). Cap. \$5,000. Vanbeer. Open pit, 12 tons; hand.
Meyersdale	Somerset Ry. 42.	Casselman Coal Co. Wm. G. Hocking, prest. and gen. mgr. Cap. stk. \$30,000. Casselman. Slope, 75,000 tons; steam.
"	"	Hocking Coal Co., Baltimore, Md., Lodenhall st. Open pit, 45,000 tons.
"	"	Benjamin Thomas. Cap. \$3,000. Thomas. Tunnel, 17,000 tons; horse.
Midway	Washington Ry. 584.	Pittsburg Consolidated Coal Co., Pittsburg, Pa., 708 Penn av. F. L. Robbins, gen. mgr. Jumbo, No. 2. Slope, 125,000 tons; steam. G. W. Schluederberg, supt.
Milesville	Allegheny (P. O. Sunny Side) Ry. 426.	Robert Jenkins, Pittsburg, Pa., 120 Water st. Cap. \$30,000. Milesville. Open pit; horse and steam.
Mineral Point	Cambria Ry. 563.	E. Reighorn & Page (heirs). Cap. \$3,000. Cambria. Slope, 18,000 tons; horse. E. Reighorn, supt.
Monongahela City	Washington Ry. 426, 563.	W. H. Brown's Sons, Pittsburg, Pa., 113 Water st. Black Diamond. Drift, 60,000 tons; steam. James Lorett, supt.
Morrisdale	Mines Clearfield Ry. Morrisdale 52.	R. B. Wigton & Sons, Philadelphia, Pa., 228 S. Fourth st. Morrisdale Nos. 1, 2, 3 and 4. Troy; Rothrock, Schoonover and Canard. Shaft and drifts, 750,000 tons; steam and compressed air; 124 coke ovens, 62,000 tons. Chas. E. Sharpless, supt.
Mt. Braddock	Fayette Ry. 42, 563.	R. Hogsett & Co. Cap. \$50,000. Mt. Braddock. Slope, 85,000 tons; steam; 170 coke ovens, 54,000 tons. Fuller Hogsett, supt.
Mt. Pleasant	Westmoreland Ry. 42, 563.	South-West Conynville-Coke Co., Pittsburg, Pa., 501 Bank of America Bldg. H. C. Frick, prest.; F. W. Haskell, secy. and treas.; Morris Ransay, gen. mgr. and supt. Cap. stk. \$4,000,000. Nos. 1, 2, 3 and 4. 1,200,000 tons; steam, water and electricity; 1,302 coke ovens, 725,000 tons.
Moyer	Fayette Ry. 563.	W. J. Rainey, Cleveland, Ohio, Mercantile Bank Bldg. Grace. Slope, 450,000 tons; steam; 410 coke ovens, 270,000 tons. Thos. Johns, supt.
Munhall	Allegheny Ry. 563.	Munhall Bros., Pittsburg, Pa., 409 Smithfield st. Cap. \$175,000. Bellwood. Tunnel, 65,000 tons; steam and horse. Wm. McMasters, supt.
Munson Station	Clearfield Ry. Munson 52.	R. C. Fishburn, Cap. \$15,000. Kyler. Tunnel, 50,000 tons; horse; 50 coke ovens, 25,000 tons.
"	"	A. B. & G. W. Lueder. Cap. \$10,000. Lueder. Slope, 30,000 tons; steam and horse. Frank O'Rorke, supt.
Myra	Cambria Ry. Somman, 563.	Somman Coal Mining Co., Philadelphia, Pa., 206 Bulfill Bldg. John Pfeiffer, prest.; C. C. Watt, v. prest.; T. S. Shoenaker, secy.; L. V. Biggs, treas.; C. A. Hughes, mgr. Cap. stk. \$50,000. Somman. Shaft, 150,000 tons; horse and steam. Joseph Patterson, supt.
Neshamook	Mercer Ry. 668.	Pierce Coal Co., Ltd., Sharpsho, Pa. Frank Pierce, prest.; James Pierce, mgr. Lackawannock No. 2. Shaft, 15,000 tons; steam. Archd McIntyre, supt.
New Castle	Lawrence Ry. 251, 503, 504, 502, 585.	Thompson Run Coal Co. M. S. Marquis, prest.; L. Roney, treas. Cap. stk. \$16,000. Thompson Run. Tunnel (developing).
New Geneva	Fayette Ry. 563.	R. T. Williams (local). Williams. 1,200 tons.
Nobletstown	Allegheny Ry. 584.	National Coal Co., Ltd., Pittsburg, Pa., 95 Fifth av. Frank Armstrong, prest.; L. M. Jenkins, secy. and mgr.; J. A. McCreedy, treas. Cap. stk. \$51,000. National. Tunnel, 50,000 tons; steam and horse. John Brown, supt.
Oil City	Venango Ry. 11, 383, 563, 805.	Hartwell Coal Co. C. F. Hartwell, prest. Tunnel (developing).
Oseola	Allegheny (P. O. Emblem) Ry. 42.	James W. Shields, Pittsburg, Pa., P. O. Box 502. Cap. \$25,000. Oseola. Open pit, 100,000 tons; steam.
Oseola Mills	Clearfield Ry. Oseola 563.	Ghem Coal Co. Ghem. Drift, 40,000 tons; horse. Geo. M. H. Good, supt.
"	"	H. Liveright & Co., Philadelphia, Pa., 28 N. Third st. Cap. \$30,000. Logan, Bessemer, Pioneer and Fairmount. Open pits, 200,000 tons; horse. J. S. Catherman, supt.
Pennsville	Fayette Ry. 563.	Pennsville-Coke Co. J. D. & B. T. Schenick, mgrs. Cap. stk. \$100,000. Pennsville. Open pit and slope, 62,000 tons; steam; 12 coke ovens, 47,000 tons. Jacob Duxant, supt.
Percy	Fayette (P. O. Uniontown) Ry. 42.	Percy Mining Co., Uniontown, Pa. Geo. C. Marshall, prest. and treas.; A. W. Bliss, secy. Cap. stk. \$60,000. Percy. Shaft, 45,000 tons; steam; 62 coke ovens, 25,000 tons. Louis de Saulles, supt.



## COAL—BITUMINOUS—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL-BREAKERS, WASHERS, CORE OVENS, AND NAME OF MINE SUPERINTENDENT.	
TOWNS	COUNTY.		
Phillipsburg	Centre	Bloomington Mining Co., Philadelphia, Pa., 411 Walnut st. F. I. Gowen, pres't.; W. R. Teller, secy., Rembrandt Peale, treas. and mgr. Cap. stk. \$100,000. Cuba and Victor. Drifts, 300,000 tons; horse. John Dunsmore, supt.	
"	"	Coldale Coal Co., O. Perry Jones, pres't. and mgr.; Geo. W. Gamoe, secy. and treas. Cap. stk. \$250,000. Coldale Nos. 3, 4, 5, 6, 7 and 8. Drifts and slopes, 100,000 tons; steam.	
"	"	Jackman & Ellsworth. Colorado Nos. 1, 2 and 3. Tunnel, 125,000 tons; horse.	
"	"	Thomas J. Lee. Cap. \$10,000. Gearhart. Drift, 100,000 tons; horse. Richard Lobb, supt.	
"	"	Munson Coal Co. Munson. Tunnel, 5,000 tons; horse. R. E. Munson, supt.	
"	"	John Nuttall & Co. Cap. \$150,000. Decatur Nos. 1 and 2. Open pit, 140,000 tons; horse. G. W. McGaffey, supt.	
"	"	J. S. Wires & Co. Cap. \$60,000. Montana. Open pit, 70,000 tons; horse.	
Pittsburg	Allegheny	Corey Gas Coal Co., Fifth av. J. B. Corey, mgr. Cap. \$150,000. Buffalo. Open pit, 75,000 tons; steam. Thomas F. Neill, supt.	
Portage	Cambria	Cambria Coal Mining Co., Williamsport, Pa. Jas. B. Coryell, pres't.; W. D. McCausland, secy. Cap. stk. \$100,000. Anchor. Tunnel, 100,000 tons; horse. E. S. Brubaker, supt.	
"	"	Hopfer & Milson. Cap. \$9,000. Ebbvale. Drift, 40,000 tons; horse. Edward Hughes, supt.	
"	"	Somnan Coal Mining Co., Philadelphia, Pa., 266 Bullitt Bldg. John Pitcairn, pres't.; T. S. Shoemaker, secy.; L. A. V. Riggs, treas.; C. A. Hughes, mgr. Cap. stk. \$50,000. Trout Run. Slope, 75,000 tons; steam and horse.	
Powellton	Centre	Robert A. Jackson, Osceola Mills, Pa. Cap. \$20,000. Black Diamond. Open pit, 60,000 tons; steam. R. Jackson Jr., supt.	
Rainey	Fayette	W. J. Rainey, Cleveland, Ohio. Mercantile Bank Bldg. Rainey. Drift; steam; 25 coke ovens, 150,000 tons. T. J. Mitchell, supt.	
Ralston	Lycoming	Red Run Coal Co., Rorring Branch, Pa. Jacob Green, pres't.; C. L. Green, secy., treas. and mgr. Cap. stk. \$200,000. Red Run. Tunnel, 60,000 tons; steam. Robert Browline, supt.	
Ramsey	Clearfield	Bendish Coal Co., Ltd., Philadelphia, Pa., 141 S. Fourth st. Cap. stk. \$2,000. Webster No. 1. Tunnel, 91,000 tons; steam. James H. Mills, supt.	
Red Bank	Armstrong	Oak Mining Co., Buffalo, N. Y., Coal and Iron Exchange. R. H. Williams, pres't., secy. and mgr.; H. A. Noble, treas. Cap. stk. \$50,000. Oak Ridge Nos. 1, 2 and 3. Drifts, 4,500 tons; steam. J. C. Baker, supt.	
Reynoldsdale	Jefferson	Bell, Lewis & Vates Coal Mining Co., Buffalo, N. Y. Geo. H. Lewis, pres't., Chas. Clifton, secy. and treas.; S. B. Elliott, mgr. Cap. stk. \$1,000,000. Solder Run, Sprague and Hamilton. Slopes, 600,000 tons; horse, 100 coke ovens, 30,000 tons. Geo. Mellinger, supt.	
Richland Station	Lebanon	Richland Coal Co., Altoona, Pa., Room 12 Phoenix Block. W. L. Shellenberger, pres't. and mgr.; F. G. Patterson, secy.; S. J. Westley, treas. Cap. stk. \$50,000. Dougherty. DRIFT developing.	
Ridgelysburg	Bedford	Kemble Iron Co., Alex. N. Mick, pres't.; Chas. H. Scott, secy. and treas.; Wm. Lander, mgr. Mt. Equity. Tunnel, 70,000 tons; ss coke ovens, 30,000 tons. James Allen, supt.	
Rimersburg	Clarion	Aerne Mining Co., Buffalo, N. Y., Coal and Iron Exchange. W. Pollock, pres't.; J. W. Hill, secy. and treas.; E. B. Hill, mgr. Aerne. Open pit, 45,000 tons; horse. Thos. S. Lofthor, supt.	
Rimerton	Armstrong	C. E. Butler. Cap. \$1,000. Rimerton. Open pit, 15,000 tons; horse.	
River View	Armstrong	River View Coal & Mining Co., Philadelphia, Pa., 266 Bullitt Bldg. John Pitcairn, pres't.; L. A. V. Riggs, secy. and treas.; James S. Moore, mgr. and supt. Cap. stk. \$75,000. River View. Drift, 100,000 tons; horse and gravity.	
Robertsdale	Huntingdon	Rockhill Iron & Coal Co., Philadelphia, Pa., 229 Walnut st. Wm. A. Ingham, pres't.; J. E. Haverstick, secy. and treas.; A. W. Sims, mgr. Robertsdale. Slope and shaft, 200,000 tons; dynamite, 132 coke ovens, 50,000 tons. Charles Connor, supt.	
Roseoe	Washington	Alps Coal Co., L. S. Miller, pres't.; J. W. Ades, secy. and treas. Cap. stk. \$50,000. Snowhill and Little Alps. Open pit, 150,000 tons; steam and horse. Joseph Hodgeowl, supt.	
Saint Mary's	Eik	Raul & Hall. Cascade and Hazel Dell. Open pit, 15,000 tons; hand. Martin Dippold, supt.	
"	"	St. Mary's Coal Co., Williamsport, Pa., 165 E. Third st. F. Coleman, pres't.; J. B. Coryell, secy. and treas. Cap. stk. \$20,000. St. Mary's. Open pit, 100,000 tons; steam and horse.	
Salisbury	Somerset	Grassy Run Coal Co., Eik Lick, Pa. John Meager, mgr. and supt. Grassy Run. Drift, 28,000 tons; hand.	
Sallito	Huntingdon	George Sheeman (local). Cap. \$1,000. Rocky Ridge. Slope, 1,200 tons; horse.	
Saltsburg	Indiana	Saltsburg Coal Co., Philadelphia, Pa., Brown Bldg. B. K. Jamison, pres't.; N. B. Shuffack, secy.; F. B. Robinson, treas.; David Gallorath, mgr. and supt. Cap. stk. \$750,000. Fairbanks and Foster. Pit, 100,000 tons; steam.	
Scottdale	Westmoreland	Scottdale Iron & Steel Co., Ltd. (local). P. S. Loucks, chairman, C. Grazier, secy.; J. R. Stauffer, treas. Open pit, 30,000 tons; horse. A. S. Livingston, supt. Mine in Fayette county.	
Scott Haven	Westmoreland	Wm. P. Dilworth & Co., Pittsburg, Pa., 708 Penn. av. Cap. \$50,000. Youghogheny. Drift and open pit, 60,000 tons; horse. Thomas Whitman, supt.	
Shaner	Westmoreland	Shaner Gas Coal Co., Pittsburg, Pa., 708 Penn. av. Frank L. Rollins, pres't.; J. E. McDonald, secy.; G. W. Schellenberger, treas., supt. and mgr. Cap. stk. \$250,000. Shaner No. 1. Slope, 100,000 tons; steam.	

## COAL—BITUMINOUS—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINTS		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, COKE OVENS, AND NAME OF MINE SUPERINTENDENT.
TOWN	COUNTY.	
Shirebreaks	Washington	John M. Risher, Pittsburg, Pa., 8 Wood st. Cap. \$275,000. Banner, Cliff and Coal Bluff. Open pits, 400,000 tons; steam. Joseph Griffiths, supt.
Smithton	Westmoreland	Waverly Coal & Coke Co., Pittsburg, Pa., 17 Coal Exchange. J. A. Courtney, pres't, and secy.; R. B. Mellon, treas.; David Orr, mgr. and supt. Cap. stk. \$300,000. Waverly. Shaft and open pit, 200,000 tons; steam; washer, 117 coke ovens, 50,000 tons.
Snow Shoe	Centre	Leligh Valley Coal Co., Philadelphia, Pa., 228 S. Third st. Elisha P. Wildbur, pres't.; J. R. Fanshawe, secy.; Wm. C. Adlerson, treas.; W. A. Lehtrop, mgr. Cap. stk. \$850,000. Lucas Hill and Sugar Camp Nos. 1, 2 and 3. 197,000 tons; steam and horse. James F. Marsteller, supt.
South Fork	Cambria	Annora Coal Co., Annora. Drift, 4,000 tons; horse. D. W. Lake, supt.
"	"	Argyle Coal Co., Greensburg, Pa. R. Coulter, pres't.; W. A. Huff, secy.; Geo. F. Hull, treas.; J. P. Wilson, mgr. and supt. Cap. stk. \$23,000. Argyle. Open pit, 15,000 tons; horse.
"	"	Euchel Coal Co., Ltd., Altoona, Pa., 813 Fourth st. W. S. Hostler, pres't.; J. H. Dietrick, secy., supt. and mgr. Cap. stk. \$10,000. Euchel. Open pit, 50,000 tons; horse.
Southwest	Westmoreland	The Hecla Coke Co., Ltd., Pittsburg, Pa., 421 Wood st. Wm. Thaw jr., pres't.; T. C. Darsie, secy.; Benjamin Thaw, treas.; Jas. Darsie, genl. mgr. Cap. stk. \$50,000. Hecla No. 1. Shaft, 225,000 tons; steam and horse; 272 coke ovens, 150,000 tons. Thomas Laird, supt.
Spears	Washington	Blyth Coal Co., Pittsburg, Pa., 8 Wood st. Geo. E. Blyth, pres't.; John Musgrave, secy. and treas. Cap. stk. \$100,000. Blyth. Drift, 100,000 tons; horse. Thos. Covell, supt.
Stockdale	Washington	Stockdale Coal Co., Pittsburg, Pa., Sixth av. and Smithfield st. Aene. Open pit, 100,000 tons; horse. A. S. Braznell, supt.
Stoueboro	Mercer	Carver Coal Co., Sharon, Pa. Enoch Filer, pres't.; H. J. Filer, secy. Cap. \$50,000. Carver. Shaft, 70,000 tons; steam. E. P. Filer, supt.
Tranger	Westmoreland	The Hecla Coke Co., Ltd., Pittsburg, Pa., 421 Wood st. Wm. Thaw jr., pres't.; T. C. Darsie, secy.; Benj. Thaw, treas.; James Darsie, genl. mgr. Cap. stk. \$50,000. Hecla No. 2. Shaft, 450,000 tons; steam and horse; 500 coke ovens, 300,000 tons. Thomas Laird, supt.
Tyrone	Blair	H. K. Myers. Cap. \$15,000. Tipton. Slope, 100,000 tons; steam. J. J. Stoker, supt.
Uniontown	Fayette	J. D. Boyd & Co., W. Main st. Union. Drift, 100,000 tons; horse.
"	"	Edward Snider (local). Snider. Open pit, 8,500 tons; horse.
"	"	Stewart Iron Co., Ltd., Sharon, Pa. Fayette Brown, pres't.; D. B. Chambers, secy.; Harvey H. Brown, treas.; Samuel McClure, mgr. Cap. stk. \$150,000. Stewart. Slope, 20,000 tons; steam; 120 coke ovens, 72,000 tons. F. C. Van Dusen, supt.
Upper Tyrone	Fayette	J. R. Stauffer, Scottdale (Westmoreland Co.), Pa. Cap. \$50,000. Dexter and Home. Open pit, 23,000 tons; horse; 60 coke ovens, 30,000 tons. S. R. Fairchild, supt.
Urshina	Somerset	Connellsville & Urshina Coal & Coke Co., Scottdale (Westmoreland Co.), Pa. J. M. Reid, pres't.; Joseph Abrose, secy.; E. H. Reid, treas. and mgr. Cap. stk. \$1,700,000. Edna. Drift; horse; 30 coke ovens.
Vance Mills	Fayette	E. A. Humphries & Co., Scottdale, Pa. Cap. \$50,000. Chester Coke Works. Slope, 40,000 tons; steam and horse; 37 coke ovens, 25,000 tons. George Armstrong, supt.
Vanderbilt	Fayette	W. J. Rainey, Cleveland, Ohio, Mercantile Bank Bldg. Moreland. Slope, 60,000 tons; steam. T. J. Mitchell, supt.
Van Ormer	Cambria	James Wolfenden. Cap. \$4,000. Van Ormer. Open pit; horse.
Venetia	Washington	D. M. Anderson. Cap. \$150,000. Anderson. Drift, 60,000 tons; steam.
Walker's Mills	Allegheny	Boyd Coal Co. Cap. \$50,000. Boyd. Drift, 36,000 tons; horse. Jesse H. Sanford, supt.
Walsall	Cambria	Ingleside Coal Co., Johnstown, Pa. Cap. stk. \$20,000. Ingleside. Drift, 60,000 tons; horse. Alfred Slater, supt.
Walston	Jefferson	Bell, Lewis & Yates Coal Mining Co., Buffalo, N. Y. Geo. H. Lewis, pres't.; Chas. Clifton, secy. and treas.; S. B. Elliott, mgr. Cap. stk. \$1,000,000. Walston. Drifts and slope, 450,000 tons; steam; breaker, 480 coke ovens. G. W. Snyder, supt.
Wampum	Lawrence	Wampum Run Coal Co., Railroad st. Mary J. Mehard, pres't. and treas.; Geo. C. Murdock, secy.; Robert H. Mehard, mgr. and supt. Cap. stk. \$14,000. Excelsior Nos. 1 and 2. Tunnel, 60,000 tons; horse and steam.
Waynesburg	Greene	Champion Coal Co. (local). Champion. Slope, 4,000 tons; hand.
"	"	J. D. Johnson. Cap. \$4,000. Slippery Rock. Open pit, 2,800 tons; hand.
West Brownsville	Washington	Knob Coal Co., Brownsville, Fayette County, Pa. Thomas Hollenrod, pres't.; Ashael Smith, secy.; S. H. Pearsall, treas. and mgr. Cap. stk. \$25,000. Knob. Slope, 80,000 tons; steam. John D. Bakenell, supt.
West Elizabeth	Allegheny	Joseph Walton & Co., Pittsburg, Pa., 134 Water st. I. N. Blanton, mgr. Cap. \$1,500,000. Lower. Drift, 40,000 tons; hand, horse and steam. John W. Pike, supt.
West Monterey	Clarion	Skidmore & Eleke. Cap. \$25,000. Mineral Ridge. Tunnel, 50,000 tons; hand. C. W. H. Eleke, supt.
W. Newton	Westmoreland	Gough Slope Gas Coal Co. Cap. \$50,000. Gough. Slope, 73,000 tons; steam. R. H. Latimore, supt.
W. Overton	Westmoreland	A. C. Overholt & Co. Cap. \$250,000. West Overton. Open pit, 48,000 tons; horse; 110 coke ovens, 48,000 tons. B. F. Overholt, supt.

## COAL—BITUMINOUS—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES, AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, COKE OVENS, AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
West Salisbury . . . Somerset (P. O. Elk Lick) Ry. 42.	Standard Coal Co. M. F. Statler, pres't., mgr. and supt.; C. E. Statler, secy. and treas. Cap. stk. \$5,000. Standard. Drift, 20,000 tons; horse.
" " " " " "	E. Statler. Cap. \$5,000. Statler, 20,000 tons; horse.
White Ash . . . Allegheny Ry. Sandy Creek 11.	New York & Cleveland Gas Coal Co., Pittsburg, Pa., 320 Penn av. W. P. DeArmit, pres't.; Frank Semple, secy. and treas.; Wm. Fisher, mgr. and supt. Cap. stk. \$1,000,000. Sandy Creek. Tunnel, 200,000 tons; steam and horse.
Whitney . . . Westmoreland Ry. 563.	Hostetter Connellsville Coke Co., Pittsburg, Pa., 59 Fourth av. George I. Whitney, pres't.; Alfred Knox, secy. and treas.; John McFadyen, mgr. Cap. stk. \$3,000,000. Whitney and Lippincott. Slopes, 480,000 tons; steam; 607 coke ovens, 330,000 tons. John T. Rush, supt.
Whitsett . . . Fayette Ry. 591.	Rainbow Coal & Coke Co. Cap. \$50,000. Rainbow. Drift, 180,000 tons; steam. H. G. Whitsett, supt.
Wilkinsburg . . Allegheny Ry. 563.	Hampton Coal Mines, Pittsburg, Pa., 1425 Liberty st. J. M. Brownson, secy. and treas.; Thos. C. Dickson, mgr. Hampton. Slope; horse. John L. Stewart, supt.
Willock . . . Allegheny Ry. 42.	First Pool Mongongahela Gas Coal Co., Pittsburg, Pa., 708 Penn av. Francis L. Robbins, pres't.; A. L. Petrie, secy.; G. W. Schluederberg, treas., mgr. and supt. Cap. stk. \$50,000. First Pool. Shaft, 130,000 tons; steam.
Willow Grove . Allegheny (P. O. Sturgeon) Ry. 584, 583.	Willow Grove Mining Co., Pittsburg, Pa., 708 Penn av. F. L. Robbins, mgr. Willow Grove. Slope, 150,000 tons; steam. G. W. Schluederberg, supt.
Winburne . . . Clearfield Ry. 52.	Sommerville & Buchanan. Cap. \$50,000. Sommerville, Nos. 4, 5, 6, 7 and 8. Tunnels, 300,000 tons; horse. John S. Sommerville, supt.
Woodland . . . Clearfield Ry. 52, 563.	Woodland Camel Coal Co., Tyrone, Pa. J. M. Keck, pres't.; C. M. Ewing, secy.; L. Keck, treas.; Edward Keck, mgr. Cap. stk. \$40,000. Kecks. Open pit, 10,000 tons; horse. H. S. Overly, supt.

## CORUNDUM

LOCATION OF MINE OR BANK, RAILWAYS, WATER ROUTES, AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE OR BANK, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, ETC., AND NAME OF SUPERINTENDENT.
TOWN AND COUNTY.	
Unionville . . . Chester Ry. 563.	Abrasive Material Co., Philadelphia, Pa., 115 N. Fourth st. John Hoskin, pres't.; Fred S. Dickson, secy.; Louis T. Byerts, treas.; Harlan Page, mgr. and supt. Cap. stk. \$25,000. Tunnel and shafts; steam.

## FIRE CLAY

LOCATION OF MINE OR BANK, RAILWAYS, WATER ROUTES, AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE OR BANK, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, ETC., AND NAME OF SUPERINTENDENT.
TOWN AND COUNTY.	
Haydenville . . Fayette Ry. Fairbairn, 563.	D. H. Emme. Cap. \$5,000. Emme's, glass pot clay. Open pit, 1,000 tons; hand.
Lloydville . . . Cambria Ry. 546.	Cambria Fire Brick Co., Lock Haven, Pa. N. W. Fredericks, pres't.; E. L. Bower, secy.; R. W. Fredericks, treas.; H. G. Hurd, mgr. Cap. stk. \$32,000. Fire clay. Drift, hand and horse (developing).
Metzdown . . . Berks Ry. 578.	Star Clay Co. Cap. stk. \$30,000. J. Bordeaux Wilson, mgr. and supt. White China clay. Open pit, 2,400 tons; steam.
Park Quarries . Beaver Ry. Colway 563.	Park Fire Clay Co. Jas. I. Park, pres't.; W. A. Park, treas. Park fire clay. Shafts and slope, 100,000 tons; steam. J. H. Park, supt.

## GOLD AND SILVER

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWNS AND COUNTY.	
Grilah . . . Cumberland Ry. Hunter's Run 578.	Joseph Hoivis. Gold and silver. Open pit, 5,000 tons; horse and hand.

## GRAPHITE

LOCATION OF MINE, OR BANK, RAILWAYS, WATER ROUTES, AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE OR BANK, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, ETC., AND NAME OF SUPERINTENDENT.
TOWN AND COUNTY.	
Uwchland Ry. 578. . . . . Chester	American Plumbago Mining Co., Reading, Pa., 800 Penn st. Plumbago. Shaft and open pit; steam. H. B. Rohrbach, supt.

## IRON

LOCATION OF MINE, RAILWAYS, WATER ROUTES, AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, BLAST FURNACES, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Alburtis . . . . . Lehigh Ry. 110, 578.	Cal. Weiler & Bro. Morris Schiwer, mgr. and supt. Cap. \$3,000. Weiler's Ore Bed, brown hematite. Shaft and open pit, 2,000 tons; steam.
Boiling Springs, Cumberl'd Ry. 578.	Boiling Springs Iron Co. Cap. stk. \$30,000. Mt. Holly, Letcher, Ege, Lehman, Henry Clay, Springer, Heck, Arnold, hematite and magnetic. Steam; blast furnace.
" . . . . . "	Philadelphia & Reading Coal & Iron Co., Pottsville, Pa. A. A. McLeod, pres.; F. P. Kaercher, secy.; W. C. Church, treas.; C. M. Henderson, mgr. Cumberland, brown hematite. Tunnel and open pit, 30,000 tons; steam. Asbury Derland, supt.
Bowman's . . . . . Carbon (P. O. Prince) Ry. 118.	Prince Manufacturing Co., New York, N. Y., 71 Maiden lane. A. C. Prince, prest. and mgr.; David Prince, secy. and treas. Cap. stk. \$50,000. Prince, magnetic. Shaft, slope and tunnel, 16,000 tons; steam and water; paint mill and kilns, 6,000 tons. Henry McFarland, supt.
Boyetown . . . . . Berks Ry. 578.	E. & G. Brooke Iron Co., Birdsboro, Pa. Geo. Brooke, prest.; Geo. W. Harrison, secy. Boyetown, magnetic. Slope, 12,000 tons; steam; blast furnace. John H. Harden, supt.
Cleversburg, Cumberland Ry. 195.	George G. Clever. Cap. \$2,000. Nelkirk, brown hematite. Open pit, 2,500 tons; steam.
Cornwall . . . . . Lebanon Ry. 189, 191.	Cornwall Ore Bank Co. Robert H. Coleman, pres.; R. Percy Alden, secy.; J. Taylor Boyd, treas. and mgr. Cornwall, magnetic. Open pit, 750,000 tons; steam and compressed air. J. C. Boyd, supt.
Dillsburg . . . . . York Ry. 191, 363.	Lanek & Shelley, Bowmansdale, Pa. Cap. \$12,000. Lanek & Shelley's, magnetic. Shaft, 37,000 tons; steam. David Ott, supt.
" . . . . . "	W. H. Letcher. Letcher's, hematite. Tunnel, 6,000 tons; steam. R. A. Spahr, supt.
Five Forks . . . . . Franklin Ry. Milbrook Station 804.	L. L. Springer, Edenville, Pa. Cap. \$1,500. Millbrook, hematite. Open pit, 3,000 tons; steam. Benj. Mozingo, supt.
Fogelsville . . . . . Lehigh Ry. Litzenburg 110.	Crane Iron Co., Catasauqua, Pa. Mr. Dixon, prest.; J. S. Elverson, mgr. Brown hematite. Open pit and shaft, 6,000 tons; steam. J. S. Laros, supt.
Goshorn . . . . . Huntingdon (P. O. McNeal) Ry. 363.	Rockhill Iron & Coal Co., Philadelphia, Pa., 320 Walnut st. Wm. A. Ingham, prest.; J. E. Haverstick, secy. and treas.; A. W. Sims, mgr. Cap. stk. \$1,000,000. Shade Gap, fossil. Tunnel, 130,000 tons; horse; blast furnace. Joseph Repper, supt.
Graffenburg . . . . . Adams Ry. 573.	Caledonian Mining & Manufacturing Co., New York City, 93 and 95 Nassau st. Wm. H. Male, prest.; J. P. Ganney, secy. and treas.; J. J. Morehouse, mgr. and supt. Cap. stk. \$250,000. Wolf Hill, hematite. Shaft and tunnel; water.
Hunter's Run, Cumberl'd Ry. 578.	Weaver & Bortz. Cap. \$50,000. Lehman, hematite. Tunnels, 10,000 tons; steam. J. A. R. McBride, supt.
Ironville . . . . . Northampton P. O. and Ry. Hellen- town 578.	John R. Dull & Son, Hellertown, Pa. Hematite. Open pit and shaft, 6,000 tons; steam.
Joanna . . . . . Berks Ry. 820.	Phoenix Iron Co., Philadelphia, Pa., 410 Walnut st. David Reeves, prest.; G. G. White, secy.; J. O. Pease, treas.; W. H. Reeves, gen. supt. Jones, magnetic. Open pit, 10,000 tons; steam; blast furnace. John H. Harden, supt.
Kramer . . . . . Snyder Ry. 543.	Bickel Bros., Froehburg, Pa. Laurel Hill, fossil ore. Tunnel, 1,200 tons; haul. P. J. Bickel, supt.
Lehigh Gap . . . . . Carbon Ry. 393, 118.	Henry Erwin, Bethlehem, Pa. Cap. \$50,000. Black Rock, iron. Shaft and open pit, 2,500 tons; steam.
Mahoning . . . . . Armstrong Ry. 11.	McElravy & Stone, Mahoning, hematite. Open pit, 2,170 tons.
Mont Alto . . . . . Franklin Ry. 468.	Mont Alto Iron Co. Hematite. Slope and open pit; steam; furnace.
" . . . . . "	Smith & Avery. Cap. \$3,000. Smith, brown hematite. Open pit, 20 tons; steam.
Orbisonia . . . . . Huntingdon Ry. 235.	W. T. Browning, Cap. \$15,000. Booker, fossil. Tunnel, 10,000 tons; horse and hand; furnace, 36,000 tons. Thomas N. Purkey, supt.
Pine Grove Furnace, Cumberland Ry. 363.	South Mountain Mining & Iron Co., J. C. Fuller, prest.; W. H. Woodward, treas.; S. R. Still, mgr. Cap. stk. \$300,000. Hematite. 2,000 tons; steam and water; furnace.
Quincy . . . . . Franklin Ry. 468.	George G. Rock. Cap. \$1,000. Laurel Valley. Open pit, 9,000 tons; steam; furnace.
Rittenhouse Gap . . . . . Berks (P. O. Seisholtzville) Ry. 110.	Hartzell Concentrating Co., Allentown, Pa., cor. Eighth and Walnut sts. H. K. Hartzell, prest.; T. J. Crane, secy.; W. S. Pilling, treas.; T. W. Liddle, mgr. Cap. stk. \$40,000. Rittenhouse Gap. Shaft and slopes, 30,000 tons; steam; furnace. Peter Worst, supt.
Rockhill Furnace, Huntingdon Ry. 235.	Rock Hill Iron & Coal Co., Philadelphia, Pa., 320 Walnut st. Wm. A. Ingham, prest.; J. E. Haverstick, secy. and treas.; A. W. Sims, mgr. Shade Mount, fossil ore. Tunnel, 45,000 tons; horse; furnace, 20,000 tons. J. Repper, supt.

IRON—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, BLAST FURNACES, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Scotland . . . . . Franklin Ry. 199.	Craig Bros. Cap. \$1,000. Brown hematite. Open pit, 3,300 tons; steam. H. F. Craig, supt.
Seisholtzville . . . . Berks Ry. Bittenbender 563.	H. K. Hartzell, Allentown, Pa., cor. Eighth and Walnut sts. Cap. \$100,000. Bittenbender and Gelman, red hematite. Slopes and shaft, 60,000 tons; steam; furnaces. A. G. Sallade, supt.
Shippenburg <sup>1</sup> umberland Ry. Stewart's Siding 199.	George H. Stewart. Neikirk, hematite.
Sligo . . . . . Clarion Ry. 11.	Leonard Fahler. Tunnel and open pit, 2,500 tons, horse and hand.
Smudley . . . . . Chester Ry. St. Peters 813.	E. & G. Brooke Iron Co., Bird-shoro, Pa. Geo. Brooke, prest.; Geo. W. Harrison, treas.; W. Nobe, mgr. and supt. French Creek, hematite. Shaft, 20,000 tons; steam.
Topton . . . . . Berks Ry. Fleetwood 578.	Henry Erwin, Bethlehem, Pa., 120 Broad st. Cap. \$25,000. Hoch and Diemel. Shaft and open pit, 4,800 tons; steam. Simon P. Raug, supt.

MINERAL PAINT

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF PRODUCT, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, PAINT MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Bethlehem <sup>1</sup> Northampton Ry. 118, 578.	E. C. Bontelle (local). Cap. \$3,000. Red hematite and ocher. Open pit and shaft, 2,000 tons; horse and hand.
Bower's Station . . . Berks Ry. 578.	J. R. Clair. Cap. 88,000. Clair's, high grade sienna, ocher and oxide. Shaft, 1,200 tons; steam.
Cedarville . . . . . Chester Ry. 563, 578.	C. K. Williams & Co., Easton, Pa. Umber. Shaft, 1,500 tons; water and steam.
Fleetwood . . . . . Berks Ry. 578.	C. K. Williams & Co., Easton, Pa. Ocher. Shaft, 1,500 tons; water and steam.
Hancock . . . . . Berks (P. O. De Long) Ry. 578.	S. Long & Son, De Long, Pa. Cap. \$10,000. Ocher. Steam.
" . . . . . "	C. K. Williams & Co., Easton, Pa. Hancock. Ocher. 1,500 tons. Steam.
Nazareth . . . . . Northampton Ry. 393, 578.	Henry Erwin, Bethlehem, Pa. Cap. \$50,000. Schuabel, ocher. Shaft and open pit, 1,200 tons; steam.
Prince . . . . . Carbon Ry. Bowmans 393, 501.	Prince Manufacturing Co., New York City, 71 Maiden lane. A. C. Prince, prest. and mgr.; David Prince, secy. and treas. Cap. \$1k, \$30,000. Prince, ocher. Shaft, slope and tunnels, 6,500 tons; water and steam; 3 paint mills, 10,000 tons. Henry McFarland, supt.
Reading . . . . . Berks Ry. 563, 578, 820.	C. K. Williams & Co., Easton, Pa. Sienna. Shaft, 2,000 tons; steam.
Slimer . . . . . Northampton (P. O. Santow) Ry. 393, 578.	Henry Erwin, Bethlehem, Pa. Cap. \$50,000. Daniel, ocher. Shaft and open pit, 1,200 tons; steam.
Topton . . . . . Berks Ry. Fleetwood 578.	Henry Erwin, Bethlehem, Pa., 120 Broad st. Cap. \$25,000. Hoch and Diemel, ocher. Shaft and open pit, 2,000 tons; steam. Simon P. Raug, supt.

NICKEL.

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, SMELTERS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Nickel Mines <sup>1</sup> Lancaster Ry. Gap Station 368.	Joseph Wharton, Philadelphia, Pa., P. O. Box 1332. Cap. Shafts, 8,000 tons; steam; cupola. Charles Judde, supt.

SALT

LOCATION OF MINE OR WELL, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF PRODUCT, KIND OF MINE OR WELL, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Allegheny . . . . . Allegheny Ry. 533, 564, 585, 592.	Haller, Beck & Co., cor. Western and Beaver avs. Augustine Haller, mgr. Cap. \$40,000. Union Salt Works, dairy and coarse. Well, 12,000 brls.; steam.
Butler . . . . . Butler Ry. 563, 588, 592.	Butler Chemical Co. J. H. Troutman, prest.; W. J. Cassidy, secy.; H. C. Heineman, treas.; Schuyler Frazier, mgr. Cap. \$100,000. All kinds. Well, 50,000 brls.; steam.

## SAND

LOCATION OF MINE OR BANK, RAILWAYS, WATER ROUTES, AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE OR BANK, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, ETC., AND NAME OF SUPERINTENDENT.
TOWN AND COUNTY.	
Lewistown, Mifflin Ry. Granville 563.	Juniata Sand Co. Thomas Baumgardner, prest.; Geo. M. Franklin, treas.; B. F. Irving, mgr. Cap. stk. \$100,000. Juniata, flint glass sand. Tunnel, 30,000 tons; steam.
McVeytown, Mifflin Ry. 563.	C. P. Dull. Cap. \$80,000. Excelsior, white sand. Slope, 20,000 tons; steam and horse.
Mapleton, Huntingdon (P. O. Mapleton Depot) Ry. 563.	Macklin & Stevenson. M. & S., flint glass sand. Tunnels, 14,000 tons; steam.
Vineyard, Mifflin (P. O. McVeytown) Ry. 563.	Samuel Hatfield jr. Cap. \$12,000. Mapleton, glass sand. Open pit, 36,000 tons; steam.
	Enterprise Sand Co., McVeytown, Pa. Wm. Ewing, mgr. and supt. Enterprise, flint glass sand. Tunnels, slope and pit, 25,000 tons; steam; stone mill.

## SLATE

LOCATION OF QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF SLATE, KIND OF QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, MILLS, ETC., AND NAME OF SUPERINTENDENT.
TOWN AND COUNTY.	
Bangor, Northampton Ry. 47, 393, 745.	Acme Slate Co., John W. Underhill, prest.; J. H. Shull, secy. and treas.; Wm. A. Winsboro, mgr. and supt. Cap. stk. \$150,000. Acme, roofing slate. Open pit, 7,000 tons; steam.
" " "	American Bangor Slate Co., Easton, Pa., 14 S. Third st. Frank Reeder, prest.; J. Edgar Mitchell, secy. and treas.; Colton Amy, mgr. Cap. stk. \$100,000. American Bangor, slate. Open pit, 5,000 tons; steam; mill. Wm. Kellow, supt.
" " "	Auld, Conger & Co., J. W. Conger, prest.; W. E. Lloyd, secy. and mgr. Cap. stk. \$30,000. Bangor Union, slate. Open pit, 8,000 tons; steam, mill. W. D. Jones, supt.
" " "	Bangor Southern Slate Co., Ltd., New York City, 38 Park row. F. W. Dunton, prest.; E. J. Johnson, secy. and mgr. Cap. stk. \$200,000. Bangor Southern, roofing slate. Open pit; steam.
" " "	Columbia Bangor Slate Co. Cap. \$25,000. Columbia Bangor, roofing slate. Open pit, 6,000 tons; steam. G. H. Mutton, supt.
" " "	Northampton Slate Co., Samuel Flory, prest.; E. H. Albertson, secy.; Chris Walters, treas.; Charles DeFrick, mgr. and supt. Cap. stk. \$150,000. Northampton, roofing slate. Open pit; steam; mill.
" " "	North Bangor Slate Co., Newark, N. J., 41 Campus st. Ekanah Drake, prest. and treas.; F. W. Wilkinson, secy.; Chas. E. Snyder, mgr. and supt. North Bangor, slate. Open pit, 64,300 tons; steam; mill.
Belfast, Northampton Ry. 47.	G. Frank Messinger, Tatamy, Pa. Cap. \$25,000. Belfast Hard Vein, slate. Open pit, 1,000 tons; steam. Thomas Evans, supt.
" " "	Northampton Hard Vein Slate Co., Easton, Pa., 700 Walnut av. James Young, prest.; Geo. W. Geisler, secy. Theo. Whitesell, treas. and mgr. Cap. stk. \$25,000. Northampton Hard Vein, slate. Open pit, 6,000 tons; steam. A. E. Stetler, supt.
" " "	Pennsylvania Hard Vein Slate Co., Easton, Pa., Easton Trust Co. Bldg. Geo. W. Geisler, prest.; N. A. Fulmer, secy.; Birge Pearson, treas., mgr. and supt. Cap. stk. \$25,000. Pennsylvania Hard Vein, slate. Open pit, 1,500 tons; steam.
" " "	Portland Slate Co., I. J. Johnson, prest.; J. L. Watson, secy. and treas.; Wm. W. Jones, supt. and mgr. Belfast, roofing slate. 6,000 tons; steam.
" " "	Theo. Whitesell & Co., Easton, Pa., 700 Walnut av. Cap. \$10,000. Whitesell Hard Vein, slate. Open pit, 10,000 tons; steam. E. P. Lamb, supt.
Bethlehem, Northampton Ry. 118, 578.	Old Bangor Slate Co., J. S. Harris, prest.; J. S. Moyer, secy. and treas. Cap. stk. \$250,000. Old Bangor, slate. 17,000 tons; steam, horse and hand. Chas. Shuman, supt.
Brodbeck's, York Ry. Green Ridge 304.	John Lewis. Llanberis, slate. Open pit; hand.
Chapman, Northampton Ry. and P. O. Chapman Quarries, 335.	Chapman Slate Co., New York City, 52 and 50 West st. Wm. Chapman, prest. and treas.; M. L. Babin, secy. Cap. stk. \$300,000. Chapman Hard Vein, slate. Open pit, 6,300 tons; steam. Richard Chapman, supt.
Chapman Quarries, Northampton Ry. 335.	Keystone Slate Co., Robt. C. H. Brook, prest.; Arthur Brook, secy. and treas.; Henry G. West, mgr. and supt. Cap. stk. \$200,000. Keystone, roofing slate. Open pit, 25,000 tons; steam; mill.
Danleisville, Northampton Ry. 565.	Excelsior Slate Co., Camden, N. J., Third and Market sts. Wm. Whitmer, prest.; G. W. Creighton, secy. and treas. Cap. stk. \$50,000. Excelsior, slate. Open pit; steam (developing). John D. Schlater, supt.
" " "	Franklin M. Hower. Cap. \$75,000. Pench Hill, slate. Open pit, 5,000 tons; steam. J. K. Hower and A. A. Bossard, supts.
Delta, York Ry. 41.	Arthur E. Edle, York, Pa., 30 E. Market st. Cap. \$10,000. Roofing slate. Open pit, 5,000 tons; steam. Wm. O. Hughes, supt.
" " "	Excelsior Slate Co., R. L. Jones, prest. and gen. mgr.; Fred. R. Williams, secy. and treas. Excelsior, roofing slate. Open pit; steam. W. Penn Jones, supt.
" " "	R. L. Jones & Co. Old Big, roofing slate. Open pit; steam.
" " "	Peerless Slate Co., Pittsburg, Pa., 47 Seventh st. E. M. Aiken, prest.; H. L. Aiken, secy. Peerless, Open pit; steam. John W. Jones, supt.
" " "	V. G. Stubbs & Son. Timothy F. Morgan, mgr. Stubbs, roofing slate. Steam.
East Bangor, Northampton Ry. 47.	East Bangor Consolidated Slate Co. Sylvester C. Smith, prest.; M. C. Swartsweller, secy. and treas. Cap. stk. \$300,000. East Bangor Consolidated, black slate. Open pits; steam; mill. William Bray, supt.

## SLATE—CONTINUED)

LOCATION OF QUARRY, RAILWAYS, WATER RIGGES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF QUARRY, KIND OF SLATE, KIND OF QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, MILLS, ETC., AND NAME OF QUARRY SUPERINTENDENT.
TOWN AND COUNTY.	
East Bangor, Northampton (Continued.)	East Bangor Northern Slate Co. James Masters, prest. and treas.; John Longhead, secy., mgr. and supt. East Bangor Northern, roofing slate. Open pit, 1,200 tons; steam.
" "	East Bangor Slate Mining Co. Henry Williams, prest.; James Masters, secy., mgr. and supt. Cap. stk. \$12,000. Old East Bangor, roofing slate. Open pit; steam.
" "	Standard Slate Co. Cotton Amy, prest. and mgr.; Chas. S. Ford, secy. and treas. Standard, roofing slate. Open pit; steam. Wm. W. Amy, supt.
" "	Star Slate Co. John K. Ditchett, prest. and supt.; Chas. S. Ford, secy.; Cotton Amy, treas. and mgr. Cap. \$40,000. Star roofing slate. 10,000 tons; steam; mill.
Easton, Northampton Ry. Edelman 47.	Edelman's Hard Vein Slate Co. W. Doremus, prest.; H. Trauger, secy.; N. H. Heft, treas.; T. Jones, mgr. Slate. Open pit; steam; 3,000 tons.
Edelman, Northampton Ry. 47.	Flory & Lehr Hard Vein Slate Co., Easton, Pa. F. H. Lehr, prest.; Calvin Arner, secy.; Horace Lehr, treas. Cap. stk. \$25,000. Flory & Lehr Hard Vein, slate. Open pit; steam. Eugene Hartman, supt.
Lynnport, Lehigh Ry. 578.	George Bower, Catastauqua, Pa. Cap. \$100,000. Lynn, slate. Steam; mills.
" "	Enterprise Slate Co., Philadelphia, Pa., 1822 Filbert st. D. P. Wannamaker, prest.; J. H. Bachman, secy.; J. B. Waidlich, treas.; O. M. Snyder, mgr. Cap. stk. \$50,000. Outaouaque, slate. Open pit, 6,000 tons; steam; mills. W. Follweller, supt.
Mt. Bethel, Northampton Ry. 47, 565.	Mount Bethel Hard Vein Slate Co. J. Moore, prest.; B. F. Rausly, secy.; R. J. Groeyer, treas. Cap. stk. \$25,000. Mount Bethel Hard Vein, slate. Open pit; steam. Owen O. Williams, supt.
Muncy, Locomyng Ry. 563, 578.	Keystone Paint Co., Williamsport, Pa., cor. Third and Pine sts. Elsha Gray, prest.; M. L. Downing, secy.; H. T. Ames, treas.; Ames Hammond, mgr. Cap. stk. \$90,000. Slate and silica. Open pit, 500 tons; hand; mill. J. E. Barlow, supt.
Pen Argyl, Northampton Ry. 47, 565, 305.	William Harding & Co., Main st. Cap. \$10,000. Albion, black roofing slate. Open pit; steam. Reuben Harding, supt.
" "	Jackson Bros. J. H. Jackson, prest., secy. and treas.; J. E. Jackson, mgr. Cap. stk. \$10,000. Jackson Bros., roofing slate. Open pit, 9,000 tons; steam; mill. John D. Symons, supt.
" "	Jackson Slate Co., Schank av. and Main st. Richard Jackson jr., mgr. and supt. Cap. stk. \$25,000. St. Ethel, roofing slate. Open pit, 4,800 tons; steam.
" "	Lackawanna Slate Co. Geo. H. Miller, prest. and mgr.; John Tinney sr., secy.; A. C. Young, treas. Cap. stk. \$25,000. Lackawanna, slate. Open pit, 100,000 tons; steam. Joseph B. Kellein, supt.
" "	William Lobb & Sons. Cap. \$10,000. Albion, roofing slate. Steam.
" "	William Masters. Cap. \$10,000. Excelsior, roofing slate, 3,000 tons; steam.
" "	James H. Shannon & Son. Diamond Slate Works, roofing slate. Open pit, 4,500 tons; steam; mills. Frederick H. Simpson, supt.
" "	Stephens, Jackson & Co. Courtney, roofing slate. Open pit; steam.
" "	United States Slate Co. Thos. Lasher, prest.; E. K. Armstrong, secy.; John Lobb, mgr. United States, roofing slate. Open pit, 6,500 tons; steam.
Portland, Northampton Ry. 47, 565.	Globe Hard Vein Slate Co., New York City, 75 Wall st. M. K. Kellein, prest.; J. R. Stanton, secy.; A. O. Allen, treas. and mgr. Cap. stk. \$125,000. Globe Hard Vein, slate. Open pit.
Sceneryville, Northampton Ry. Catastauqua 578.	Ziegenfuss Slate Co. Geo. Ziegenfuss, mgr. Cap. stk. \$20,000. Ziegenfuss, slate. Open pit, 2,000 tons; steam.
Slateford, Northampton Ry. 269.	Snowden Slate Co. Henry Green, prest.; John H. King, secy., treas. and mgr. Cap. stk. \$100,000. Snowden, roofing slate. Open pit, 1,750 tons; steam; mill. H. P. Jones, supt.
Slatting, Lehigh Ry. 33, 578, 565.	Blue Valley Slate Co., Main st. E. D. Peters, prest.; A. P. Neff, secy.; Joel Neff, treas., mgr. and supt. Cap. stk. \$30,000. Blue Valley, roofing slate. Open pit, 6,000 tons; steam; mills.
" "	Carbon Slate Co. Cap. \$10,000. Carbon, roofing slate; steam and horse; mill. Ellis Owens, supt.
" "	Samuel Caskie. Heimbach, slate. Pit and shaft, 4,100 tons; steam.
" "	G. R. Davies & Son. William Penn, roofing slate. Open pit and tunnel; steam.
" "	Henry Fulmer. Fulmer's, roofing slate. Open pit, 1,200 tons.
" "	Henry Kuntz. Cap. \$12,000. Big Franklin, Washington Bangor, Silver Brook, Old Washington and Mountain Belle, black roofing slate. Open pits and tunnel, 7,500 tons; steam. James L. Foote, supt.
" "	Old Lehigh Slate Co., Philadelphia, Pa., 1026 Arch st. Penlyn, slate. Open pit; steam; factory. W. Bachman, supt.
" "	E. D. Peters & Co. Cap. \$20,000. Franklin Union, roofing slate. Open pit, 2,000 tons; steam. Bowman Minnie, supt.
" "	Saegerville Slate Quarrying & Manufacturing Co. Chas. M. Dodson, prest.; Geo. W. Schumcker, secy.; Josiah Bachman, treas.; Samuel J. Kistler, mgr. and supt. Cap. stk. \$150,000. Saegerville, slate. Open pit, 6,000 tons; steam.
" "	A. P. Steecl. Girard, Dr. Franklin and Big Franklin, slate, 2,000 tons; steam.
" "	David Williams. Slate. Open pit, 1,400 tons; steam. J. W. Williams, supt.
" "	O. T. Williams & Son. Cap. \$40,000. Williams' Large Veins, slate. Tunnel; steam.
Steinsville, Lehigh Ry. Wannamakers 578.	Rehr & Fricke. Roofing slate and flagging. Open pits, 4,000 tons; steam. David Williams, supt.
Treichler's, Northampton Ry. 118.	Boyer, Beck & Son. John H. Beck, mgr. and supt. Slate Dam, roofing slate. Open pit; steam.
Walnutport, Northampton Ry. 118, 565.	R. Raymond Jones. Cap. \$1,500. Roofing slate. Open pit, 500 tons; horse.
" "	Wm. Griffith & Son, Danielsville, Pa. Cap. \$16,000. Heimbach, slate. Open pit and tunnel, steam.

## SLATE—(CONTINUED)

LOCATION OF QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF QUARRY, KIND OF SLATE, KIND OF QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, MILLS, ETC., AND NAME OF QUARRY SUPERINTENDENT.
Winnabakers.....	Lehigh Ry. 578.	Reading Slate Co., Philadelphia, Pa., 122 Entwist st. Jos. Lieberman, prest.; August Liebold, secy.; James Y. MacDonnell, treas.; John Jones, mgr. and supt. Cap. stk. \$100,000. Reading, roofing slate. Open pit, 600 tons; steam.
West Bangor.....	York Ry. Delta 41.	Edward W. Evans & Co., Ltd., Pittsburg, Pa., 1012 Penn av. W. J. Rowlands, prest.; E. W. Evans, secy., mgr. and supt.; P. L. Gouleau, treas. Cap. stk. \$5,000. Roofing slate. Open pit, 1,000 tons; steam.
Wind Gap.....	Northampton Ry. 47, 305, 565.	Alpha Slate Co., Bangor, Pa. Wm. A. Winsboro, prest., mgr. and supt.; H. Underhill, secy.; Miner Trowbridge, treas. Cap. stk. \$150,000. Alpha, roofing slate. Open pit; steam (developing).
".....	"	Imperial Slate Co., Stroudsburg, Pa. H. J. Kotz, prest.; Morris Evans, secy.; Allen Metzgar, treas.; Robt. J. Vasseur, mgr. and supt. Cap. stk. \$150,000. Imperial, roofing and school slate. Open pit, 2,500 tons; steam.
".....	"	Wind Gap Slate Mfg. Co., Beldyde, N. J. Ellwood Vapbinder, prest.; P. S. Yetter, secy.; Reuben Emery, treas.; C. Stanley, mgr. and supt. Cap. stk. \$40,000. Wind Gap, slate. Open pit; steam; mill.

## STONE, MARBLE, GRANITE AND ONYX

LOCATION OF MINE OR QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE OR QUARRY, KIND OF STONE, KIND OF MINE OR QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STONE OR MARBLE MILLS, LIMESTONES AND CAPACITY, ETC., AND NAME OF MINE SUPERINTENDENT.
Agnew.....	Beaver Ry. Conway 563.	John Rouagh. Charles Cheney's, freestone and sandstone.
Adaville.....	Lebanon Ry. 578.	Batdorf & Beaver. West Annville, limestone. Open pit, 15,000 tons; limekilns, 6,000 tons.
".....	"	Maulfair & Forney. M. & F., limestone. Slope; hand and steam; limekilns, 8,400 tons.
Avoca.....	Luzerne Ry. 213, 252, 118, 303.	Seamans & Hollister. Avoca Stone Quarry, greenstone. Open pit; horse; mill.
Avondale.....	Chester Ry. 563, 577.	Aeme Lime Co., Ltd. R. H. Hepburn, prest. and mgr.; J. Kirk Meyns, secy.; Joshua Hunt, treas. Cap. stk. \$12,000. Aeme Avondale, silica, marble. Open pit, 37,000 tons; steam. George M. Keir, supt.
".....	"	Avondale Lime & Stone Co., Philadelphia, Pa., 222 Chestnut st. Wm. Henderson, prest.; Samuel Gayley, secy.; Frank Williamson, treas.; John G. Williamson, mgr. Cap. stk. \$30,000. Avondale, limestone. Open pit, 75,000 tons; steam and horse; mill, limekilns, 10,500 tons. J. Warren Dixon, supt.
Birdsboro.....	Berks Ry. 563, 578, 820.	James Humphreys. Cap. \$2,000. Hampton, brownstone. Open pit, 3,000 tons; horse and hand.
Birmingham.....	Huntingdon Ry. 563.	Cambria Iron Co., Philadelphia, Pa., 218 S. Fourth st. Powell Stackhouse, prest.; ——— Kyle, secy.; W. S. Robinson, treas.; Chas. S. Price, gen. mgr. Birmingham, limestone. Open pit, 200,000 tons; steam; mill. S. B. Isenbarg, supt.
Bhairsville.....	Indiana Ry. 563.	Annie M. Wilson. Feldman, building stone. Hand. W. D. Jones, supt.
Bradford.....	McKean Ry. 85, 12, 503, 72.	National Brick & Tile Co., 18 Main st. L. Emery jr., prest.; Robt. L. Edgett, secy. and treas.; C. M. Cook, mgr. Cap. stk. \$20,000. Lewis Run, red shale. Open pit; steam.
Carlin.....	Blair (P. O. Williamsburg) Ry. 563.	Juniata Limestone Co., Ltd., Williamsburg, Pa. J. K. McLanahan, prest.; W. L. Baldrige, secy. and treas.; Wm. Bice, mgr. Cap. stk. \$50,000. Juniata, limestone. Open pit, 300,000 tons; steam and compressed air.
Chester.....	Delaware Ry. 42, 563, 578.	C. W. Andrew (local), 1512 Highland Terrace. Granite. Open pit, 4,500 tons; hand.
".....	"	Leiper & Lewis, Philadelphia, Pa., 2301 Chestnut st. Cap. \$55,000. Leiper & Lewis, gneiss, granite, 20,000 tons; steam and horse.
".....	"	S. S. Betwiler & Co. Cap. \$75,000. Betwiler's, stone. Open pit, 30,000 tons; dynamite. Nelson Cooper, supt.
Columbia.....	Lancaster Ry. 578, 563.	S. & G. Hoffman. Cap. \$3,000. Hoffman's, limestone, 22,500 tons; steam; mill. S. S. Hoffman, supt.
Connellsville.....	Fayette Ry. 42, 563.	Hope Manufacturing Co. W. D. McDowell, prest.; David Williams, secy. and treas.; R. J. McDowell, mgr. and supt. Cap. stk. \$8,000. Hope, sandstone. Open pit, 12,000 tons; steam; sand mill.
".....	"	Keeling, Ridge & Co., Pittsburg, Pa., 114 Southfield st. Cap. \$1,000,000. Belgian Block, paving blocks. Open pit; steam, horse and hand. Patrick Ridge, supt.
".....	"	Snyder & Blair. Cap. \$5,000. Sand Rock, white sandstone. Open pit; horse (developing). Geo. B. Snyder, supt.
Conway Station.....	Beaver (P. O. Park Quarries) Ry. 563.	Park & Park, Park Quarries, Pa. Baden, building stone.
Crowther.....	Lawrence Ry. 592.	Laughlin & Co., Ltd., Pittsburg, Pa., cor. Third av. and Try st. H. A. Laughlin, prest.; James Laughlin, jr., secy. and treas.; W. C. Quiney, mgr. Newton's, limestone. Open pit, 67,500 tons; hand and steam; mill. Daniel Jones, supt.
Dillsburg.....	York Ry. 199.	Fehl Bros. (local). Cap. \$4,000. Evans, limestone. Open pit, 24,000 tons; horse; kiln, 1,200 tons. John Fehl, supt.
Durlach.....	Lancaster Ry. Ephrata 578.	Helmly & Wike. Turkey Hill and Cocallo, pebble flint sandstone. Open pit, 20 tons; hand; mill.
".....	"	Benjamin Wissler, Lincoln, Pa. Cap. \$5,000. Cocallo, millstone. Open pit, 50 tons; hand; mill. Emanuel Helmly, supt.
Easton.....	Northampton Ry. 118, 201, 323, 563.	John O. Wagener & Co., 33 S. Fourth st. West End and East End, soapstone, talc and silicate. Slope and open pit, 2,500 tons; water; stone mill and pulverizer.



## STONE, MARBLE, GRANITE AND ONYX—(CONTINUED)

LOCATION OF MINE OR QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE OR QUARRY, KIND OF STONE, KIND OF MINE OR QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STONE OR MARBLE MILLS, LIMEKILNS AND CAPACITY, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Easton ... Northampton (Continued.)	C. K. Williams & Co. Soapstone. Open pit, 2,000 tons; water and steam.
Frankford, Philadelphia Ry. 563, 578.	Barbour & Ireland. Cap. \$30,000. Frankford, blue gneiss and granite. 40,000 tons; steam; mill. E. Bythe way and M. Dehl, supts.
Freeburg ... Snyder Ry. Sellins Grove, 563.	H. H. Glass. Limestone. Limekiln, 500 tons.
Germantown Philadelphia Ry. 563, 578.	James S. McKinny, 139 Maplewood av. Cap. \$1,000. McKinny's, hornblende, gneiss. Open pit, 4,000 tons; steam and horse. R. K. D. McKinny, supt.
" .....	C. S. Pyle, Wayne st. Germantown, hard bluestone. Slope; steam; mill.
Gottysburg ... Adams Ry. 578, 584.	J. W. Flaharty. Wolf Hill, granite. 100 tons; hand.
" .....	Nathaniel Lightner. Powers Hill, diabase, granite. Open pit; hand.
Graeffenburg ... Adams Ry. 563.	Caledonia Mining & Manufacturing Co., New York City, 33 and 95 Nassau st. Wm. H. Male, pres.; J. P. Rambo, secy. and treas.; James J. Morehouse, mgr. and supt. Cap. stk. \$250,000. Pond Bank, white granite and flint. Open pit; steam; mill.
Greenville ... Mercer Ry. 563, 566, 588.	Amy & Co. Cap. \$5,000. Flagstone. Open pit; hand and steam; mill. C. E. Amy, supt.
Groynala ... Montour Ry. 578.	John Christian.
Hellertown Northampton Ry. 578.	H. D. Heller. Stevens, limestone. Open pit, 28,000 tons. Hand and horse. Samuel Kostenbader, supt.
Holmesburg Philadelphia Ry. 563.	House of Correction, Philadelphia, Pa. James A. Freeman, pres. House of Correction, bluestone, 22,725 tons; steam, horse and hand; mill.
Hooversville ... Somerset Ry. 42.	I. J. Blough & Son (local). Limestone. Tunnel, 50 tons; hand; limekiln, 50 tons.
Hummelstown ... Dauphin Ry. 578.	Christian Hershey. Cap. \$50,000. Brookside, limestone. Open pit, 36,500 tons; horse; mill, limekiln, 15 tons.
" .....	Maulfair & Forney, Annville, Pa. Eagle, limestone. Slope; hand and steam; limekilns, 8,000 tons.
" .....	Middletown & Hummelstown Stone Co. Jos. Campbell, pres.; Chas. Raymond, secy.; Geo. H. Grove, treas., mgr. and supt. Cap. stk. \$75,000. M. & H., brownstone and limestone. Slope, 80,000 tons; steam; mill.
Idaville ... Adams Ry. 578.	Sylvester Fisher. Cap. \$5,000. White flint stone. Open pit, 3,000 tons; horse. H. J. Gardner, supt.
Ironton ... Lehigh Ry. 330.	Diehl & Folk. Diehl's, slate stone. Open pit, 18,000 tons; steam; mill.
" .....	Thomas Iron Co., Hokendauqua, Pa. Samuel Thomas, pres.; Wm. Andrews, mgr. Schadt & Keefer's, limestone. Open pit, 20,000 tons; steam. Joseph Keefer, supt.
Jersey Mills ... Leaning Ry. 257.	J. R. Glover. Cap. \$20,000. Glover and Underwood, 3,500 tons; horse and hand.
" .....	Thomas Parker. Flagstone. Open pit; horse and hand.
Knauer Town ... Chester (P. O. St. Peter's) Ry. 578.	Davis Knauer. Cap. \$40,000. Falls of French Creek, paving stone, 7,200 tons; steam; mill. John Benny, supt.
Lancaster ... Lancaster Ry. 563, 578.	Dr. I. H. Mayer, Willow st. Gneiss building stone. Hand.
Langhorne ... Bucks Ry. 563, 578.	Langhorne Spring Water Co. Charles Hill, pres.; John S. Wright, secy. and treas. Building stone. Open pit, 1,000 tons; hand.
Lenox ... Susquehanna Ry. Nicholson Station 200.	Hiram Buck. Cap. \$1,500. Buck, bluestone. Open pit, hand.
Lima ... Delaware Ry. Glen-Riddle 577.	Jesse Hibberd. Gneiss rock.
Littlestown ... Adams Ry. 563.	George N. Riffe & Bro. Cap. \$1,500. Limestone. Steam; mill, limekiln, 800 tons.
McKee's Gap ... Blair Ry. 563.	Juniata Ganister Co. A. S. Morrow, pres.; J. L. Hartman, secy., treas. and mgr. Cap. stk. \$50,000. McKee's Gap, ganister. Slope, 10,000 tons; dynamite. Harry Sellers, supt.
Mahoning ... Armstrong Ry. 11.	McElravy & Stone. Mahoning, limestone. Open pit, 6,510 tons.
Mapleton ... Huntingdon (P. O. Mapleton Depot) Ry. 563.	Speer White Sand Co., Pittsburg, Pa., Hamilton Bldg. J. H. Speer, secy. and treas.; N. Q. Speer, mgr. Cap. stk. \$950,000. White sandstone. Open pit, 60,000 tons; steam. L. M. Speer, supt.
" .....	Swope & Gayton. Swope & Gayton's, limestone and sandstone. Open pit. J. N. Swope, supt.
Marble Hill ... Somerset (P. O. Confluence) Ry. 42.	Marble Hill quarry Co., Pittsburg, Pa., Penn av. Robert Smith, pres.; A. P. Kertland, secy. and treas.; E. K. Morse, mgr. Cap. stk. \$80,000. Marble Hill, brown lignonier, granite. Slope; steam. D. W. Patton, supt.
Mertztown ... Berks Ry. 578.	Henry J. Trexler. H. J. Trexler's, limestone. Open pit, 4,500 tons, steam, mill, limekiln, 4,000 tons. John L. Trexler, supt.
Morrell ... Huntingdon Ry. Union Furnace 563.	H. J. McAteer. H. C. Beck, mgr. and supt. Union Furnace, limestone. Slope, 48,000 tons; steam; mill.
Mt. Pleasant Westmore'ld Ry. 597.	J. H. Rumbaugh (local). Limestone. Open pit, 900 tons; hand; kiln, 900 tons.

## STONE, MARBLE, GRANITE AND ONYX (CONTINUED)

LOCATION OF MINE OR QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE OR QUARRY, KIND OF STONE, KIND OF MINE OR QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STONE OR MARBLE MILLS, LIMEKILNS AND CAPACITY, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
New Brighton, Beaver Ry. 563 and 591.	Beaver Valley Stone & Clay Co. Jos. Wilson, pres.; W. C. Peatling, secy. and treas.; Wm. Fish, mgr. and supt., Cap. stk. \$35,000. Block House Run, sandstone and clay. Open pit.
New Galilee, Beaver Ry. 563.	Joseph Hartman & Son, Pittsburg, Pa., 6215 Station av. Hartman's, sandstone.
" " " "	Park & Park, Park Quarries, Pa. New Galilee, dimension building stone.
Nicholson, Wyoming Ry. 293.	Moses Shields jr. Cap. \$20,000. Nicholson, flag and building stone. Open pit, 9,000 tons; horse and steam.
Orishonla, Huntingdon Ry. Rocky Hill 235.	J. J. Brodbeck. Grove, limestone. Open pit, 300 tons.
Overbrook, Montgomery Ry. 563.	J. T. Stadelman, Stadelman's, blue granite. Open pit; steam.
Palmyra, Lebanon Ry. 578.	Maulfair & Forney, Annville, Pa. Gingrich, limestone. Slope; steam and hand; limekilns, 8,000 tons.
Perkiomenville, Montgomery Ry. 573.	Fisher & Son. Cap. \$2,000. Deep Creek, Belgian blocks and dimension stone. Hand; stone mill, 200 tons.
Picture Rocks, Lycoming Ry. 815.	Charles F. Billamboz. Picture Rocks, bluestone, flagging. Open pit, 5,000 tons; hand.
" " " "	George West. Cap. \$2,000. Picture Rocks Stone Works. Open pit, 200 tons; hand.
Pittston, Luzerne Ry. 118, 209, 252, 393.	Symington & Perrin, 9 Montgomery st. Blue building stone. Open pit; steam.
Ridley Park, Delaware Ry. 577, 42.	Joseph H. Ward. Cap. \$15,000. Crum Creek, gray granite. Open pit, 14,000 tons; steam. Joseph Sully, supt.
Rockwood, Somerset Ry. 42.	J. C. McSpadden. Cap. \$25,000. Somerset, blue and brown paving blocks. Open pit, 50,000 tons; steam; mill. M. J. Corrigan, supt.
Seesholtzville, Berks Ry. 578.	Keystone State Granite Co., Shenandoah, Pa., 127 N. Jardin st. J. H. Master, pres.; M. H. Master, secy. and mgr. Granite. 200 tons; horse.
Shalinlines, Montgomery (P. O. Bridgeport) Ry. 578.	Wm. P. David & Co. Limestone. Open pit; horse and hand; kiln, 11,812 tons.
Sherman, Wayne Ry. Hales Eddy 563.	O. M. Kingsbury & Co., Hales Eddy, N. Y. Flagstone. Open pit; hand.
Silvira, Brafford Ry. Skimmers Eddy 578.	W. A. Bennett. Cap. \$5,000. Bennett's, flagstone. Tunnel, 2,400 tons; horse.
Spragueville, Monroe (P. O. Anadolink) Ry. 260.	Detrick & Cramer, Anadolink, Pa. Cap. \$2,000. Spragueville, bluestone, rock powder. Mill.
Spring Creek Sta., Lehigh (P. O. Trexlertown) Ry. 110.	John A. Walbert. Limestone. Open pit, 6,000 tons; horse and hand. Jacob Miller, supt.
Spring Mill, Montgomery (P. O. William Penn) Ry. 573, 578.	William Little, William Penn, Pa. Gray ironstone. Open pit; steam; stone mill.
Spring Mt., Montgomery Ry. 578.	J. W. Klein. Cap. \$30,000. Spring Mount, granite. Open pits, shaft, 8,000 tons; steam and hand; mill.
Starrucca, Wayne Ry. 560.	O. M. Kingsbury & Co., Hales Eddy, N. Y. Flagstone. Open pit; hand.
Swatara Station, Dauphin Ry. 578.	Swatara Stone & Lime Co. Cap. \$10,000. Swatara, limestone. Open pit, 250,000 tons; horse and hand; kiln. I. H. Balsbaugh, supt.
Urial, Cumberland Ry. 578.	Sylvester Fishel, Idaville, Pa. Cap. \$5,000. White flint stone. Open pit, 3,000 tons; horse. Birten Beam, supt.
Walkers Mills, Allegheny Ry. 584.	Walkers Mills Quarry Co. W. W. Hazlett, mgr. and supt. Cap. stk. \$20,000. Walkers Mills, sandstone. Open pit, 60,000 tons; steam, horse and hand.
Wampum, Lawrence Ry. 563, 562.	Consolidated Stone & Mining Co., Pittsburg, Pa., 91 Fifth av. John G. Ingham, pres.; G. B. Ingham, mgr. Cap. stk. \$25,000. Rock Point and Spangler, sandstone. 25,000 tons; steam, horse and hand. James Connor, supt.
Waynesburg, Greene Ry. 804.	J. E. B. Phillips & Sons. Cap. \$200. Rees, building stone. Open pit; mill.
Wernersville, Berks Ry. 578.	J. A. Ruth. Ruth's, limestone. Open pit; limekiln, 320 tons.
West Conshohocken, Montgomery Ry. and P. O. Conshohocken 578.	Philadelphia & Conshohocken Stone Quarry Co., Philadelphia, Pa., 216 South Fourth st. E. J. Matthews, pres.; H. C. Eggleston, secy. and treas.; F. D. Koch, mgr. and supt. Cap. stk. \$100,000. Philadelphia & Conshohocken, foundation and building stone. Open pit, 20,000 tons; steam and hand.
West Le Roy, Brafford Ry. Canton 528.	Thomas Sutton, Canton, Pa. Cap. \$2,000. Bluestone. Open pit, 100,000 tons; electricity; mill. Samuel Owens, supt.
Westmoreland, Westmoreland (Not a P. O.) Ry. 563.	Westmoreland Fire Brick Co., Pittsburg, Pa., Hamilton Bldg. John George, pres.; M. M. O'Connell, secy. and mgr.; John A. Wilson, treas. Cap. stk. \$50,000. Westmoreland, fire clay and sandstone. Tunnel; steam (developing). F. R. Reed, supt.
Williams Mill, Cumberland Ry. Williams Grove 578.	H. K. Spahr, Williams Mill, Pa. Williams, lime and building stone. Open pit; electricity and hand; limekilns, 1,940 tons.
Winfield, Union Ry. 578.	C. M. Ploke & Co., Winfield, limestone. Open pit, 4,700 tons; horse and hand; kiln, 4,700 tons.

**STONE, MARBLE, GRANITE AND ONYX—(CONTINUED)**

LOCATION OF MINE OR QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE OR QUARRY, KIND OF STONE, KIND OF MINE OR QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STONE OR MARBLE MILLS, LIMEKILNS AND CAPACITY, ETC., AND NAME OF MINE SUPERINTENDENT.
Woy (P. O. Millford Station) Ry. 42.	Somerset	Somerset Stone Co., Johnstown, Pa., 88 Franklin st. John Murdock, pres. and mgr.; J. M. Lawyer, secy.; J. M. Murdock, treas. Cap. stk. \$50,000. Bare Rock, sandstone. Open pit, 30,000 tons; steam.
Wrightsville Ry. 563.	York	Kerr Bros. Cap. \$20,000. Limestone. Open pit, 30,000 tons; steam; limekilns, 30,000 tons.
Wyalusing (P. O. Lime Hill) Ry. Hotchkiss Ferry 336.	Bradford	D. Y. & L. W. Caswell, Lime Hill, Pa. Flag and curbstone. Open pit; hand.

SEE ALSO SUPPLEMENTARY LIST

**RHODE ISLAND**  
**COAL—BITUMINOUS**

LOCATION OF MINE OR QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL DRAGGERS, WASHERS, COKE OVENS, AND NAME OF MINE SUPERINTENDENT.
Valley Falls Ry. 504, 513.	Providence	Blackstone Coal Mining Co., A. H. Clark, pres.; John F. Clark, secy.; Edmund Clark, treas. Cap. stk. \$30,000. Blackstone. Shaft, 600 tons; steam.

**STONE, MARBLE, GRANITE AND ONYX**

LOCATION OF MINE OR QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE OR QUARRY, KIND OF STONE, KIND OF MINE OR QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STONE OR MARBLE MILLS, LIMEKILNS AND CAPACITY, ETC., AND NAME OF MINE SUPERINTENDENT.
Burrillville (P. O. Mapleville) Ry. Oakland 513.	Providence	Oakland Granite Co., Providence, R. I., 48 Exchange pl. H. S. Taft, mgr. Cap. stk. \$20,000. Oakland, granite. Open pit, 25,000 tons; steam, horse and hand. Paul Brodie, supt.
Crompton Ry. Centreville 513.	Kent	Joseph M. Tarbox, East Greenwich, R. I. Cap. \$1,500. Tarbox, granite. 200 tons; hand.
Johnston (P. O. Centrodale) Ry. 513.	Providence	E. H. Angell (local). Granite. Open pit; horse and hand.
Newport Ry. 481, 488, 540.	Newport	R. W. Harris (local). Cap. \$2,000. Granite. Open pit, 500 tons; steam.
"	"	A. T. Anthony, Coggeshall av. Cap. \$2,000. Anthony's. Open pit, 5,000 tons; hand; stone mill.
Niantic Ry. Westerly 508.	Washington	Joseph P. Cotton (local), 201 Thames st. Granite. Open pit, 9,000 tons; steam. James A. Austin, supt.
North Kingstown P. O. & Ry. Wickford 491.	Washington	A. G. Crumb & Sons. Cap. \$35,000. Granite. Open pit, 2,000 tons; steam. E. A. Crumb, supt.
Smithfield Ry. 514.	Providence	Olney Granite Co., Wickford, R. I. Cap. stk. \$200. Olney's, granite. Slope, 2,000 tons; horse and hand.
Westerly Ry. 508.	Washington	John W. Mathewson & Son, Greenville, R. I. Clarence H. Mathewson, mgr. and supt. Cap. \$8,000. Waterman Ledge, granite. Open pit, 2,000 tons; steam.
"	"	Caldar & Carnie, 17 Dixon st. Cap. \$5,000. Caldar and Carnie, granite. Open pit, 3,000 tons; horse.
"	"	John E. Collins. Cap. \$10,000. Cormorant Hill, granite. Open pit; steam. Adam B. Archie, supt.
"	"	Murray, Archie & Co. George Thackeray, pres.; Jas. C. Archie, secy.; Wm. G. Archie, treas.; John Murray, mgr. and supt. Cap. stk. \$10,000. Granite, 8,000 tons; steam.
"	"	New England Granite Works, Hartford, Conn., 650 Main st. James G. Patterson, pres. and treas.; W. V. Wightman, secy.; James Gourley, mgr. and supt. Cap. stk. \$250,000. Rhode Island, granite. Open pit and slope, 13,845 tons; steam; mill.

SEE ALSO SUPPLEMENTARY LIST

## SOUTH CAROLINA

## BARYTES

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, BLAST FURNACES, ETC., AND NAME OF MINE SUPERINTENDENT.
Blacksburg .....	York	Blacksburg Mining & Milling Co. J. W. Bettin, prest. and mgr.; John T. Jones, secy.; Thos. B. Gantier, treas. Cap. stk. \$50,000. Westmoreland. Open pit, 10,000 tons; hand. H. C. Wilkins, supt.
" .....	"	Blacksburg Mining & Milling Co. J. W. Bettin, prest.; John T. Jones, secy.; Thos. B. Gantier, treas.; J. D. Bettin, mgr. Cap. stk. \$50,000. Kings Creek. Open pit and tunnel, 15,000 tons; water. Jacob Johnson, supt.

## GOLD AND SILVER

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
Glenn Springs .. Union Ry. Spartanburg 622.	Union Ry. Spartanburg 622.	Golden Gate Mining Co., Spartanburg, S. C. E. N. Higley, prest., mgr. and supt.; R. A. Oliphant, secy.; Andrew Thome, treas. Cap. stk. \$100,000. Golden Gate, gold. Placer; hydraulic and steam.
" .....	"	Thomson Gold Mining Co., Spartanburg, S. C. William Fowler, prest.; L. C. Cannon, secy. and treas.; Edward McDowell, mgr. and supt. Cap. stk. \$100,000. Thomson, gold. Shafts and open pits, 9,000 tons; free; steam; 10 stamps.
HaileGoldMine Lancaster Ry. Lancaster 121, 622.	Lancaster 121, 622.	Haile Gold Mine Co., New York, N. Y., 32 Barling slip. Geo. H. Sexley, prest.; Alfred F. Cross, treas.; A. Thies, mgr. and supt. Haile, gold. Shafts, 30,000 tons; free and refractory; steam; 60 stamps.
Willie .....	Spartanburg Ry. Greens 622 (8 miles from mine).	Wolfe & Tyger Mining Co. of South Carolina. L. W. Jordan, prest. and mgr.; H. K. Sullivan, secy. and treas. Cap. stk. \$200,000. Gold. Shafts and placer; free and refractory; steam and water; 10 stamps (developing). John T. Whitener, supt.

## IRON

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, BLAST FURNACES, ETC., AND NAME OF MINE SUPERINTENDENT.
Yorkville .....	York Ry. 121, 622.	Nannie Mount Acid & Mining Co. Major Jas. F. Hart, prest.; A. E. Weemple, secy. and treas.; J. G. McNulty, mgr. and supt. Cap. stk. \$300,000. Iron. Slope, shaft and tunnel; 45,000 tons; steam.

## KAOLIN

LOCATION OF MINE OR BANK, RAILWAYS, WATER ROUTES, AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE OR BANK, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, ETC., AND NAME OF SUPERINTENDENT.
Largley .....	Aiken	T. G. Lamar Kaolin Co. R. H. Walker, prest.; W. J. Oliver, secy. and mgr.; W. W. Woolsey, treas. Cap. stk. \$50,000. Open pit, 8,000 tons; horse.

## MICA

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF PRODUCT, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, ETC., AND NAME OF MINE SUPERINTENDENT.
Pickens .....	Pickens Ry. Easley 622.	J. E. Hagood. Cap. \$100,000. Polly Blackstone, mica and asbestos.
" .....	"	J. K. Kirksey. Mica.

## PHOSPHATE

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Ashley Phosphate Ry. 699. Berkeley	Wayde & Von Kolnitz, Charleston, S. C., 147 E. Bay st. George F. von Kolnitz, mgr. and supt. Cap. \$55,000. Palmetto. 15,000 tons; steam and hand.
Beaufort Ry. 280. Beaufort	Farmers Mining Co., Charleston, S. C., 17 Broad st. Paul S. Felder, pres.; E. F. Witsell, secy.; C. C. Pinckney Jr., treas.; A. F. Felder Jr., mgr. and supt. Cap. stk. \$70,000. Farmers. 40,000 tons; steam; mill, 50,000 tons.
Charleston Ry. 31, 620. Charleston	Ashley Phosphate Co. F. L. Frost, pres.; J. P. De Saussure, secy. and treas.; J. B. Davis, mgr. and supt. Cap. stk. \$108,000. Ashley. Shaft and dredge, 10,000 tons; hand and steam; mill, 2,000 tons.
" " " "	T. D. Dotterer, 332 Meeting st. Cap. \$25,000. Dotterer. 5,000 tons; steam.
" " " "	Mead Phosphate Co., P. O. Box 125. Thomas Bayle, pres.; T. W. Webb, secy.; T. R. Webb, treas. and mgr. Cap. stk. \$200,000. Rock. Open pits, 20,000 tons; steam; mills, 20,000 tons.
Cosaw Ry. Bull River 31. Beaufort	St. Helena Phosphate Co., Boston, Mass., care of Kidder, Peabody & Co., 22 Broad st. W. E. Stowe, pres.; P. H. Armstrong, treas.; George W. Roberts, mgr. and supt. Cap. stk. \$600,000. Chisolms Island, rock. Open pit, 30,000 tons; steam; mill, 30,000 tons.
Magnolia (P. O. Ten Mile Hill) Ry. 620. Berkeley	Magnolia Mining Co., Charleston, S. C., Broad st. C. C. Pinckney, pres.; E. T. Witsell, secy.; R. B. Cuthbert, mgr. Cap. stk. \$50,000. Rock. Open pit, 40,000 tons; hand.
St. Andrews Parish P. O. & Ry. Charleston 125, 524, 620, 3116 m. Berkeley	Chas. H. Drayton, Charleston, S. C., 25 E. Battery. Drayton Hall, rock. 12,000 tons; steam and hand. J. G. Wilkinson, supt.
Sheldon Ry. 280. Beaufort	Bull River Phosphate Co., Ltd., London, Eng., 21 Mining lane, E. C. A. G. Nichols, mgr. and supt. Williams Island, rock. Open pit; mill.
Stono Ry. Charleston Jn. 123 Berkeley	Bolton Mining Co., Charleston, S. C., 2 Broad street. David Roberts, pres.; Kirby S. Tupper, secy., treas. and mgr. Cap. stk. \$30,000. Bolton, rock. Open pit, 30,000 tons; steam and hand; mill, 30,000 tons. S. C. Brown, supt.
" " " "	Wm. L. Bradley, Boston, Mass., 27 Kilby st. Bulow, rock. Open pit, 55,000 tons; hand and steam. Geo. S. Goff, supt.
" " " "	St. Andrews Phosphate Mining & Milling Co., Charleston, S. C. F. G. Latham, pres.; E. C. Williams Jr., secy. and treas.; J. B. Gist, mgr. Cap. stk. \$200,000. St. Andrews, rock. Open pit, 25,000 tons; steam.

## STONE, MARBLE, GRANITE AND ONYX

LOCATION OF MINE OR QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE OR QUARRY, KIND OF STONE, KIND OF MINE OR QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STONE OR MARBLE MILLS, LIMEELNS AND CAPACITY, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Columbia Ry. 622, 688, 690, 817. Richland	Stewart Stone Co., George A. Shields, pres.; A. R. Stewart, secy., treas. and mgr. Cap. stk. \$10,000. Granite. Slope and open pit, 50,000 tons; steam; mill.
Newberry Ry. 622, 620. Newberry	Leavell & Speers (local). Granite. Open pit; hand.
Rockton Ry. 622. Fairfield	Winnboro Granite Co., Charleston, S. C., 59 Broad st. James F. Redding, pres.; Leon C. Ferrall, secy. and treas.; A. W. St. Amant, mgr. and supt. Cap. stk. \$40,000. Winnboro, granite. 15,000 tons; steam.

SEE ALSO SUPPLEMENTARY LIST

## SOUTH DAKOTA

## FIRE CLAY

LOCATION OF MINE OR BANK, RAILWAYS, WATER ROUTES, AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE OR BANK, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, ETC., AND NAME OF SUPERINTENDENT.
Rapid City.....	Pennington Ry. 274.	Charles Marshall. Cap. \$15,000. Open pit; steam.

## GOLD AND SILVER

LOCATION OF MINE OR BANK, RAILWAYS, WATER ROUTES, AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
Bald Mtn. Mines. Lawrence P. O. and Ry. Deadwood 208, 88, 274.		Bald Mountain Consolidated Milling Co. W. E. Herron, prest. and mgr.; O. U. Pryce, secy.; W. F. Smith, treas. Cap. stk. \$3,000,000. Annie, Josie, Katie, Boomer, gold. Shaft, 15,000 tons; refractory; steam; mill. Oscar Waller, supt.
Bear Gulch.....	Lawrence Ry. Deadwood 88.	W. A. Rinehart and others. Inter Ocean, gold and tin. Shaft, open pit; free, refractory.
Carbonate.....	Lawrence Ry. Deadwood 208, 88, 274.	Iron Hill Mining Co. R. W. Cooper, prest., mgr. and supt. John Baggaley, secy.; L. W. Valentine, treas. Cap. stk. \$2,500,000. Fraction, Blue Bird and 6 others. Shaft, tunnel; refractory, free; steam; mill, 20 stamps.
Central City.....	Lawrence Ry. 274.	Deadwood-Terra Mining Co., James B. Haggitt, treas.; T. J. Grier, mgr. Cap. stk. \$200,000. Deadwood-Terra, gold. Shaft, tunnel, 400,000 tons; free; steam; 250 stamps. Richard Blackstone, supt.
"	"	Monitor Mining Co., Deadwood, S. Dak. Daniel McLaughlin, prest.; W. L. McLaughlin, secy. and treas.; George Cassels, mgr. and supt. Cap. stk. \$250,000. Monitor, Blaine, Reno and 7 others, gold. Tunnel, 1,000 tons; free; steam; 25 stamps.
"	"	Scotia Mining Co. George Cassels, prest.; W. L. McLaughlin, secy. and treas.; John Cassels, mgr. and supt. Scotia, Flora Belle, gold. Tunnel, 500 tons; free.
Custer.....	Custer Ry. 88.	Brownlee & Booth. Sunrise, Young Bill, gold. Open pit, shaft; refractory; hand. James Brownlee, supt.
"	"	H. G. Butterfield. Bonanza, Sentinel, gold. Shaft (developing).
"	"	Grand Junction Mining & Milling Co., St. Louis, Mo. Josiah Akire, prest.; Fred Reimess, secy. and treas.; James Morrissey, mgr. Cap. stk. \$1,000,000. Grand Junction, gold. Shaft, tunnel, 24,000 tons; free, refractory; steam; 40 stamps. C. W. Robbins, supt.
"	"	Wm. Nevice. Scotland, gold. Shaft, tunnel. A. Smith, supt.
"	"	H. N. Ross. Old Bill, gold. Shaft; refractory; hand.
"	"	Thomas Irving Wheeler. Neptune, gold. Tunnel; refractory; hand.
Deadwood.....	Lawrence Ry. 88, 208, 274.	Carthage Silver Mining Co. Robert Graham, prest.; A. J. Plowman, secy. and treas.; S. P. Roman, mgr. and supt. Cap. stk. \$500,000. Boston, Carthage; gold and silver. Shaft; refractory; steam.
"	"	Florence Mining Co. J. W. McDonald, prest.; A. R. Dawson, secy. and treas.; H. B. Young, gen. mgr. Cap. stk. \$250,000. Florence, gold. Tunnel, 3,000 tons; refractory. Richard W. Richards, supt.
"	"	Hardin-Baker Gold Mining Co., Milwaukee, Wis., 345 E. Water st. Isaac D. Adler, prest.; Eugene A. Friel, secy.; Jonas Cohen, treas. Cap. stk. \$500,000. Hardin-Baker, gold. Shaft; free; steam (developing). A. M. Hardin, supt.
"	"	Jefferson Consolidated Silver Mining Co. C. W. Carpenter, prest.; Wm. Selbie, secy., treas. and mgr. Cap. stk. \$250,000. Hercules, May Queen, gold, silver. Shaft, tunnel; refractory.
"	"	New Laplata Mining Co. C. W. Carpenter, prest.; E. Vanicse, secy.; Wm. Selbie, treas. Cap. stk. \$250,000. Laplata, Cashier, gold and silver. Shaft, tunnel; free, refractory.
"	"	Portland Consolidated Mining Co., Clinton, Iowa. George M. Curtis, prest.; C. E. Webb, secy.; W. D. Thompson, treas.; W. D. Ford, mgr. and supt. Cap. stk. \$10,000,000. Portland, gold and silver. Tunnel; refractory (developing).
"	"	Ross-Hannibal Mining Co. S. P. Romans, prest., mgr. and supt.; A. J. Plowman, secy. and treas. Cap. stk. \$2,500,000. Hannibal, Roanoke, gold, silver. Tunnel, 800 tons; refractory; steam.
"	"	Ruby-Wilks Mining Co. M. H. Lyon, prest.; F. E. Ickes, secy., treas. and mgr. Cap. stk. \$1,250,000. Ruby-Wilks, gold. Open cut, tunnel, shaft, 4,500 tons; refractory; steam; chlorination process. Richard Richards, supt.
"	Ry. Portland 88.	Slumbering Bonanza Mining Co. Abram Kelder, prest.; A. R. Z. Dawson, secy.; Frank E. Ickes, treas.; Abram Kelder, mgr. and supt. Cap. stk. \$250,000. Slumbering Bonanza. Shaft, open cut; refractory.
Galena.....	Lawrence Ry. Whitewood 274.	Bullion Mining Co. S. A. Flower, prest., treas. mgr. and supt.; John Baggaley, secy. Cap. stk. \$1,250,000. Bay State, silver. Tunnel, shaft; refractory.
"	"	Coletta Group. C. B. Harris, mgr. Coletta, gold, silver. Tunnel, 3,000 tons; horse.
"	"	Conzett & Bullock. Emma, silver and lead. Tunnel, shaft, 100 tons; refractory. James Conzett, supt.
"	"	Cora Mining Co. K. G. Phillips, prest.; H. Fairbanks, secy.; C. G. Fargo, treas.; W. Groshong, mgr. Cap. stk. \$2,500,000. Cora, gold, silver and lead. Tunnel, 1,000 tons; horse.
"	"	W. V. Doyle and others. Union Hill, gold, silver. Shaft, tunnel, open cut; free, refractory; horse (developing). W. M. Fagan, supt.
"	"	Gerken & Lynn. Cap. \$50,000. Ontario, Wanda. Tunnel, 400 tons; refractory; hand. John Gerken, supt.

## GOLD AND SILVER—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAME OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
Galeana.....	Lawrence (Continued.)	Henry Mayors. Captain Pratt, silver, lead. Tunnel, 365 tons; free.
".....	"	R. B. Hayes Mining Co. J. Devenon, prest. and mgr.; S. Moll, secy.; P. E. Sparks, treas. Cap. stk. \$250,000. R. B. Hayes, gold, silver, lead. 2,000 tons; horse.
".....	"	Washington Consolidated Gold & Silver Mining Co. John J. Schlawig, prest., mgr. and supt.; William McLaughlin, secy.; J. L. Follett, treas. Cap. stk. \$200,000. Gold, silver. Tunnel, 1,000 tons; refractory; water.
Harney.....	Pennington (P. O. Etta Mine) Ry. Hermosa 274.	Myron Willsie & Co., Rapid City, S. Dak. C. J. Wheelock, mgr. Wade, silver, copper. Horse. Myron Willsie, supt.
Hayward.....	Pennington Ry. Hermosa 274 (9 miles).	Hayward Group Silver Mining Co. C. J. Patton, prest.; A. C. Walker, secy. and treas.; John Monday, mgr. and supt. Cap. stk. \$1,250,000. London, gold, silver, lead. Shaft, tunnel, 500 tons; refractory; hand.
Hermosa.....	Custer Ry. 274.	J. R. Bobler. North Star, gold, silver, lead. Shaft; hand.
".....	"	Spokane Mining Co. J. N. Wright, prest. and mgr.; M. R. Maxson, secy. and treas. Cap. \$80,000. Spokane, silver, lead. Shaft, 800 tons; hand. J. N. Wright, supt.
Hill City.....	Pennington Ry. 88.	McCulloch & Stevens. Swan Lode, gold. Slope; free; water. G. W. McCulloch, supt.
Keystone.....	Pennington (P. O. Etta Mine) Ry. Hermosa 274.	Reed, Franklin & Blair. Keystone Lode, gold, silver. Tunnel, shaft; free; refractory; hand. A. J. Simmons, supt.
Lead.....	Lawrence Ry. 64, 208.	Big Missouri Mining Co., Chicago, Ill., 14 Tribune Bldg. Alvan E. Tyler, prest.; Jabez B. Stubbs, secy.; M. J. Lathier, treas.; M. A. Delano, mgr. Cap. stk. \$250,000. Big Missouri, Shaft, 75,000 tons; free; steam; 60 stamps. James H. Honey, supt.
".....	"	Collins & O'Leary. Lackawanna, gold, silver. Shaft, open cut, 2,000 tons; refractory; steam. James A. Collins, supt.
".....	"	Custer & Mand Mining Co. Chicago, Ill., Room 14 Tribune Bldg. M. J. Lathier, prest.; M. A. Delano, secy. and treas. Cap. stk. \$30,000 (developing).
".....	"	Florence Gold & Silver Mining Co., Deadwood, S. Dak. Charles Waite, prest.; A. J. Malterner, secy.; B. F. Ankeny, treas.; P. L. Gibbs, mgr. and supt. Florence Group, Shaft, tunnel; refractory; steam.
".....	"	Hawk Eye Gold Mining Co., Des Moines, Iowa, 817 Walker st. Geo. Bauschbach, prest.; M. J. Hunter, secy.; Wm. B. Ankeny, treas.; David Hunter, mgr. and supt. Cap. stk. \$2,500,000. St. James, Willie and 6 others. Shaft and tunnel; free; steam; 40 stamps.
".....	"	Lead Placer Mining Co. J. M. Dickson, prest.; J. B. Baker, secy., treas. and supt. Wm. Larimer, treas. Placer (developing).
".....	"	Welcome Mining Co. Charles Waite, prest. and mgr.; A. J. Malterner, secy. and treas. Welcome, gold, silver. Shaft, tunnel; refractory; steam; chlorination process. N. Scheuer, supt.
Perry.....	Lawrence Ry. 64.	Convention Gold Mining Co., Deadwood, S. Dak. J. T. Harrington, prest.; James Frawly, secy.; Henry Frawly, treas.; Daniel Miles, mgr. and supt. Convention. Shaft, tunnel; free; hand.
".....	"	Wilson M. Merritt. Advance, Single Tax, gold, silver and copper. Shaft, tunnel; free; refractory; hand.
Rochford.....	Pennington Ry. 88.	Minnesota Consolidated Mining Co., Davenport, Ia. A. Kimball, prest.; F. H. Griggs, secy. and treas.; C. H. Enos, mgr. and supt. Cap. stk. \$300,000. Mimosota and others. Free; water (developing).
Spokane.....	Custer Ry. Hermosa 274 (10 m. l.).	Buckingham & Miller. Cap. \$10,000. Lucky Friend, gold, silver. Shaft, 200 tons; refractory; hand. John L. Buckingham, supt.
".....	"	Maxson & Patton. Cap. \$10,000. Banker, silver, gold. Shaft, 130 tons; hand. N. Veates, supt.
".....	"	W. L. Pike and others. Cheyenne, Linus, silver. Shaft; electricity. W. L. Pike, supt.
".....	"	Spokane Mining Co. M. R. Maxson, secy. and treas. Cap. \$100,000. Spokane, silver, gold, lead. Shaft, 300 tons; refractory; horse. F. M. Wall, supt.

## GYPSUM

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
Rapid City.....	Pennington Ry. 274.	Moland Mining & Developing Co. John J. Rochford, prest. and mgr.; Edward M. Reeves, secy.; William W. Hinton, treas. Cap. stk. \$5,000,000. Open pit; mill (developing). Samuel Scott, supt.
Sturgis.....	Meade Ry. 274.	Black Hills Plaster Co. Henry A. Carpenter, prest.; G. W. Cromwell, secy. and treas. Cap. stk. \$20,000. Open pit, 3,600 tons; steam.

## MICA

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF PRODUCT, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, ETC., AND NAME OF MINE SUPERINTENDENT.
Custer..... Ry. 88.	Custer	Galesburg Mica Mining Co., Galesburg, Ill., 321 E. Main st. A. P. Charles, pres.; C. A. White, secy. and treas.; R. H. Pileher, mgr. and supt. Cap. stk. \$150,000. Evelyn. Shaft, tunnel; hand (developing).
"..... "	"	Wm. C. Walsh, Chicago, Ill., 54 and 56 Sherman st. Climax. Shaft, tunnel; horse.
Fringling..... (P. O. Hot Spgs.) Ry. 88.	Custer	Consolidated Mica Co. J. B. Diekorf, pres.; J. F. Parks, secy.; Charles G. Fargo, treas.; M. S. Thomas, mgr. and supt. Cap. stk. \$300,000. Sun Dog. Shaft; hand.
Rapid City..... Ry. 274.	Pennington	L. L. Davis. Cap. \$1,000. Newton, gold, mica and tin. Open cut; hand (developing).

## STONE, MARBLE, GRANITE AND ONYX

LOCATION OF MINE OR QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE OR QUARRY, KIND OF STONE, KIND OF MINE OR QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STONE OR MARBLE MILLS, LIMESTONES AND CAPACITY, ETC., AND NAME OF MINE SUPERINTENDENT.
Deadwood..... Ry. 88, 274, 208.	Lawrence	Ball White Sandstone Co. Edward Ball, propr. Cap. \$25,000. Sandstone. Open pit, 1,500 tons; hand.
Dell Rapids..... Ry. 141.	Minnehaha	Dell Rapids Granite Co. Ritchie Sampson, pres.; W. S. Mitchell, secy. and treas.; John McDonald, v.-pres. Cap. stk. \$50,000. Jasper. Open pit.
E. Sioux Falls..... Ry. 319.	Minnehaha	East Sioux Falls Granite Co. G. H. Perry, mgr. Cap. \$200,000. East Sioux Falls, granite, sandstone. Open pit, 15,000 tons; steam; mill. James McGrath, supt.
Rowena..... Ry. 319.	Minnehaha	Minnehaha Granite Co., Chicago, Ill., 84 La Salle st. L. A. Marshall, pres.; Fred Stafford, secy.; W. B. Holton, treas. Cap. stk. \$50,000. Quartzite, granite. Open pit, slope, 15,000 tons; steam. Thomas Vernon, supt.

## TIN

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, SMELTERS, ETC., AND NAME OF MINE SUPERINTENDENT.
Bear Gulch..... Ry. Deadwood 88, 274.	Lawrence	Janssney & St. John. George and 5 others. Shaft; horse, hand (developing).
"..... "	"	C. Miller. Boston, Commercial Grace, Dakota. Tunnel; shaft (developing).
"..... "	"	Nigger Hill Tin Mining Co. Charles J. Finch, pres., mgr. and supt.; Henry Schmitz, secy. and treas. Cap. stk. \$1,250,000. Nigger Hill. Shaft; hand.
Custer..... Ry. 88.	Custer	Dolphin Mining & Milling Co. Col. John Doulphin, pres.; O. D. Moore, secy. Capital stk. \$4,000,000. Dolphin, Tempest. Shaft, tunnel, 1,000 tons; free; horse, hand. W. P. Moore, supt.
"..... "	"	Thomas J. Wheeler. Haven. Shaft; hand.
Etta Mine..... Ry. Hermosa 274.	Pennington	Everly & Preece. Good Luck. Open cut; hand. Milton Everly, supt.
"..... "	"	Rapid City Land & Improvement Co., Rapid City, S. Dak. E. B. Byington, pres.; R. J. Hill, secy.; H. S. Hall, treas.; Samuel Scott, mgr. Cap. stk. \$6,000,000. Etta, Margaret. Shaft, open cut, 30,000 tons; hand. Lewis Everly, supt.
Glendale..... (P. O. Etta Mine) Ry. Hermosa 274	Pennington	Glendale Tin Co., Chicago, Ill., 41 Portland Block. Fred W. Gardner, pres.; Geo. W. Cope, secy. and treas.; J. K. Haines, mgr. Cap. stk. \$2,500,000. Glendale. Shaft, tunnel; water, steam; concentrat- ing mill (developing). B. M. Mitchell, supt.
Harney City..... (P. O. Etta Mine) Ry. Hermosa 274.	Pennington	Black Hills Tin & Metal Co. A. J. Kohler, pres.; Frank O. Fetton, secy.; N. Hunsicker, treas.; H. H. Francis, mgr. and supt. Cap. stk. \$1,000,000. Harney City. Tunnel, shaft; horse, hand (developing).
"..... "	"	Wheelock & Everly. Olive. Shaft, tunnel; horse. C. J. Wheelock, supt.
Hill City..... Ry. 88.	Pennington	Harney Peak Tin Mining & Milling Co., New York City, 44 and 46 Wall st. Samuel Untermeyer, pres.; Charles D. Deshler, secy.; Lewis May, treas. Cap. stk. \$15,000,000. Shaft; steam. J. S. Childs, supt.
"..... "	"	Frank Hebert. Tin Queen. Shaft, open pit (developing).
"..... "	"	James Jacoby & Co. Rose, Big Mountain, tin, lead, copper (developing).
"..... "	"	Joseph McClure. Western Bell and 3 others.
"..... "	"	Rapid City Land & Improvement Co., Rapid City, S. Dak. E. B. Byington, pres.; R. J. Hill, secy.; H. S. Hall, treas.; Samuel Scott, mgr. Cap. stk. \$6,000,000. First Find. Open cut; hand. Samuel Scott, supt.
"..... "	"	C. Von Wochmann & Bartley Bros. Dogtown Group and 9 others. Shaft, tunnel; hand (developing).
Spokane..... Ry. Hermosa 274 (10 miles).	Custer	L. Scurlock & Co., Copalis, Wash. Cap. \$1,500. Open pit, 50 tons; hand.
Whitewood..... Ry. 274.	Lawrence	Charles J. Finch. May Queen and 4 others. Shaft, open cut, 400 tons; hand.
"..... "	"	Finch & Gaston. Buckeye. Shaft, tunnel, 1,200 tons; hand. Charles J. Finch, supt.

SEE ALSO SUPPLEMENTARY LIST



## TENNESSEE

## COAL—BITUMINOUS

LOCATION OF MINE,  
RAILWAYS, WATER ROUTES  
AND SHIPPING POINT.  
TOWN AND COUNTY.

Bon Air Coal Mine White  
Ry. 482.

Carlyle .. . Campbell  
Ry. 240.

Coal Creek .. Anderson  
Ry. 240.

" .. . "

Crossville .. Cumberland  
Ry. Rockwood 636.

Elk Valley .. Campbell  
Ry. 612, 240.

Evensville .. Rhea  
Ry. 612.

Frozen Head .. Morgan  
(P. O. Coalfield) Ry.  
Oliver Springs 787.

Harriman .. Roane  
Ry. 612.

Hartraff .. Claiborne  
Ry. Middleboro, Ky.,  
371, 408.

Knoxville .. Knox  
Ry. 240, 372, 371, 420.

Needmore .. Marion  
(P. O. South Pittsburg)  
Ry. 408.

Newcomb .. Campbell  
Ry. 240.

Rockwood .. Roane  
Ry. 612, 636.

Sale Creek .. Hamilton  
Ry. 612.

Soddy .. Hamilton  
Ry. Rathburn 612.

South Pittsburg .. Marion  
Ry. 482, 746.

" .. . "

Tracy City .. Grundy  
Ry. 482.

Whitwell .. Marion  
Ry. 482.

" .. . Claiborne  
(P. O. and Ry. Middle-  
boro, Ky.) 371, 400.

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NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK,  
NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED,  
COAL BREAKERS, WASHERS, COKE OVENS, AND NAME OF MINE SUPERINTENDENT.

Bon Air Coal & Coke Co., J. M. Overton, prest., treas. and mgr.; J. L. Dilrell, secy. Cap. stk. \$50,000. Bon Air. Tunnel, 100,000 tons; steam. Win. Harvey, supt.

J. C. Collins, Hill st. Cap. \$500. Citizen's. Tunnel, 40 tons; hand.

Black Diamond Coal Co., Knoxville, Tenn. T. H. Heald, prest.; E. F. Wiley, secy. and treas.; J. M. Andrews, mgr. and supt. Cap. stk. \$150,000. Black Diamond, Empire and Shamrock. Slope, 252,000 tons; steam.

Coal Creek Coal Co., Knoxville, Tenn., 61 W. Church st. E. C. Camp, prest.; D. B. Bean, secy. and treas. Cap. stk. \$200,000. Praterville, This-tle. Tunnel, 250,000 tons; steam and horse. A. H. Bowling, supt.

Phillipsburg Land Co. (local). Noble Phillips, prest. and mgr.; R. W. Shannon, secy.; John J. White, treas. Cap. stk. \$60,000. Albany. Open; hand.

Elk Valley Coal & Iron Co., Knoxville, Tenn. Judge M. P. Jernagin, prest.; W. T. Russell, secy. and treas.; C. R. Baird, mgr. and supt. Cap. stk. \$800,000. Tunnel, horse (developing). L. E. Bryant, supt.

J. T. Darwin. Cap. \$7,500. Darwin. Slope and tunnel, 10,000 tons; water.

East Tennessee Mining Co., Harriman, Tenn. J. D. Roberts, prest.; J. Michell, secy.; Fred. Gates, treas.; Louis E. Bryant, mgr. Cap. stk. \$1,000,000. Frozen Head. Tunnel and drift; compressed air and electricity; washer, 200 coke ovens, 120,000 tons (developing). L. E. Bryant, supt.

East Tennessee Mining Co., J. D. Roberts, prest.; Jos. Michell, secy.; Fred. Gates, treas.; L. E. Bryant, mgr. and supt. Cap. stk. \$1,000,000. Byrd. Tunnel and drift, 20,000 tons; steam, 6 coke ovens, 3,570 tons.

Reliance Coal & Coke Co., E. A. Sumner, prest.; Philip Swab, secy. and treas. Cap. stk. \$15,000. Reliance, 50,000 tons; horse. John Gent, supt.

Black Diamond Coal Co., T. H. Heald, prest.; E. F. Wiley, secy.; W. F. Searle, treas.; J. M. Andrews, mgr. and supt. Cap. stk. \$150,000. Black Diamond. Slope, 300,000 tons; steam.

B. F. Patton. Cap. \$10,000. Needmore. Tunnel, 10,000 tons; hand.

Standard Coal & Coke Co., J. L. Brees, prest.; Russell A. Clapp, secy., treas. and mgr. Cap. stk. \$500,000. Tunnels, 85,000 tons; horse. J. C. Brooks, supt.

Phillipsburg Land Co. (local). Crossville, Tenn. Noble Phillips, prest. and mgr.; R. W. Shannon, secy.; John J. White, treas. Cap. stk. \$60,000. Rockwood. Open; hand.

Sale Creek Coal & Coke Co., Chattanooga, Tenn., cor. Ninth and Market sts. Sol. Simpson, prest.; Win. Griffiths, secy.; A. Simpson, treas.; D. B. Griffiths, mgr. Cap. stk. \$50,000. Sale Creek. Tunnel, 30,000 tons; horse; washer, 65 coke ovens. W. R. Lloyd, supt.

Soddy Coal, Iron & Railway Co., Chattanooga, Tenn., cor. W. Ninth and Broad sts. M. H. Clift, prest., treas. and mgr. Cap. stk. \$800,000. Soddy. Tunnel, 10,000 tons; horse and steam; washer, 150 coke ovens. A. Lloyd, supt.

Houston, McDaniel & Co. Cap. \$2,000. Old Battle Creek. Tunnel, hand. P. T. Fuller, supt.

R. M. Payne. Cap. \$5,000. Battle Creek. Tunnel and drift, 5,000 tons; hand. James Turner, supt.

Tennessee Coal, Iron & Railroad Co., Nashville, Tenn. T. C. Platt, prest.; Jas. Bowen, secy. and treas.; A. M. Shook, third v. prest. and mgr. 5 drifts, 287,736 tons; steam and horse; washer, 530 coke ovens, 43,788 tons. E. O. Nathurst, supt.

Tennessee Coal, Iron & Railroad Co., Nashville, Tenn. T. C. Platt, prest.; Jas. Bowen, secy. and treas.; A. M. Shook, third v. prest. and mgr. 2 drifts, 214,424 tons; steam and horse; 130 coke ovens, 43,788 tons.

Bryson Mt. Coal & Coke Co., Cumberland ay. T. Cockill, prest. and treas.; E. Cockill, secy. and mgr. Cap. stk. \$50,000. Bryson Mountain. Tunnel, 90,000 tons; steam and horse; J. W. Cockill, supt.

Fork Ridge Coal Co., O. W. Davis Jr., prest. and treas.; John Sanderson, secy. Cap. stk. \$100,000. Fork Ridge. Tunnel, 60,000 tons; steam. J. A. Jardine, supt.

Mingo Mt. Coal & Coke Co., John Ralston, prest.; O. W. Davis Jr., v. prest. and secy.; C. M. Woodbury, treas. Cap. stk. \$150,000. Mingo Nos. 1 and 2. Tunnel, 150,000 tons; steam; washer, 240 coke ovens, 75,000 tons. R. L. Ralston, supt.

## COPPER

LOCATION OF MINE,  
RAILWAYS, WATER ROUTES  
AND SHIPPING POINT.  
TOWN AND COUNTY.

Ducktown .. Polk  
Ry. 420.

NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK,  
NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND  
OF POWER USED, FURNACES, ETC., AND NAME OF MINE SUPERINTENDENT.

Pittsburg & Tennessee Copper Co., Pittsburg, Pa., 3222 Penn ay. Hugh Ferguson, prest.; Duncan Ferguson, secy.; S. J. Wainright Jr., treas.; Carl Heerli, mgr. and supt. Old Tennessee, copper. Shafts; steam.

## FIRE CLAY

LOCATION OF MINE,  
OR BANK,  
RAILWAYS, WATER ROUTES,  
AND SHIPPING POINT.

TOWN AND COUNTY.

Cleveland . . . . .Bradley  
Ry. 240.

NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK,  
NAME AND KIND OF MINE OR BANK, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER  
USED, ETC., AND NAME OF SUPERINTENDENT.

Cleveland Fire Brick Co. J. H. Sanborn, prest. and treas.; J. C. Noel, secy. and mgr. Cap. stk. \$50,000.  
Open pit, 6,000 tons; steam.

## GOLD AND SILVER

LOCATION OF MINE,  
RAILWAYS, WATER ROUTES  
AND SHIPPING POINT.

TOWN AND COUNTY.

Knoxville . . . . .Knox  
Ry. 240, 372, 371, 420.

NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK,  
NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND  
OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.

East Tennessee & North Carolina Mining Co., 64 Gay st. Samuel Johnson, prest.; Charles S. Ashton,  
secy.; Wm. M. Johnson, treas.; Levi Levegood, mgr. Cap. stk. \$57,000. Troffer and Indian, gold,  
silver, iron, lead, copper. Shaft and tunnel; water and steam (developing). (Mine in Sevier county.)

## IRON

LOCATION OF MINE,  
RAILWAYS, WATER ROUTES  
AND SHIPPING POINT.

TOWN AND COUNTY.

Evensville . . . . .Rhea  
Ry. 612.

Goodrich . . . . .Hickman  
Ry. 482.

Harriman . . . . .Roane  
Ry. 240, 612, 746.

Inman . . . . .Marion  
Ry. 482.

Louise . . . . .Montgomery  
Ry. 408.

Mannie . . . . .Wayne  
Ry. 482.

Napier . . . . .Lewis  
Ry. 408.

Newburg . . . . .Lewis  
Ry. Napier 408.

Pinkney . . . . .Lawrence  
Ry. 408.

Welker Mines . . . . .Roane  
Ry. Kingston 746.

NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK,  
NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND  
OF POWER USED, BLAST FURNACES, ETC., AND NAME OF MINE SUPERINTENDENT.

W. C. Gossett. Cap. \$500. Payne, red fossil. Open pit, 5,000 tons; hand; furnace.

Southern Iron Co., Nashville, Tenn., Union st. A. M. Shook, prest.; W. E. McNelly, secy. and treas.;  
Percy Warner, mgr. Cap. stk. \$3,000,000. Johnson and McNelly, black hematite. Open pit, 250  
tons; steam; furnace. H. E. Williams, supt.

East Tennessee Mining Co. J. D. Roberts, prest.; Joseph Michell, secy.; Fred Gates, treas.; L. E.  
Bryant, mgr. and supt. Cap. stk. \$3,000,000. Waldeen Ridge, hematite. Drift, 12,000 tons; hand.

Tennessee Coal, Iron & Railroad Co., Nashville Tenn. T. C. Platt, prest.; James Bowton, secy. and treas.;  
A. M. Shook, third v. prest. and mgr. Red fossiliferous. 3 slopes, 117,160 tons; steam. J. Hawkins,  
supt.

Gracey-Woodward Iron Co., Clarksville, Tenn. W. H. Woodward, prest.; H. G. Woodward, secy., treas.,  
mgr. and supt. Cap. stk. \$168,000. Louise, brown hematite. Tunnel, open pit, 100,000 tons; steam and  
hand; furnace, 45,000 tons.

The Southern Iron Co., Nashville, Tenn. A. M. Shook, prest.; J. A. Cooper, secy. and treas.; P. Warner,  
mgr. Cap. stk. \$3,000,000. Mannie, brown hematite. Open pit, 60,000 tons; steam; furnace. John W.  
DeFor, supt.

Napier Iron Co. E. C. Lewis, prest. and mgr.; E. L. Ware, secy. and treas. Cap. stk. \$300,000. Napier,  
brown hematite. Open pit; steam; furnace, 18,000 tons.

Napier Iron Works Co., Nashville, Tenn. E. C. Lewis, prest. and mgr.; J. H. Eakin, secy. and treas.  
Cap. stk. \$3,000,000. Open pits; steam, hand; furnace.

Smith & Sharpe Mining Co., Dayton, Ohio. W. W. Smith, prest.; Thomas Sharpe, secy. and treas.; John  
Fagan, mgr. and supt. Cap. stk. \$25,000. Pinkney, red and brown hematite. Open pit, 22,500 tons;  
steam; furnace, 13,500 tons.

East Tennessee Mining Co., Harriman, Tenn. J. D. Roberts, prest.; Jos. Michell, secy.; Fred Gates,  
treas.; L. E. Bryant, mgr. and supt. Cap. stk. \$1,000,000. Welker, hematite. Open pit, 28,000 tons;  
hand and horse.

## LEAD AND ZINC

LOCATION OF MINE,  
RAILWAYS, WATER ROUTES  
AND SHIPPING POINT.

TOWN AND COUNTY.

Blue Springs . . . . .Bradley  
(P. O. Blue Springs Sta-  
tion) Ry. 240.

Mosby Creek . . . . .Jefferson  
Ry. 240.

White Pine . . . . .Jefferson  
Ry. 240.

NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK,  
NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND  
OF POWER USED, SMELTERS, ETC., AND NAME OF MINE SUPERINTENDENT.

Blue Springs Mining Co., Chattanooga, Tenn., 232 Richardson Block. S. W. Divine, prest.; W. H. Bogle,  
secy. and treas. Cap. stk. \$50,000. Blue Springs, lead and zinc. Shaft, tunnel, 400 tons; steam; fur-  
nace; Paul Cass, supt.

White Pine Zinc Co., Louisville, Ky., 33 Kenyon Bldg. Wm. L. Breyfogle, prest.; B. Whitney Herr, secy.  
and treas.; Jas. K. Zollinger, mgr. Cap. stk. \$50,000. Sulphurets and carbonate of zinc. Open pits  
and shaft; steam and hand. Frank H. Breyfogle, supt.

White Pine Zinc Co., Louisville, Ky., 33 Kenyon Bldg. Wm. L. Breyfogle, prest.; B. Whitney Herr, secy.  
and treas.; Jas. K. Zollinger, mgr. Cap. stk. \$50,000. Sulphurets and carbonate of zinc. Shaft and  
open pits; steam and hand. Frank H. Breyfogle, supt.

SLATE

LOCATION OF QUARRY,  
RAILWAYS, WATER ROUTES  
AND SHIPPING POINT.  
TOWN AND COUNTY.

NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK,  
NAME OF QUARRY, KIND OF SLATE, KIND OF QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS,  
KIND OF POWER USED, MILLS, ETC., AND NAME OF QUARRY SUPERINTENDENT.

Bluff City .. Sullivan The James Slate & Mining Co. W. W. James, prest.; John R. Cunningham, secy.; D. S. Heaton, treas.  
Ry. 24. Cap. stk. \$30,000. Slate and marble. Steam (developing).

STONE, MARBLE, GRANITE AND ONYX

LOCATION OF MINE  
OR QUARRY,  
RAILWAYS, WATER ROUTES  
AND SHIPPING POINT.  
TOWN AND COUNTY.

NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK,  
NAME OF MINE OR QUARRY, KIND OF STONE, KIND OF MINE OR QUARRY, ANNUAL OUTPUT IN TONS OF  
2,000 POUNDS, KIND OF POWER USED, STONE OR MARBLE MILLS, LIMEKILNS AND  
CAPACITY, ETC., AND NAME OF MINE SUPERINTENDENT.

Andersonville .. Anderson Tennessee Onyx Co. Z. T. Alban, prest.; A. H. Jacobs, v. prest. and secy.; S. H. Stevens, treas.; M. A.  
Ry. Clinton 240. Williams, mgr. Tennessee, onyx. Open pit (developing).

Arthur .. Claiborne Hoffman & Malone, Middleshoro, Ky. R. F. Hoffman, prest. and secy.; Thomas Malone, treas. and mgr.  
Ry. 371. Cap. \$2,000. Arthur, limestone. 12,000 tons; horse and steam.

Caswells .. Knox Tennessee Producers' Marble Co., Knoxville, Tenn., 31 Denderick Block. W. H. Evans, prest.; J. J.  
Ry. 240. Craig, v. prest.; John J. Craig jr., treas. and mgr. Cap. stk. \$300,000. Caswell, marble. Open pit,  
3,000 tons; steam, horse and hand.

Chattanooga .. Hamilton John Truitt, sis Pine st. Cap. \$15,000. Stone Fort, limestone. Open pit, 50,000 tons; steam. P. J.  
Ry. 170, 126, 127, 280, Whitman, supt.  
240, 801.

Cloyd's Creek .. Blount Tennessee Producers' Marble Co., Knoxville, Tenn., 31 Denderick Block. W. H. Evans, prest.; J. J. Craig,  
Ry. Metcfe 420. v. prest.; John J. Craig jr., treas. and mgr. Cap. stk. \$300,000. Cloyd's Creek, marble. Open pit, 3,000  
tons; horse, steam and hand.

Concord .. Knox Concord Quarry Co., Knoxville, Tenn. J. E. Hart, prest.; T. W. Keller, secy. and treas. Cap. stk. \$20,000.  
Ry. 240. Marble.

" .. " Tennessee Producers' Marble Co., Knoxville, Tenn., 31 Denderick Block. W. H. Evans, prest.; J. J.  
Craig, v. prest.; John J. Craig jr., treas. and mgr. Cap. stk. \$300,000. Concord, marble. Open pit,  
3,000 tons; steam, horse and hand.

Ebenezer .. Knox Tennessee Producers' Marble Co., Knoxville, Tenn., 31 Denderick Block. W. H. Evans, prest.; J. J.  
Ry. 240. Craig, v. prest.; John J. Craig jr., treas. and mgr. Cap. stk. \$300,000. Ebenezer, marble. Open pit,  
3,000 tons; steam, horse and hand.

Friendsville .. Blount Tennessee Producers' Marble Co., Knoxville, Tenn., 31 Denderick Block. W. H. Evans, prest.; J. J.  
Ry. 420. Craig, v. prest.; John J. Craig jr., treas. and mgr. Cap. stk. \$300,000. Friendsville, marble. Open pit,  
3,000 tons; steam, horse and hand.

Graysville .. Hamilton John Truitt, Chattanooga, Tenn., sis Pine st. Cap. \$15,000. Graysville, brown sandstone. Open pit;  
Ry. P. O. and Ry. Chat- 240, 280, 801. nooga 126, 127, 150,  
240, 280, 801.

Knoxville .. Knox W. H. Evans & Son, Baltimore, Md. Cap. stk. \$500,000. Marble. Open pits, 75,000 tons; steam; mill. J. E.  
Ry. 240, 371, 372, 420. Willard, supt.

" .. " Gray Knox Marble Co. Marble. 8,000 tons.

" .. " Phoenix Marble Co. R. R. Swenson, prest.; John P. Beach, secy., treas. and mgr. Cap. stk. \$30,000.  
Beach, marble. Open pit, 1,500 tons; steam, horse and hand; mills. Jas. B. Lyle, supt.

" .. " J. Edward Ross. Cap. \$20,000. Ed. Ross, pink and gray marble. Open pit, 2,000 tons; steam. Tom Bur-  
nell, supt.

" .. " Tennessee Producers' Marble Co. W. H. Evans, prest.; J. J. Craig, v. prest.; John J. Craig jr., treas. and  
mgr. Cap. stk. \$300,000. Knoxville, marble. Open pit, 3,000 tons; steam, horse and hand.

Ooltewah .. James Thatcher Lime & Stone Works. W. O. Thatcher jr., mgr. Limestone. Open pit, 8,000 tons; hand; kiln,  
Ry. 240. 3,000 tons.

Philadelphia .. Loudon Rosebud Marble Co., Knoxville, Tenn. J. E. Hart, prest.; T. W. Keller, secy. and treas.; S. C. Burgess,  
Ry. 240. mgr. Cap. stk. \$15,000. Rosebud, marble. Steam.

Powder Springs .. Grainger Columbia Marble Co., Columbus, Ohio, 9 S. High st. Dr. L. W. Sherwood, prest.; Hon. Phillip H. Bruck,  
(P. O. Ambro) Ry. 371. secy.; R. E. Beckley, treas.; Col. D. D. Nichols, mgr. Cap. stk. \$10,000. Columbian, marble. Open  
pit, 5,000 tons; steam. John Carver, supt.

Rogersville .. Hawkins James Cooper. Cap. \$25,000. Gem, marble. Slope and open pit, 75,000 tons; horse and hand. John  
Ry. 240. Carver, supt.

" .. " J. L. Leroy. Cave Ridge, marble. Hand.

" .. " D. C. McKay. Cap. \$50,000. McKay, marble. Open pit, 1,000 tons; steam; mill. John Carver, supt.

Sewanee .. Franklu D. E. Denny, Nashville, Tenn., cor. Mulberry and Vine sts. Sewanee, sandstone. Mill.

SEE ALSO SUPPLEMENTARY LIST

## TEXAS

## COAL—BITUMINOUS

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, COKE OVENS, AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Decatur . . . . . Wise Ry. 776.	Wise County Coal Co. H. H. Halsell, prest. and mgr.; Will Rush, secy. and treas. Wise. Shaft (developing).
Lytle . . . . . Atascosa Ry. 326.	Carr Coal Co., San Antonio, Tex., cor. Medina and Monterey sts. J. S. Carr, mgr. Lytle. Slope, 7,000 tons; steam. Domingo Bineva, supt.
Minera . . . . . Webb Ry. Laredo 326, 436.	Santo Tomas Coal Co., Laredo, Tex. A. C. Hunt, prest.; Dr. A. W. Wilcox, secy. and treas. Cap. stk. \$75,000. Santo Tomas. Slope, 14,400 tons; horse. D. D. Davis, supt.
Rock Creek . . . . . Parker Ry. 793.	Texas Coal & Fuel Co., Weatherford, Tex. L. M. Fouts, prest. and mgr.; E. R. Standish, secy. and treas. Cap. stk. \$250,000. Rock Creek. Shaft, 15,000 tons; steam. J. O. Fouts, supt.
Rockdale . . . . . Milam Ry. 326, 648.	Rockdale Mining & Manufacturing Co., P. O. Box 25. L. Isaacs, prest.; W. B. Woody, secy. and mgr.; J. L. Lockett, treas. Cap. stk. \$60,000. Shaft, open pit; steam (developing). J. A. Touchstone, supt.
Sierra Blanca . . . . . El Paso Ry. 756, 692.	R. C. Crawford. Fannie M. Shaft.
Strawn . . . . . Palo Pinto Ry. 756.	Adair Coal Mining Co., Fort Worth, Tex. J. B. Adair, prest. and mgr.; R. B. Adair, secy. and treas. Cap. stk. \$250,000. Shaft; steam (developing).

## COPPER

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, FURNACES, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Henrietta . . . . . Clay Ry. 776.	Lone Star Copper Co. W. A. Dennis, prest.; John McNeish, secy.; James M. Steere, treas.; Henry J. Brennon, mgr. Cap. stk. \$875,000. Carbonate, oxide. Tunnel and shaft. S. E. Ford, supt.

## GOLD AND SILVER

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Camp Schryver . . . . . El Paso P. O. and Ry. Allamore 756.	Hazel Mining Co., San Antonio, Tex. Hazel, silver and copper. Shaft, 4,500 tons; refractory; steam. H. J. Clifford, mgr. and supt.
Clio . . . . . Brown Ry. Brownwood 26, 268.	W. F. Elliott. Elliott, gold, silver. Shaft; free.
Sierra Blanca . . . . . El Paso Ry. 756, 692.	R. C. Crawford. Caledonia, gold and silver. Tunnel; refractory.

## IRON

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, BLAST FURNACES, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Jefferson . . . . . Marion Ry. 756, 459.	Lone Star Iron Co. John H. Kruse, prest. and mgr.; Edward Atfield, secy.; Thomas T. Nelson, treas. Cap. stk. \$1,000,000. Brown hematite, fossiliferous, carbonate. Open pit, 36,000 tons; hand; furnace, capacity 18,000 tons. Thomas Traverse, supt.
Llano . . . . . Llano Ry. Burnet 37.	Wakefield Iron & Coal Land Improvement Co., Milwaukee, Wis., 154 Second st. Ceylon E. Lyman, prest.; Vernon T. Wakefield, secy.; George M. Wakefield, treas.; James A. Wood, mgr. and supt. Cap. stk. \$3,000,000. Binder, magnetic, pyrophosphite, manganese. Shaft; steam (developing).
Queen City . . . . . Cass Ry. 756.	Queen City Iron Co. John I. Halley, prest.; J. B. H. Janeway, secy. and mgr.; J. J. Robertson, treas. Cap. stk. \$600,000. Red and brown hematite. Open pit; furnace, 25,000 tons.

## SALT

LOCATION OF MINE OR WELL, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF PRODUCT, KIND OF MINE OR WELL, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Colorado ..... Mitchell Ry. 756.	Lone Star Salt Co., Dallas, Tex. Byton Parsons, pres.; Fredk. R. Blount, secy. and treas. Cap. stk. \$200,000. Lone Star, Crescent, common, fine, table, solar. Well, 250,000 brls.; steam; evaporation. John Miller and A. Wilderspin, supts.

## STONE, MARBLE, GRANITE AND ONYX

LOCATION OF MINE OR QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE OR QUARRY, KIND OF STONE, KIND OF MINE OR QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STONE OR MARBLE MILLS, LIMEKILNS AND CAPACITY, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Fredricksburg. Gillespie Ry. 37.	Frank Teich, San Antonio, Tex., cor. Arkansas and Mill sts. Cap. \$80,000. Bear Mountain, granite. Open pit, 20,000 tons; horse.
Gordon. Palo Pinto Ry. 756.	W. M. Gibbs. Sandstone. Open pit, 19,500 tons; horse, hand.
Granite Mountain, Burnet Ry. 37.	Frank Teich, San Antonio, Tex., cor. Arkansas and Mill sts. Cap. \$80,000. Moor, granite. Open pit, 20,000 tons; horse.
" " "	Texas Capitol Granite Co. W. H. Westfall, pres.; N. L. Norton, secy. and treas.; George W. Lacey, mgr. Cap. stk. \$1,000,000. Granite Mountain, granite. Open pit, steam, horse, hand; polishing mill.
Santa Anna. Coleman Ry. 28.	Golden Stone Co. Cap. stk. \$10,000. Golden Stone, limestone. Slope, hand; mill, kiln, 30,000 brls. James T. Donahoe, supt.
Santa. Palo Pinto Ry. 756.	J. W. Morris. Cap. \$2,000. Morris, sandstone. Open pit, 2,000 tons; hand; mill.
Weatherford. Parker Ry. 26, 754, 758.	W. J. Franklin. Cohen, limestone. Open pit; horse, hand.
" " "	J. H. Harberger. Cap. \$5,000. J. H. Harberger's, limestone. Slope, 500,000 tons; hand; kiln, 50,000 tons.
" " "	W. A. Hutson. Rock Creek, sandstone. Open pit, 6,000 tons.

SEE ALSO SUPPLEMENTARY LIST

# UTAH

## ASPHALTUM

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Clear Creek ..... Utah (P. O. Tucker) Ry. 215.	Wasatch Asphaltum Co., Salt Lake City, Utah, 71 Culmer Block. G. F. Culmer, prest.; H. L. A. Culmer, secy. and treas. Wasatch rock asphaltum. Tunnel, 5,900 tons; steam, horse and hand; mill, 9,000 tons. St. V. Le Sieur, supt.
Duchesne ..... Utah, (P. O. Fort Duchesne) Ry. Price 215.	Gilson Asphaltum Co., St. Louis, Mo., Odd Fellows' Bldg. C. O. Baxter, prest.; H. E. Naffiz, secy. and treas.; E. Seabold, mgr. Asphaltum. Shaft, 1,500 tons; horse. Thomas Taylor, supt.
Pariaette ..... Wasatch (Not a P. O.) Ry. Price 215.	Salt Lake Gilsonite Co., Salt Lake City, Utah, 71 Culmer Block. Geo. F. Culmer, prest.; H. L. A. Culmer, secy. and treas. Cap. stk. \$150,000. Salt Lake Gilsonite Co.'s Group. Shaft, tunnel, slope and open pit, 2,000 tons; horse and hand. St. V. Le Sieur, supt.

## COAL—BITUMINOUS

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, CORE OVENS, AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Castle Gate ..... Emery Ry. 239.	Pleasant Valley Coal Co., Salt Lake City, Utah. C. W. Drake, secy. and treas.; D. C. Dodge, mgr. Cap. stk. \$2,500,000. Castle Gate. Tunnel, 125,000 tons; electricity; breaker, 80 coke ovens, 25,000 tons. W. G. Sharp, supt.
Coalville ..... Summit Ry. 776.	Chalk Creek Coal Mining Co., Salt Lake City, Utah, 225 W. South Temple st. Geo. C. Kidder, prest.; J. D. Bubee, secy.; H. P. Mason, treas.; J. H. Clark, mgr. Cap. stk. \$30,000. Chalk Creek. Shafts, steam and horse. Isaac Trega, supt.
" " " "	Home Coal Co., Salt Lake City, Utah, 22 E. First S. R. C. Chambers, prest.; F. A. Mitchell, secy., mgr. and supt. Edward Kimball, treas. Cap. stk. \$250,000. Wasatch. Shaft and tunnel, 37,412 tons; steam. James Robinson & Co. (lessees), Coalville, Utah. James Robinson, mgr. Old Church. Tunnel; horse.
Grass Creek Jn. .... Summit (P. O. Coalville) Ry. 776.	Pleasant Valley Coal Co., Salt Lake City, Utah. C. W. Drake, secy. and treas.; D. C. Dodge, mgr. Cap. stk. \$2,500,000. Winder Quarters. Tunnel, 125,000 tons; electricity; breaker. W. G. Sharp, supt.
Seofield ..... Emery Ry. 215.	Union Pacific Coal Co., Omaha, Neb. F. D. Brown, treas.; G. W. Megeath, gen. supt. Pleasant Valley. Tunnel, 90,000 tons; horse. W. G. Sharp, supt.

## COPPER

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TOWN AND COUNTY.	
St. George ..... Washington Ry. Milford, 776.	Dixie Mining & Smelting Co., John Pynch, prest.; Seth A. Pynch, secy.; Robert C. Lund, mgr. Cap. stk. \$250,000. Apex, Morning Star and others. Tunnel, 2,000 tons. S. R. Culloway, supt.

## GOLD AND SILVER

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Alpine City ..... Utah Ry. American Fork 215, 776.	Nettie Mining Co., J. G. Wilkin, prest.; W. Healy, secy.; H. Healy, treas. Cap. stk. \$20,000. Nettie, silver and lead. Shaft, 20 tons; refractory; hand. W. T. Brown, supt.
" " " "	J. G. Wilkin, Hiram & William Healy. Jeannette, lead and silver. Slope; hand (developing).
Alta ..... Salt Lake Ry. 215.	Emma Mining Co., Ltd., London, Eng., 16 George st., Mansion House, E. C. F. W. Snell, prest.; R. K. Hobbs, secy.; H. C. Woodron, mgr. Cap. stk. \$625,000. Emma, silver, lead. Tunnel and shaft, 5,000 tons; steam and compressed air. W. H. Tamblin, supt.
" " " "	Montezuma Silver Mining Co., Detroit, Mich., 210 Larned st. W. John Belknap, prest.; David R. Pierce, secy. and treas. Cap. stk. \$500,000. Montezuma, Savage, Hlavathia, Last Chance, silver and lead. Tunnels and shafts, 330 tons; free; hand. Thos. W. Buzzo, supt.
" " " "	C. M. Sieklos & James R. Tainsh. Kenosha, gold, silver and lead. Tunnel, shaft and slope, 5,000 tons; refractory; horse and hand. Jas. R. Tainsh, supt.
American Fork ..... Utah Ry. 215, 776.	E. H. Bailey & Co. Cap. \$7,000. Lone Pine, gold, silver and lead. Tunnel and slope; free; hand. E. H. Bailey, supt.
" " " "	J. Preston, J. Chipman & L. Kulkowski. Emma, silver and lead. Shaft, 25 tons; refractory; horse. L. Kulkowski, supt.

## GOLD AND SILVER—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN	COUNTY.	
American Fork	Utah (Continued.)	Treasure Consolidated Mining Co. J. Chipman, pres.; W. H. Chipman, secy. and treas.; John Chadwick, mgr. and supt. Cap. stk. \$1,000,000. Treasure, gold, silver and lead. Tunnel and slopes, 5 tons; refractory; hand.
Bingham Canyon Salt Lake By. 215.		J. B. Cornwell. Cap. \$10,000. Unlimited. Logan, Crown, Silver Shield and others, gold and silver. Shaft, tunnel, slope and open pit, 500 tons; hand.
"	"	Highland Mining Co., Salt Lake City, Utah, 231 S. Main st. Frank Hoffman, mgr. Highland and others, gold, silver and lead. Shaft, 10,000 tons; steam.
"	"	James Judd sr. Agnostie, gold and silver. Tunnel; free; hand (developing). William E. Judd, supt.
"	"	The Lexington Mining Co., Salt Lake City, Utah, Rooms 19 and 20 Commercial Bldg.; Paris, France, 24 Rue de Peleter, Eugene Ramevey, pres.; G. Lavagnino, mgr. and supt. Cap. stk. \$2,000,000. Old Telegraph, gold, silver and lead. Tunnel and shaft, 5,000 tons; free; water and steam; 5 stamps.
"	"	Nast Mining & Milling Co., Salt Lake City, Utah. Frank Knox, pres.; John M. Zane, secy.; J. A. Early, treas.; Daniel Eyer, mgr. and supt. Cap. stk. \$200,000. Nast and others, gold, silver and lead. Tunnel, 1,000 tons; refractory; hand.
"	"	Niagara Mining & Smelting Co., Salt Lake City, Utah, 108 Main st. Gilbert E. Polen, pres.; C. Howard Schermerhorn, secy. and treas.; N. Treweek, mgr. Cap. stk. \$10,000,000. Niagara Group, gold, silver and lead. Shafts, tunnels; refractory; steam; mill. John Treweek, supt.
"	"	Old Jordan & Galena Mining Co., Salt Lake City, Utah, P. O. Box 1027. L. E. Holden, pres. and mgr.; C. E. Allen, secy.; W. S. McFormick, treas. Cap. stk. \$2,000,000. Jordan, Galena, Mary Ann and others, gold, silver, lead and iron. Shaft and tunnel, 60,000 tons; refractory; steam; 60 stamp mills. A. F. Holden, supt.
"	"	Orphan Boy Mining Co., San Francisco, Cal., Chronicle Bldg. Col. Isaac Trumbo, pres. and mgr. Orphan Boy, Lydia Bono, Walk Off, Keys-tone, Remnant and Starless, silver and lead. Tunnel and shaft, 1,800 tons; refractory. Geo. E. Lee, supt.
"	"	Petro Mining Co., Salt Lake City, Utah, 65 Commercial Bldg. G. R. Rothwell, pres.; S. R. Milner, secy., treas. and mgr. Cap. stk. \$1,000,000. Petro, Democrat and Addella, silver and lead. Shafts and tunnels, 3,300 tons; refractory; steam. Andrew Johnson, supt.
"	"	Sampson Mining Co., Salt Lake City, Utah, 34 Gladstone Bldg. A. E. Hyde, pres.; J. Schreck, secy. and supt.; George Arthur Rice, treas. and mgr. Cap. stk. \$500,000. Sampson, gold, silver and lead. Shaft, 4,000 tons; refractory; steam.
"	"	Turngren Mining Co., Salt Lake City, Utah, 56 W. Second S. st. Daniel Turngren, pres.; J. J. Rogers, secy.; J. W. Sullivan, treas. Cap. stk. \$2,500,000. Turngren, gold, silver and lead. Tunnel; free (developing).
"	"	Yampa Extension Mining Co., Salt Lake City, Utah, Hooper Block. Isaac Jennings, pres. and mgr. Yampa Extension, Rattlesnake, Keopapahim, Rytel and Etaka, gold, silver and lead. Tunnels and shafts, 3,000 tons; free; water. Geo. E. Lee, supt.
"	"	York Mining Co., Salt Lake City, Utah, Rooms 49 and 50 Wasatch Block. John A. Groesbeck, pres.; W. B. Andrew, secy. and treas.; D. H. McAllister, v. pres.; mgr. and supt. Cap. stk. \$1,000,000. York, gold, silver and lead. Slope, 7,000 tons; steam.
Diamond P. O. and Ry. Silver City 776.	Juab	Batte Mining Co., Eureka, Utah. C. W. Clark, pres.; B. B. Clark, secy. and treas.; Albert Leigh, mgr. and supt. Cap. stk. \$100,000. Diamond, gold and silver. Tunnel and shaft, 4,500 tons; free; hand. Albert Leigh, supt.
Eureka By. 215, 776.	Juab	C. W. Bennett Mining Co., Salt Lake City, Utah, P. O. Box 180. Cap. \$250,000. C. W. B. Group, gold, silver and lead. Shaft and tunnel, hand and steam (developing). C. S. Davis, supt.
"	"	Bullion-Bee & Champion Mining Co., Salt Lake City, Utah. Moses Thatcher, pres.; W. J. Beattie, secy.; Wm. B. Preston, treas.; A. E. Hyde, mgr. Cap. stk. \$1,000,000. Bullion-Bee and Champion, gold, silver and lead. Shaft, 92,000 tons; free; steam. F. V. Taylor, supt.
"	"	Centennial-Eureka Mining Co., Salt Lake City, Utah, Opera House Block. J. E. Woodman, pres.; W. W. Chisholm, secy., treas. and mgr. Cap. stk. \$1,500,000. Centennial-Eureka, Blue Rock, Kendall, Alta and others, gold, silver and copper. Shaft, 72,000 tons; free and refractory; steam. J. D. Kendall, supt.
"	"	Balthazar Christensen. Mahogany, Marion and James G. Blaine, gold, silver and lead. Tunnels and shaft; refractory; hand.
"	"	Godiva Mining Co., Salt Lake City, Utah. John Q. Packard, pres.; John McChrystal, secy., mgr. and supt.; Robert Harkness, treas. Cap. stk. \$100,000. Godiva, gold, silver and lead. Tunnel, 500 tons; free; hand.
"	"	Gold Blossom Mining Co., American Fork, Utah. John Nicholes, pres.; C. W. Kelly, secy. and mgr.; George Nicholes, treas. Cap. stk. \$1,000,000. Gold Blossom, gold. Shaft, refractory; horse.
"	"	John & John H. McChrystal. Eureka, gold, silver and lead. Shaft and tunnel; free; steam. John McChrystal, supt.
"	"	North Eureka Mining Co., T. P. Murray, pres.; C. L. Peoples, secy.; Pat. Donnelly, treas.; Figo Depazin, mgr. and supt. Cap. stk. \$800,000. North Eureka and others, gold, silver and lead. Shaft; horse.
"	"	Pasadena Mining Co., Salt Lake City, Utah, 48 W. Second st. Alex. McKiernan, pres. and treas.; A. F. Daying, secy.; A. S. Johnson, mgr. and supt. Cap. stk. \$1,000,000. Pasadena, gold and silver. Tunnel; free; hand and horse.
"	"	Richmond & Anaconda Consolidated Mining Co., Salt Lake City, Utah. S. W. Morrison, pres.; John H. McChrystal, v. pres.; J. J. Stewart, treas.; W. C. B. Allen, secy.; F. E. Bostwick, mgr. and supt. Cap. stk. \$200,000. Danilicare, gold and silver. Shaft and tunnel, 2,000 tons; free; horse.
"	"	The Tetro Mining Co. of Tintic, Salt Lake City, Utah. Noah W. McChrystal, pres.; Wm. R. Wallace, secy.; Harry T. Duke, treas.; Gus. Tetro, mgr. and supt. Cap. stk. \$800,000. Gold. Tunnel; hand (developing).
Fish Springs P. O. Deseret Ry. Oasis 776 (65 miles).	Juab	Emma Mining Co., American Fork, Utah. Emma, silver and lead. Slope and tunnel, 60 tons; refractory; horse.

## GOLD AND SILVER—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN	AND COUNTY.	
Frisco	Beaver Ry. 776.	Blue Jay Consolidated Mining Co., Salt Lake City, Utah, 46 Central Block. W. H. Chamberlin, pres.; John T. Lynch, secy. and treas.; Jack Lofton, mgr. Cap. stk. \$2,000,000. Trojan, Blue Jay and Mona, silver and lead. Free; horse and hand (developing). O. D. Heindrickson, supt.
"	"	Caebus Mining Co., Paris, France, 20 Rue Tailbourg. Sallandrouze de Eamornaix, pres.; Harry T. Duke, secy.; Joseph Luce, mgr. and supt. Cap. stk. \$5,000,000. Voorhees, silver and lead. Shaft and tunnel; refractory; hand (developing).
"	"	Horn Silver Mining Co. A. C. Washington, pres.; A. I. Harrison, secy. and treas.; P. T. Farnsworth, mgr. Cap. stk. \$10,000,000. Horn, silver and lead. Shaft, 25,000 tons; refractory; steam. J. Osborne, supt.
Iron City	Iron P. O. & Ry. Milford 776.	Blair Mining Co., Salt Lake City, Utah, 79 Main st. J. M. Blair, pres. and mgr.; R. S. Campbell, v.-pres.; J. T. Hammond, secy.; Geo. E. Blair, treas. Cap. stk. \$500,000. Flower of West, Putnam, Blair, Trade Dollar and others, silver. Shaft and tunnel, 1,000 tons; free; horse. Brigham Lyon, supt.
Joseph	Sevier Ry. Salina, 215 (50 m.).	Bald Mountain Mining Co., Castle Gate, Utah. H. B. Asadoorian, pres.; J. R. Sharp, secy.; B. F. Caffey, treas.; Jas. L. Smith, mgr. Cap. stk. \$500,000. Annie Laurie, gold and silver. Tunnel; free; electricity (developing). Wm. Dickson, supt.
Kingston	Pi Ute Ry. Milford 776.	Scott & Baalman. Barcelona, gold, silver and copper. Shaft; refractory; horse (developing).
La Plata	Cache Ry. Ogden 215, 776.	Ogden-La Plata Mining & Milling Co. Frank J. Cannon, pres.; A. A. Wenger, secy.; J. M. Langsdorf, treas.; J. M. Harris, mgr. and supt. Cap. stk. \$1,000,000. Heller, Blue Bird, Sun Side, silver, lead and copper. Shaft; refractory; hand.
Mammoth	Junab. Ry. 776.	Gerber & Hofer. Hungarian, silver and lead. Shaft and tunnel, 20 tons.
"	"	Mammoth Mining Co., Salt Lake City, Utah. Wm. McIntyre, pres.; J. Fred Corker, secy.; Samuel McIntyre, treas.; J. A. Cunningham, mgr. Cap. stk. \$400,000. Mammoth, gold, silver, lead and copper. Shaft, 9,000 tons; refractory; steam. W. M. Nesbit, supt.
Marysvale	Pi Ute Ry. Salina, 626 (43 m.).	The Dutton Gold Mining & Milling Co., Salt Lake City, Utah, Hooper Bldg., Room 62. C. A. Ames, pres.; Willis M. Ames, secy.; Frank Knox, treas.; Isaac Jennings, mgr. Cap. stk. \$2,500,000. Pearl and Hard Cash, gold and silver. Tunnels and shaft, 3,000 tons; free; water; mill.
"	"	Ferris Gold & Silver Mining Co., Salt Lake City, Utah, 60 E. Temple st. Lorenzo Snow, pres.; A. M. Musser, secy.; B. H. Shuttler, treas.; A. F. Gregirson, mgr. and supt. Cap. stk. \$5,000,000. Twelve mines, gold. Tunnels; free (developing).
"	"	Gold Belt Mining & Milling Co., Salt Lake City, Utah, 43 W. Second South st. Wm. F. Colton, pres.; W. H. Donnell, secy.; E. L. Carpenter, treas.; C. A. Ames, mgr. Cap. stk. \$500,000. Hidden Treasure, Giles, Gold Belt, Gold Belt Extension, gold and silver. Tunnel; free; hand (developing). D. A. Giles, supt.
"	"	Webster Mining Co., Salt Lake City, Utah. Webster Group, gold, silver and lead. Tunnels; refractory; concentrators. John Fergusson, supt.
Milford	Beaver Ry. 776 (16 miles).	James Barretts. Moscow. Tunnels and shafts, 50 tons; free and refractory; hand.
"	"	John T. Kelly. Anvil, gold, silver and lead. Slope; free; hand.
"	"	James Lavelle. Iron, gold, silver and lead. Slope, shaft and tunnel; free; hand.
"	"	W. R. Sloan. Atlas, gold, silver and lead. Tunnels, shafts and inclines; refractory; hand.
"	"	Talisman & Stalwart Consolidated Silver Mining Co., Seattle, Wash. I. F. McNaught, secy.; H. Hefner, mgr. Cap. stk. \$1,000,000. Talisman and Stalwart, silver and lead. Slope; refractory; horse and hand (developing). Peter S. Marlin, supt.
Miller Hill	Utah P. O. and Ry. American Fork 215, 776.	The Treasure Consolidated Gold & Silver Mining Co., American Fork, Utah. James Chipman, pres.; Edward Winn, v.-pres.; Washburn Chipman, secy. and treas. Cap. stk. \$2,500,000. Treasure, Dolphin, Nemo, Oliver, gold, silver and lead. Tunnels.
Minersville	Beaver Ry. Milford 776.	W. L. Croff. Creole, Two Lone Brothers, Kattler and others, gold, silver, iron, copper, lead and bismuth. Tunnels and shafts; free (developing).
"	"	Gressmen Bros. North Galena, gold, silver and lead. Open pit; free; hand.
"	"	Monte Cristo Mining & Milling Co., Salt Lake City, Utah, 20 E. First South st. J. G. Jacobs, pres.; Joseph T. Iache, secy.; Oscar Zipp, treas.; J. H. Dupuis, v.-pres., mgr. and supt. Cap. stk. \$1,000,000. Monte Cristo, gold, silver and copper. Tunnels and shafts, 70 tons; free; water; 5 stamps.
"	"	Charles Roll. Maybel and others, gold and silver; water.
Mona	Junab. Ry. 776.	Lorenzo Babeock. Cap. \$1,200. Hidden Treasure, gold, silver, iron and mica. Tunnel, 150 tons; hand.
"	"	Elias Molynoux. Cap. \$4,000. Gold King, gold and silver. Shaft, 1 ton; free; hand.
"	"	Starr Bros. Enterprise, gold, silver and lead. Slope and tunnel, 10 tons; hand.
"	"	John Yates & Ruben Stevens. Cap. \$4,000. Great Eastern, silver and lead. Shaft.
Ogden	Weber Ry. 215, 776.	Don Maguire, 649 Twenty-fifth st. Cap. \$100,000. Santa Maria, gold and silver. Tunnel, 300 tons; refractory; horse. John Reddy, supt.
"	"	Red Jacket Mining & Milling Co., First National Bank Block. H. B. Westover, pres.; John E. Bagley, secy.; W. V. Helfriet, treas.; C. K. Westover, mgr. and supt. Cap. stk. \$2,000,000. Red Jacket, Queen of Hills, gold and silver. Shaft and tunnel, 20,000 tons; free; hand and steam.
Ophir	Tooele Ry. Stockton 776 (19 m.).	Estate of Gen. P. E. Connor. Chloride Point, silver. Tunnel, 300 tons; free.



## GOLD AND SILVER (CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Ophir.....Tooele (Continued.)	Consolidated Mining Co., St. Louis, Mo., cor. Second and Cass sts., W. F. Niedringhaus, pres.; Alex. Niedringhaus, secy. and treas.; E. J. Radtatz, mgr. and supt. Cap. stk. \$100,000. Buckhorn, silver and lead. Shaft, slopes and tunnels, 1,000 tons; refractory; steam.
"....."	Ghaststone Mining Co., Ghaststone, gold, silver and lead. Shaft, tunnel, slope and open pit; refractory and free; hand. Geo. St. Clair Jr., supt.
"....." (10 miles.)	Little Pittsburg Mining Co., Salt Lake City, Utah, 46 Central Block, P. Condon, pres.; A. F. Groves, secy. and treas.; James McEvoy, mgr. and supt. Cap. stk. \$2,000,000. Little Pittsburg group, gold and silver. Slope and tunnel; free; hand.
"....." (12 miles.)	Patriek McAfee, Margaret Kelly & Lewis W. Clark. Northern Light, gold, silver and lead. Shaft, 750 tons; free and refractory; horse.
Park City.....Summit Ky. 776 (3 miles).	Alliance Mining Co., Salt Lake City, Utah, 168 Main st., A. Hanauer, pres.; C. T. Stevenson, secy.; Jas. Glendenning, treas.; N. Treweek, mgr. Cap. stk. \$100,000. Nine claims, gold, silver and lead. Shafts and tunnels; refractory; steam. Geo. B. Norman, supt.
"....."	Anchor Mining Co., Cleveland, Ohio, 44 Euclid av., John L. Woods, pres.; D. C. McLaughlin, secy.; W. S. McCormick, treas.; Edward P. Terry, mgr. Cap. stk. \$3,000,000. Anchor, gold, silver and lead. Tunnels and shaft, 5,650 tons; refractory; steam; mill. David Keith, supt.
"....."	Crescent Mining Co., L. H. Wilkey, pres.; H. M. Hunsdill, secy.; W. S. McCormick, treas.; James McCreor, mgr. Cap. stk. \$15,000,000. Forty mining claims, gold, silver and lead. Shaft and tunnels, 5,482 tons; free; steam. James Hecky, supt.
"....."	Daly Mining Co., Salt Lake City, Utah, 125 S. Main st., R. C. Chambers, pres., mgr. and supt.; Thos. J. Ahly, secy.; J. B. Haggitt, treas. Cap. stk. \$2,000,000. Daly, gold and silver. Shaft, 29,908 tons; refractory; steam; 30 stamps, chloridizing furnace.
"....."	Glencoe Mining Co., Salt Lake City, Utah, M. Shaugbnessy, pres.; H. G. McMillan, secy.; George S. Frink, v.-pres. and treas. Cap. stk. \$2,500,000. Glencoe, silver and lead. Tunnel; refractory; steam. W. M. Curtis, supt.
"....."	Jupiter Mining Co., Council Bluffs, Iowa. Gen. F. Wright, pres.; Wm. Sedentour, secy.; Wm. Moore, treas.; Chas. E. Street, mgr. and supt. Cap. stk. \$3,000,000. Seventeen mining claims, gold, silver and lead. Tunnels (developing).
Provo City.....Utah Ky. 215, 776.	Ontario Silver Mining Co., Salt Lake City, Utah, 125 S. Main st., J. B. Haggitt, pres. and treas.; Irwin C. Stump, secy.; R. C. Chambers, mgr. and supt. Cap. stk. \$15,000,000. Ontario, gold and silver. Shaft, 37,818 tons; refractory; steam, 40 stamps, 2 chloridizing furnaces.
Rush Valley.....Utah (P. O. American Fork) Ky. Rushval 842d, 776.	Provo Slate Co., 14 Union Block, W. R. Pike, pres.; Edward Pike, secy.; F. W. C. Hattenbrueck, treas. mgr. and supt. Cap. stk. \$100,000. Phacer No. 1, gold, silver and slate. Tunnel, free.
Silver City.....Juab Ky. 776.	Buffalo Bill Mining Co., John J. Cushing, pres.; Fred B. Gillett, v.-pres.; C. E. Powell, treas.; R. W. Jones, secy. Cap. stk. \$600,000. Gold, silver, lead and iron. Tunnel and shaft; horse. R. W. Jones, supt.
"....."	Brooklyn Mining Co., Springville, Utah. Brooklyn, gold and silver. Shaft, 100 tons, refractory, horse.
"....."	Cleveland Consolidated Mining Co., Geo. Ryan, pres.; Charles S. Horne, secy. and treas. Cap. stk. \$125,000. Gold and silver, 100 tons, refractory; horse and steam.
"....."	Columbus Mining Co., Cedar Rapids, Iowa. Samuel P. Ely, pres.; John S. Ely, secy. and treas. Cap. stk. \$1,000,000. Julian Lane Group, gold and silver. Shaft and tunnel; free and refractory. H. C. Wilkin, supt.
"....."	Golden Treasure Mining Co., Salt Lake City, Utah. Judge Marshall, pres.; J. E. Hooley, secy., treas. and mgr. Golden Treasure, gold and silver. Shaft, 2,000 tons, free; horse. Wm. Carruthers, supt.
"....."	H. D. Jones. Undine, silver and lead. Tunnel, shaft, 500 tons, refractory; hand.
"....."	Mountain King Mining Co., Salt Lake City, Utah. O. J. Cooke, pres.; F. M. Benedict, secy. and mgr.; E. Grithets, treas. Cap. stk. \$100,000. Monterey, silver and lead. Shaft; free; horse. T. Fort, supt.
"....."	Phoenix Mining Co., Phoenix, gold, silver and copper. Shaft, tunnel (developing). Geo. S. Rust, supt.
"....."	Pride of the Hills Mining Co., Salt Lake City, Utah, 38 W. Second South st., D. A. Shiley, pres.; James L. Vundt, secy. and treas.; J. W. Smith, mgr. and supt. Cap. stk. \$500,000. Pride of the Hills, Mormon Chief, Sunday and others, gold, silver, lead and iron. Tunnels, shaft; refractory; horse.
"....."	A. Roberts. Cap. \$100,000. North Star, gold, silver, lead and copper. Tunnel, 480 tons; refractory; hand.
"....."	Silver City Gold & Silver Mining Co., Salt Lake City, Utah, 49 and 50 Commercial Bldg., C. R. Hancock, pres. and mgr.; F. Rehrman, secy.; H. J. Osborne, treas. Cap. stk. \$80,000. Wheeler, silver and lead. Shaft; horse. J. W. Black, supt.
"....."	Silver Spar Mining & Milling Co., Geo. Ryan, pres.; James A. Pollock, v.-pres.; George F. Downey, treas.; Amel Dodd, secy. Cap. stk. \$1,500,000. Gold, silver and lead. Refractory; horse and steam (developing). Geo. Ryan, supt.
"....."	Sioux Consolidated Mining Co., Provo City, Utah. S. S. Jones, pres.; Albert Jones, secy. and treas.; C. E. Looze, mgr. and supt. Cap. \$1,000,000. Sioux, gold and silver. Shaft and slope, 1,000 tons; refractory; horse and hand.
"....."	South Swansea Mining Co., J. T. Croxall, mgr. and supt. Cap. stk. \$80,000. South Swansea, silver, iron and lead. Shaft, 250 tons, refractory; horse.
"....."	Tosora Silver Mining Co., Chicago, Ill., 225 Dearborn st., George E. Church, pres.; E. R. Chandler, secy.; F. W. Farwell, treas.; C. H. Blanchard, mgr. and supt. Cap. stk. \$500,000. Tosora, gold and silver. Shaft, refractory; horse.
Silver Reef.....Washington Ky. Millford 776.	Christy Mining Co., San Francisco, Cal., 310 Pine st., Robert N. Graves, pres.; George R. Spürer, secy.; Anglo-Californian Bank, treas.; D. M. Tyrrell, mgr. and supt. Cap. stk. \$1,000,000. Christy, silver. Shaft and slope; free; steam; 5 stamps.
"....."	Stormont Mining Co., Philadelphia, Pa., 208 S. Fourth st., Charles Hirehman, pres. Savage, Buckeye, Last Chance, MacNally and Thompson, silver. Shaft; free; steam, 10 stamps.
"....."	Woolley, Lund & Dudd. Barber and Walker, silver. Slope; free; steam; 5 stamps. H. W. Miles, supt.

## GOLD AND SILVER (CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
Stockton..... Tooele Ry. Tethymus 776(2 1/2) m.		Argent-Wade Hampton Mining Co. John F. Connor, propr. Cap. \$1,500. Argent and Wade Hampton, gold, silver and lead. Slope, 100 tons; horse.
" " " "		F. Durgy & Co. Cap. \$80,000. Alice Group, gold and silver. Shafts; steam. E. J. Raddtz, supt.
" " " "		L. Osgood. No U. Don't, gold, silver and lead. Shaft and tunnel; refractory; steam.
" " " "		J. C. Reynolds. Bunker Hill, silver and lead. Shafts, 500 tons; steam and horse.
" " " "		Shamrock Mining Co. C. E. Mitchener, prest.; E. B. Critchlow, secy. and treas.; E. B. Mitchener, mgr. and supt. Cap. stk. \$500,000. Shamrock, silver and lead. Shaft; steam (developing).
Tintic..... Tooele (Not a P. O.) Ry. Del- mont 776.		New Tintic Mining & Smelting Co., Salt Lake City, Utah. Central Block, Rooms 34 and 35. P. A. H. Frank- lin, prest.; Edw. J. Dummick, secy.; Christian Freider, treas. Cap. stk. \$3,000,000. New Tintic, gold, silver and lead. Shaft and tunnel; free (developing). J. D. Stevens, supt.
Tooele..... Tooele Ry. 776 (3 miles).		Pine Cyon Mining Co., Salt Lake City, Utah, 64 West Second South st. W. M. Miner, prest.; Criston Johnson, secy.; J. M. Hamilton, treas.; Benj. Peasnell, mgr. and supt. Cap. stk. \$200,000. Pine Cyon, gold, silver and lead. Tunnel; free.
West Tintic..... Juab (P. O. Nephi) Ry. Iron- ton 776.		J. R. Hickman, P. O. Box 23. Hickman, Clayton and Wright, gold, silver and lead. Shaft and inclines (de- veloping).

## GYPSUM

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
Nephi..... Juab Ry. 776.		Nephi Plaster & Manufacturing Co., Main st. John Hague, prest.; J. A. Hyde, secy., treas. and mgr. Cap. stk. \$100,000. Nephi. Open pit, 2,400 tons; water.

## IRON

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, BLAST FURNACES, ETC., AND NAME OF MINE SUPERINTENDENT.
Iron City..... Iron P. O. & Ry. Milford 776.		Consolidated Implement Co., Cedar City, Utah. G. G. Davis, prest. and treas.; James Woolsey, secy.; E. J. Eddards, mgr. Cap. stk. \$2,000,000. Flag Staff, Wall Street, American Eagle, iron. Tunnel; refractory. David Woolsey, supt.

## LEAD AND ZINC

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, SMELTERS, ETC., AND NAME OF MINE SUPERINTENDENT.
Park City..... Summit Ry. 776.		Park City Mining Co. John L. Street, prest.; Chas. E. Street, secy., treas. and mgr. Cap. stk. \$100,000. Seven claims, lead. Shaft and tunnel.

## MINERAL WAX

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
Soldier's Summit..... Utah (Not a P. O.) Ry. 215.		Ozeoerite Mining Co., New York, N. Y., 280 Broadway. J. Wallace, prest.; Chas. H. Barkley, secy. and treas.; R. J. Kronja, mgr. and supt. Cap. stk. \$1,250,000. Summit, mineral wax. Shaft; steam.

## SALT

LOCATION OF MINE OR WELL, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF PRODUCT, KIND OF MINE OR WELL, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, ETC., AND NAME OF MINE SUPERINTENDENT.
Centerville, . . . . . Ry. 776.	Davis	Saginaw Salt Co., Salt Lake City, Utah. E. E. Rich, mgr. Cap. stk. \$50,000. Made from Great Salt Lake by evaporation, coarse, fine and dairy. 20,000 tons; steam.
Nephi, . . . . . Ry. 776 (6 miles).	Juab	Nephi Salt Mining & Manufacturing Co. Geo. C. Whitmore, prest.; C. S. Tingey, secy., treas. and mgr. Cap. stk. \$25,000. Rock. Mine, open pit, 10,000 tons; hand.
Salina, . . . . . Ry. 215.	Sevier	Lewis & Gottfredsan. Cap. \$3,000. Lewis & Gottfredsan, rock salt. Open pit, 250 tons; hand.
Salt Lake City, . . . . . Ry. 626, 776.	Salt Lake	People's Forwarding Co., 26 E. Second South st. E. E. Rich, treas. and mgr. Cap. \$50,000. Lake Shore, water from Great Salt Lake, coarse. 25,000 tons; steam. Chas. Backman, supt.
" . . . . .	"	Saginaw Salt Co., 24 E. Second South st. E. E. Rich, prest. and mgr.; S. F. Walker, secy. and treas. Cap. stk. \$50,000. Saginaw, water from Great Salt Lake, coarse. 20,000 tons; steam. Chas. Backman, supt.
" . . . . .	"	Desert Salt Co. James Sharp, prest.; C. W. Lyman, secy and treas.; Geo. J. Waller, mgr. Cap. stk. \$80,000. Desert, coarse. 12,000 tons; steam.
Syracuse, . . . . . Ry. 215, 776.	Davis	Adams & Keisel Salt Co., Ogden, Utah. H. C. Adams, prest.; H. A. Lindsey, secy.; Theo. Schausenbaeh, treas.; Wm. Schausenbach, mgr. Cap. stk. \$100,000. Pumped from Great Salt Lake, coarse salt. 25,000 tons; steam.

## SLATE

LOCATION OF QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF QUARRY, KIND OF SLATE, KIND OF QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, MILLS, ETC., AND NAME OF QUARRY SUPERINTENDENT.
Provo City, . . . . . Ry. 215, 776.	Utah	The Colorado & Utah Mining & Slate Co., Colorado Springs, Colo., P. O. Box 141. E. C. Burton, prest.; W. W. Williamson, secy.; Walter Burlew, treas. Cap. stk. \$1,000,000. Hota and Charleston, blue, gray and pink slate. Open pits.
" . . . . .	"	Hathenbruck & Pike, Provo City, Utah, 14 Union Block. F. W. C. Hathenbruck, prest., mgr. and supt.; Edward Pike, secy., W. R. Pike, treas. Cap. stk. \$20,000. Provo, slate. Open pit, 30,000 tons; water and steam; mill.

## STONE, MARBLE, GRANITE AND ONYX

LOCATION OF MINE OR QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE OR QUARRY, KIND OF STONE, KIND OF MINE OR QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STONE OR MARBLE MILLS, LIMEKILNS AND CAPACITY, ETC., AND NAME OF MINE SUPERINTENDENT.
Castle Gate, . . . . . Ry. 215.	Emery	Ferguson & Carpenter, Salt Lake City, Utah, P. O. Box 1555. Cap. \$5,000. Sharp's, sandstone. Open pit, 10,000 tons; hand. J. L. Ferguson, supt.
Cedar City, . . . . . Ry. 215.	Iron	Williams & Bladen (local). Cap. \$500. Red Cloud, limestone. Open pit, 300 tons; hand; mill.
Ephraim, . . . . . Ry. 215, 776.	San Pete	E. L. Parry & Sons, Manti, Utah. E. L. Parry, treas.; E. T. Parry, secy. Oolitic. Slope, 400 tons; hand. John C. Johnson, supt.
Park City, . . . . . Ry. 776.	Summit	Metropolitan Stone Co., Salt Lake City, Utah, Hooper Block. Simon Bamberger, prest.; W. T. Ketter, secy.; H. M. McCarthey, mgr. Cap. stk. \$50,000. Metropolitan, sandstone. Open pit; steam. Alf. A. Rudy, supt.

## SULPHUR

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF PRODUCT, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
Sulphurdale, . . . . . P. O. and Ry. Black Rock 776.	Beaver	Dickert & Myers, Salt Lake City, Utah. J. H. Burfeind, mgr. Cap. stk. \$2,000,000. Cove Creek. Open pit, 45,000 tons; steam.

SEE ALSO SUPPLEMENTARY LIST

## VERMONT

## COPPER

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, FURNACES, ETC., AND NAME OF MINE SUPERINTENDENT.
South Stratford Orange Ry. Pomfret 71.		Elizabeth Mining Co., Baltimore, Md., 301 N. Charles st. Jas. W. Tyson, pres.; Wm. Glenn, secy.; M. D. Tyson, treas.; Geo. W. Dow, mgr. and supt. Cap. stk. \$300,000. Elizabeth. Shaft and tunnel; steam.

## KAOLIN

LOCATION OF MINE OR BANK. RAILWAYS, WATER ROUTES, AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE OR BANK, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, ETC., AND NAME OF SUPERINTENDENT.
Bennington Bennington Ry. 38, 392.		S. C. Lyons & Bros. Kaolin, ochre. Shaft, slope, 1,700 tons; water; steam.
S. Shaftsbury Bennington Ry. 58.		S. C. Lyons & Bros. Kaolin, ochre. Shaft, slope, 500 tons; water; steam.

## MINERAL PAINT

LOCATION OF MINE. RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF PRODUCT, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, PAINT MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
Bennington Bennington Ry. 58.		Elios Adams & Co. Yellow ochre, crystallized quartz. Shaft, 800 tons; water; stone mills.
Leicester Addison Ry. Brandon 129.		Crown Point Mineral Paint Co., Crown Point, N. Y. Chester Griswold, pres. Cap. \$10,000. Ochre. Shaft, 800 tons; steam; mill. H. C. Brownson, supt.

## SLATE

LOCATION OF QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF QUARRY, KIND OF SLATE, KIND OF QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, MILLS, ETC., AND NAME OF QUARRY SUPERINTENDENT.
Castleton Rutland Ry. 213.		Billings Slate & Marble Co. C. W. Billings, pres.; C. W. Tennant, secy. and treas. Cap. stk. \$50,000. Trojan. Open pit, tunnel, 300 tons; steam; mill. Patrick Quinn, supt.
" " "		Bolger Bros. Cap. \$50,000. Open pit, 14,000 tons; steam; mill.
" " "		R. Hanger's Slate Works. Cap. stk. \$35,000. Open pit, tunnel, 1,000 tons; steam; mill. Wm. R. Hughes, supt.
" " "		Lake Bomoseen Slate Co. Cap. \$50,000. Lake Bomoseen. Open pit, 2,000 tons; steam; mill. John Delehanty, supt.
Fair Haven Rutland Ry. 213.		Coulman & Westcott. Cap. \$25,000. Open pit, 1,200 tons; steam; mill. Wm. Francis, supt.
" " "		Fair Haven Marble & Marbleized Slate Co. C. R. Allen, pres.; F. E. Allen, secy. and treas.; E. L. Allen, mgr. Cap. stk. \$100,000. Open pit, 1,000 tons; steam, water; mill.
" " "		Francis & Co. Open pit; horse. William Francis, supt.
" " "		Jones, Owens & Co. Open pit, 750 tons; horse.
Pawlet Rutland Ry. Granville, N. Y., 213.		Thomas R. Griffith. Open pit, 1,800 tons; steam.
" " "		W. H. Hughes. Open pit; steam.
" " "		Norton Bros. Cap. \$45,000. Open pit; steam; mill.
" " "		Owen W. Owen's Sons. Cap. \$10,000. Open pit, 3,000 tons; steam.
" " "		Rising & Nelson. Cap. \$10,000. West Pawlet. Tunnel, open pit, 10,000 tons; steam. John R. Robert, supt.
" " "		Williams & Edwards. Cap. \$30,000. Open pit, 5,000 tons; steam, horse.
Poultney Rutland Ry. 213.		Attd & Conger, Cleveland, Ohio, 100 Euclid av. Cap. stk. \$100,000. Mammoth. Open pit, 30,000 tons; steam. M. J. Jones, supt.
" " "		Buckeye Slate Co. Seth Roberts, pres. and secy.; R. L. Jones, treas. and mgr. Cap. stk. \$10,000. Buckeye. Open pit, 5,000 tons; steam.
" " "		Closs & Owens. Camaroon. Open pit; horse.
" " "		Eastern Slate Co. Robert Jones, pres.; W. R. Jones, secy.; Robert J. Davis, treas.; David R. Davis, mgr. Open pit; horse.

## SLATE (CONTINUED)

LOCATION OF QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF QUARRY, KIND OF SLATE, KIND OF QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, MILLS, ETC., AND NAME OF QUARRY SUPERINTENDENT.
TOWN AND COUNTY.	
Poultney..... Rutland (Continued.)	Edwards & Williams. Cap. \$6,000. Open pit, 6,000 tons; steam.
" " "	Emuka Slate Quarries Co. A. Tuttle, treas. and mgr. Emuka. Open pit, 10,000 tons; steam; mill.
" " "	Hughes, Evans & Co. Evan M. Evans, pres.; Wm. R. Hughes, treas. and supt.; Hugh R. Hughes, mgr. Cap. stk. \$2,000. Open pit; horse.
" " "	N. A. Litchfield. Open, 1,000 tons; horse; mill.
" " "	Lloyd & Jones. Cap. \$4,500. Slope, 740 tons, steam. R. W. Jones, supt.
" " "	N. E. Lloyd Slate Co. N. E. Lloyd, pres.; N. H. Lloyd, secy. and treas.; M. Roberts, mgr. and supt. Cap. \$50,000. Peerless. Open pit, 5,000 tons; steam; mill.
" " "	Milnogue & Greer. Cap. \$30,000. Evergreen, 1,000 tons; steam; mill.
" " "	Parry & Jones. Open pit; steam.
" " "	Valley Slate Co. R. E. Lloyd, propr. Cap. \$4,000. Slope, 748 tons; steam.
" " "	Vermont Slate Mining Co. W. H. Kirthland, pres.; N. A. Litchfield, secy., treas. and mgr. Cap. stk. \$50,000. Poultney. Tunnel, open pit, 5,000 tons, steam, horse; mill. Thomas R. Maylor, supt.
Wells..... Rutland By Granville, N.Y., 213.	W. E. Roberts. Open pit, horse.
West Pawlet .. Rutland By 213.	S. C. Denison. Cap. \$10,000. Slope; steam.

## SOAPSTONE

LOCATION OF MINE OR BANK, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE OR BANK, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, ETC., AND NAME OF SUPERINTENDENT.
TOWN AND COUNTY.	
Stockbridge .. Windsor By Bethel 120.	Taced River Tale Co. N. D. Parker, pres.; F. Durkee, secy. and treas.; I. N. Bugbee, mgr. Allen, tale. Open pit, 100 tons; horse.
Waterville .. Lamolle By Jeffersonville 120.	Vermont Asphite Pulverizing Co., Rutland, Vt. H. O. Elson, pres.; F. G. Swington, secy.; H. O. Carpenter, treas.; Daniel Fosburgh, mgr. and supt. Cap. stk. \$50,000. Tale. Open pit; steam, mill developing.

## STONE, MARBLE, GRANITE AND ONYX

LOCATION OF MINE OR QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE OR QUARRY, KIND OF STONE, KIND OF MINE OR QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STONE OR MARBLE MILLS, LIMEKILNS AND CAPACITY, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Barre .. Washington By 120, 49.	H. I. Cheney. Cap. \$4,000. Granite. Open pit, 125,000 tons; horse.
" " "	Drew, Parkhurst & Co. Cap. \$13,000. Granite. Open pit; steam.
" " "	H. A. Duffy & Son. H. A. Duffy, pres. and treas.; Francis A. Duffy, secy. and mgr. Cap. stk. \$15,000. Barre, granite. Open pit; steam. G. B. Roby, supt.
" " "	Empire Granite Co. Cap. \$45,000. Open pit, 25,000 tons; steam. M. E. Coughlin, supt.
" " "	Excelsior Granite Co., Montpelier, Vt. S. I. Staples, pres.; O. J. Copeland, secy. and treas. Cap. stk. \$40,000. Excelsior, granite. 1,500 tons; steam; mill.
" " "	James Gazeley, Albany, N. Y. Cap. \$60,000. Granite. Open pit, 2,000 tons; steam; mill. John Sawyer, supt.
" " "	Langdon Granite Co., Montpelier, Vt. James R. Langdon, pres.; James M. Montwell, treas. and mgr. Cap. stk. \$1,000. Langdon, granite. Slope, open pit, 2,400 tons; steam. Henry Coughlin, supt.
" " "	Mann Bros. Granite. Steam.
" " "	Milne & Wylie. Cap. \$20,000. Granite. Open pit, 4,300 tons; horse; mill.
" " "	A. D. Morse. Cap. \$60,000. Granite. Open pit, 1,600 tons; horse, water; mill.
" " "	John O'Rourke. Cap. \$10,000. Barre Standard, granite. Open pit; horse, hand; mill.
" " "	H. N. Parkhurst. Cap. \$15,000. Granite. Steam.
" " "	E. L. Smith & Co. Cap. \$60,000. Granite. Open pit, 5,000 tons; steam, horse; mill.
" " "	C. E. Tayntor & Co., New York City, 239 Broadway. E. M. Tayntor, mgr. and supt. Cap. stk. \$50,000. Barre, granite. Open pit, 2,500 tons; steam.
" " "	Vermont Granite Co. S. C. White, pres. and treas.; H. K. Bush, secy. Cap. stk. \$150,000. Granite. Tunnel, 5,400 tons; steam, horse; mill.
" " "	H. Webster. Cap. \$140,000. Webster, granite. Slope, open pit, 800,000 tons; horse, hand; mill.
" " "	Wells, Lamson & Co. Cap. \$60,000. Granite. Open pit, 3,250 tons; steam, horse; mill.
" " "	Whitmore & Morse Granite Co., Montpelier, Vt. Albert Johannoff, pres.; F. L. Eaton, treas.; N. W. Frink, mgr. Cap. stk. \$100,000. Granite. Slope, open pit, 5,438 tons; steam; mill. N. Bond, supt.

## STONE, MARBLE, GRANITE AND ONYX—(CONTINUED)

LOCATION OF MINE OR QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT.			NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE OR QUARRY, KIND OF STONE, KIND OF MINE OR QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STONE OR MARBLE MILLS, LIMEKILNS AND CAPACITY, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN	AND	COUNTY.	
Bethel	Windsor	Ry. 120.	C. Dingman. Granite. Open pit.
Brandon	Rutland	Ry. 120.	Brandon Italian Marble Co. James P. Upham, prest.; H. D. Bacon, secy., treas. and mgr. Cap. stk. \$200,000. Brandon Italian marble. Open pit, 30,000 tons; steam; mill.
"	"	"	Briggs & Johnstone. T. J. Johnstone, mgr. Cap. stk. \$50,000. Brandon, marble. Open pit, 2,000 tons; steam; 2 mills. T. McGuire, supt.
"	"	"	Peck & Harris. Marble. Open pit; steam; horse; mill. L. B. Peck, supt.
Brownington	Orleans	Ry. Bartons Landing 71.	Pike Manufacturing Co., Pike Station, N. H. E. B. Pike, prest. and mgr.; F. M. Tucker, secy. and treas. Cap. stk. \$70,000. Pike, sandstone.
Burlington	Chittenden	Ry. 120.	G. N. Willard, 80 Shelburn st. Sandstone. Open pit, 6,000 tons; hand. H. G. Willard, supt.
Cadals	Washington	Ry. Montpelier 120, 473.	Granite Construction Co., Montpelier, Vt., 68½ E. State st. George H. Guernsey, prest. and treas.; A. Shamba, v.-prest. Cap. stk. \$5,000. Granite. Slope, open pit, 3,000 tons. N. Dubuc, supt.
Derby	Orleans	Ry. Newport 71.	Lester Cleveland. Clyde River, granite. Open pit; horse; hand.
"	"	"	Moir Granite Co. E. G. Miller, prest.; George H. House, secy. and treas. D. W. Moir, mgr. Cap. stk. \$100,000. Granite. Open pit, 5,000 tons; steam. D. W. Moir, supt.
"	"	"	Curtis Willey. Cap. \$3,500. Derby, granite. Open pit, 1,075 tons; hand.
Dorset	Bemington	Ry. East Dorset 58.	J. K. Freedley & Sons, Philadelphia, Pa., 210 S. Twenty-fourth st. Manchester, marble. Open pit, 2,000 tons; steam; mill. E. R. Harwood, supt.
Fair Haven	Rutland	Ry. 213.	J. W. Williams & Co. Sandstone. Open pit, 250 tons; horse.
Fairlee	Orange	Ry. 71.	Fairlee Granite Co. Cap. stk. \$200,000. (Developing.)
Graniteville	Washington	Ry. 49.	Vermont Quarry Co., Montpelier, Vt., 73 Main st. R. C. Bowers, prest. and mgr.; F. L. Eaton, secy. and treas. Cap. stk. \$15,000. Granite. Slope, open pit, 3,000 tons; horse.
Hardwick	Caledonia	Ry. 703.	Brush & Curtis. Crystal Brook, granite. Slope, 500 tons; horse; mill.
"	"	"	Hardwick Granite Co. Cap. \$25,000. Granite. Water; mill.
Leicester	Addison	Ry. West Salisbury 120.	Brandon Lime & Marble Co. J. W. Buell, prest.; O. C. Huntley, secy., treas. and mgr. Cap. stk. \$15,000. Limestone. Open pit, 30,000 tons; horse; limekiln, capacity 30,000 tons.
"	"	"	Leicester Marble Lime Co. G. O. Swinington, prest.; J. A. Swinington, secy.; J. C. Swinington, treas., mgr. and supt. Cap. stk. \$12,000. Limestone. 7,000 tons; steam; limekiln, capacity 50,000 brls.
Pawlet	Rutland	Ry. Granville, N.Y., 213.	S. E. Culver. Cap. \$10,000. Open pit, 600 tons; horse.
Pittsford	Rutland	Ry. Rutland 58, 213.	Wheaton Quarry Co. J. B. Hollister, mgr. Wheaton, marble. Open pit, 3,000 tons; steam.
Proctor	Rutland	Ry. 120.	Columbian Marble Co. Samuel Harlow, prest.; R. Barrett, secy., treas. and mgr. Cap. stk. \$150,000. Columbian, marble. Open pit, 5,000 tons; steam; mill. M. R. Danton, supt.
Ryegate	Caledonia	Ry. 71.	Ryegate Granite Works Co. Ryegate, granite. Open pit, 1,000 tons; water; mill. E. E. Batchelder, supt.
Victory	Essex	Ry. Morrills 703.	C. A. Story. Cap. \$2,000. Granite. Open pit; steam.
Wallingford	Rutland	Ry. 58.	W. W. Kelley & Son. George W. Kelley, mgr. Marble. Open pit, 500 tons; steam; water; mill. Thomas Norton, supt.
W. Dummerston	Windham	Ry. 120.	George E. Lyons Granite Co. George E. Lyons, prest. and mgr.; George S. Dowley, secy. and treas. Cap. stk. \$75,000. Granite. Open pit, 16,000 tons; steam; horse. D. J. Bailey, supt.
Westmore	Orleans	Ry. West Burke 71.	Pike Manufacturing Co., Pike Station, N. H. E. B. Pike, prest. and mgr.; F. M. Tucker, secy. and treas. Cap. stk. \$70,000. Pike, sandstone.
West Rutland	Rutland	Ry. 213.	Albertson Granite Co., Worcester, Mass., Knowles Bldg. Wm. R. Albertson, prest. and secy.; L. G. Biglow, treas.; W. H. Skeeles, mgr. and supt. Cap. stk. \$120,000. Esperanza, marble. Open pit, 3,000 tons; steam; mills.
"	"	"	Rutland White Marble Co., Worcester, Mass., 339 Main st. C. H. Fitch, prest.; C. H. Barbour, secy.; A. L. Burbank, treas.; J. W. Howe, mgr. Cap. stk. \$300,000. Rutland White Marble Quarry, white marble. Open pit; steam; mill. M. H. Murphy, supt.
"	"	"	True Blue Marble Co. I. W. Branton, prest.; George B. Royce, secy., treas. and mgr. Cap. stk. \$200,000. True Blue, marble. Open pit, 6,000 tons; steam; mill, limekiln, 2,000 tons. George C. Underhill, supt.
"	"	"	Vermont Marble Co. F. D. Proctor, prest. and mgr.; F. A. Baker, secy.; E. R. Morse, treas. Cap. stk. \$3,000,000. Marble. 50,000 tons; steam; water; mill.
Woodbury	Washington	Ry. Hardwick 703.	Woodbury Granite Co. George O. Woodcock, prest.; C. A. Watson, secy.; W. H. Fullerton, treas. and mgr. Cap. stk. \$200,000. Granite. Open pit, 4,200 tons; hand. C. L. Sanford, supt.

SEE ALSO SUPPLEMENTARY LIST

# VIRGINIA

## COAL—ANTHRACITE

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, CORE OVENS, AND NAME OF MINE SUPERINTENDENT.
Cochran, . . . . .	Wise Ry. 523.	Pine Run Coal & Coke Co. C. H. Montgomery, pres.; W. S. Mitchell, secy. and treas.; J. L. Rankin, mgr. and supt. Cap. stk. \$20,000. Adm. Tunnel, 50,000 tons; horse.
Price's Fork, Montgomery Ry. Vicars Switch 523.		M. S. Price. Cap. \$2,000. Tunnel; hand.
Radford, . . . . .	Montgomery Ry. Vicars Switch 523.	Virginia Hard Coal Co. G. Van Dorn, pres.; C. C. Boykin, secy. and treas. Cap. stk. \$25,000. Slope, tunnel; steam (developing). W. T. Jenkins, supt.

## COAL—BITUMINOUS

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, CORE OVENS, AND NAME OF MINE SUPERINTENDENT.
Big Stone Gap Ry. 488.	Wise	Big Stone Gap Coal Co., New York, N. Y., 1 Broadway. Hon. D. J. Turner, pres.; F. H. Leonard, secy.; W. E. Young, treas.; L. B. Deadwell, v.-pres. and mgr. Cap. stk. \$300,000. Drift, 37,500 tons. Joseph Johns, supt.
" . . . . .	"	Virginia, Tennessee & Carolina Steel & Iron Co., New York, N. Y., 5 Bowling Green. John C. Haskell, pres.; T. H. Wentworth, secy.; D. H. Conklin, mgr. Cap. stk. \$4,000,000. Looney Creek. Tunnel, 30,000 tons; hand. Thomas Johns, supt.
Blacksburg, Montgomery Ry. Christiansburg 523.		Kanode & Stussis. Cap. \$5,000. Stussis. Slope, open pit, 1,500 tons; horse. C. P. Kanode, supt.
" . . . . .	"	Klingler & Schaeffer. Cap. stk. \$20,000. Stroubles Creek. Slope, 1,000 tons; horse. L. M. Schaeffer, supt.
Candrian, Montgomery Ry. Christiansburg 523.		W. C. G. Myers. Cap. \$14,000. Price Mountain. Slope, tunnel; horse; steam.
" . . . . .	"	Sinkous & Kipps. Cap. \$7,000. Bruce, Brush Mt. Slope, 2,000 tons; horse. A. L. Hawkins, supt.
Chesterfield, Chesterfield Ry. Fendleys 529.		Ware B. Gay, Boston, Mass., 30 Kelley st. Shaft, 3,000 tons; steam; breaker, jig. J. T. Jones, supt.
Gayton, . . . . .	Henrico Ry. Lorraine 132.	Ware B. Gay, Boston, Mass., 30 Kelley st. Slope, 3,000 tons; steam; breaker, jig. J. T. Jones, supt.
" . . . . .	"	Richmond Coal Mining & Manufacturing Co., Richmond, Va., 10 S. Ninth st. Ware B. Gay, pres. and mgr. Cap. \$1,000,000. Shaft, slope, capacity 200,000 tons; steam; breaker, washer. J. T. Jones, supt.
Goochland, Goochland Ry. Maidens 132.		Ware B. Gay, Boston, Mass., 30 Kelley st. Slope, 3,000 tons; steam; breaker, jig. J. T. Jones, supt.
Middlethian, Chesterfield Ry. Coal Field 622.		Ware B. Gay, Boston, Mass., 30 Kelley st. Shaft, 3,000 tons; steam; breaker, jig. J. T. Jones, supt.
Pocahontas Ry. 523.	Tazewell	Southwest Virginia Improvement Co., Philadelphia, Pa., Bullitt Bldg. H. Wickham, pres.; George L. Estabrook jr., secy. and treas.; C. E. F. Burnley, mgr. Cap. stk. \$750,000. Pocahontas. Drift, 700,000 tons; horse, 650 coke ovens. C. E. F. Burnley, supt.
Price's Fork, Montgomery Ry. 523.		James B. & H. Price. Brush Mountain. Slope, tunnel; horse.
Pulaski City, . . . . .	Pulaski Ry. 523.	Bertha Zinc & Mineral Co., New York, N. Y., 33 Wall st. B. S. Clark, pres.; George M. Holstein, auditor, C. H. Rasler, treas.; J. V. Johnston, mgr. Cap. stk. \$8,500,000. Altoona. Tunnel, 18,000 tons; steam. W. H. Cline, supt.
" . . . . .	"	Peak Creek Coal & Iron Mining Co., George W. Varrough, pres. and gen. mgr.; Phil. L. Grasty, secy. and treas. Cap. stk. \$200,000. Open pit, tunnel (developing).
Tacoma, . . . . .	Wise Ry. 523.	Greene-Bodine Coal Co. H. S. Greene, pres. and mgr. W. T. Miller, secy.; H. B. Slaughter, treas. Cap. stk. \$50,000. Tacoma. Slope, 30,000 tons; steam; horse. T. H. Johns, supt.
Winterpock, Chesterfield Ry. 529.		E. Martin. Cap. \$8,000. Raceoon, Bright Hope. Shaft, slope, 30,000 tons; steam.

## GOLD AND SILVER

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
Cambria, . . . . .	Montgomery Ry. Christiansburg 523.	Varrough & Walters. Florence, silver. Open pit.
Richardsville, Culpeper Ry. Brandy Station 622.		Powhatan Land & Mining Co., Fredericksburg, Va. Geo. W. Shonk, pres.; L. G. Johnson, secy.; L. B. Landmesser, treas.; L. G. Johnson, mgr. Cap. stk. \$900,000. Powhatan, gold. Shaft, open pit, placer, 15,000 tons, free and refractory; steam; mill. James P. Smith, supt.

## GYPSUM

LOCATION OF MINE. RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Chatham Hill..... Smyth Ry. Glade Spring 523.	L. M. Gwyll. Cap. \$2,000. Conv. gypsum. 400 tons; horse.
Lahout..... Smyth Ry. Marion 523.	Buchanan & Co. Open pit, 200 tons; hand.
Saltville..... Washington Ry. 408.	Buena Vista Plaster Co. F. S. Robertson, pres.; W. B. Robertson, secy., treas. and mgr. Cap. stk. \$100,000. Buena Vista, gypsum. Shaft, 5,000 tons; steam, water, horse; plaster mill, capacity 3,000 tons.

## IRON

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, BLAST FURNACES, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Austinville..... Wythe Ry. 523.	Indian Camp Mining Co., Baltimore, Md., 230 Druid Hill av. Theo. F. Wilcox, pres.; Julius Stern, secy. and treas. Cap. stk. \$100,000. Indian Camp, limonite. Slope and open pit; hand. W. R. Gallimore, supt.
Backbone..... Alleghany Ry. 132.	Frank Lyman, Covington, Va. Cap. \$50,000. Brown hematite. Tunnel, 18,500 tons. John S. Ham, supt.
Big Stone Gap..... Wise Ry. 408, 687.	Appalachian Steel & Iron Co. E. J. Bird jr., pres.; M. T. Ridenour, secy. and treas.; E. J. Bird, v.-pres. and gen. mgr. Cap. stk. \$450,000. Red Fossil, iron ore. Tunnel, 45,000 tons; horse, hand.
Christiansburg..... Montgomery Ry. 523.	King Mining Co., Roanoke, Va. Henry King, pres. and mgr.; Wm. S. Todd, secy. and treas. Cap. stk. \$90,000. Kingston, red hematite. Open cut, 80,000 tons; steam; Joseph McNight, supt.
Covington..... Alleghany Ry. Backbone 132.	Frank Lyman, Brooklyn, N. Y., 50 Remsen st. Brown hematite, 80,000 tons. John S. Ham, supt.
Evington..... Campbell Ry. 622.	Dingee, Weiman & Co., Lynchburg, Va. Cap. \$50,000. Hewitt, barytes. Shaft, 2,500 tons; steam. James Davey, supt.
Ferrol..... Augusta Ry. 132.	Aurora Mining Co. Peter McLaren, propr. Brown hematite. Tunnel, 5,000 tons; gravity. George Rifehle, supt.
Foster's Falls..... Wythe Ry. 523.	Foster's Falls Mining & Manufacturing Co. M. B. Tate, pres.; John W. Robinson, secy. and treas.; J. J. Baker, mgr. and supt. Foster, Hammer. Open pit, 25,000 tons; steam, water.
Glen Wilton..... Botetourt Ry. 132.	D. G. Cook, Wrightsville, Va. T. D. Kauffelt, mgr. Wilton. Tunnel, 30,000 tons; horse; furnace, capacity 13,000 tons. R. J. Ruhl, supt.
Iron Gate..... Alleghany Ry. 132.	Alleghany Iron Co., New York, N. Y., 29 Broadway. F. C. Diviny jr., pres.; F. C. Jones, mgr. Merry Hill, fossil. Tunnel, open pit, 75,000 tons; steam; furnace.
Ivanhoe..... Wythe Ry. 523.	Pennsylvania Zinc & Iron Co., Roanoke, Va. Henry C. Stipes, pres.; E. Schaefer, secy. and treas.; J. H. Bartlett, mgr. Cap. stk. \$300,000. Iron, zinc ore (developing).
Leesville..... Campbell Ry. Lynch's Sta. 622.	Dingee, Weiman & Co., Lynchburg, Va. Cap. \$50,000. Hammer, barytes. Shaft, 1,500 tons; steam. Albert Withers, supt.
Liberty Furnace..... Shenandoah Ry. Edinburg 42.	Liberty Iron Co., Philadelphia Pa., 415 Drexel Bldg., Fifth and Chestnut sts. H. H. Yard, pres.; S. L. Gillen, secy. and treas.; M. M. Campbell, mgr. Cap. stk. \$500,000. Iron ore. Shaft, tunnel, slope, 25,000 tons; steam, water, horse; furnace, capacity 15,000 tons.
Lowmoor..... Alleghany Ry. 132.	Lowmoor Iron Co. of Virginia. A. S. Winslow, pres.; H. M. Bell, secy.; Edward A. Low, treas.; Henry G. Merry, mgr. and supt. Cap. stk. \$600,000. Brown hematite. Shaft, tunnel, 5,000 tons; steam.
Mallow..... Alleghany Ry. Iron Mt. Station 132.	Alleghany Iron Mountain Mining Co., Covington, Va. R. L. Farris, pres.; Frank Lyman, secy. and treas.; John S. Ham, mgr. and supt. Cap. stk. \$30,000. Iron Mountain, brown hematite. Open cut, 24,500 tons.
"..... "	Frank Lyman, Covington, Va. Cap. \$100,000. Dolly Ann, brown hematite. Open cut, 25,000 tons. John S. Ham, supt.
Marion..... Smyth Ry. 523.	Marion Iron Ore Co., New York, N. Y., 52 Broadway. P. S. Swain, pres.; Charles T. Darling, secy. and treas. John S. Apperson, mgr. Cap. stk. \$250,000. Carrier Valley, brown hematite, manganese. Open cut, shaft, 30,000 tons; steam.
Mineral City..... Louisa Ry. 132.	Arminius Copper Mines Co., New York, N. Y., 71 Wall st. Sol. Hexter, pres. and treas.; Alex. Griterman, secy.; Wm. H. Adams, mgr. Cap. stk. \$500,000. Arminius, pyrites. Shaft, 35,000 tons; steam. Henry M. Bancroft, supt.
"..... "	Washington Pyrite Co., Washington, D. C., 918 F st. Eugene B. Payne, pres.; Walter L. Bishop, secy. and supt.; C. F. Grilling, treas. and mgr. Cap. stk. \$500,000. Goodwin, Hunter, pyrites. Shaft; steam (developing).
Pittsville..... Pittsylvania Ry. 622.	Dingee, Weiman & Co., Lynchburg, Va. Cap. \$50,000. Borger, barytes. Shaft, 600 tons; steam. C. E. Woody, supt.
Reed Island..... Pulaski Ry. Kaydonah 523.	Eva Mining & Manufacturing Co., Pulaski City, Va. J. E. Moore, pres.; L. S. Calley, secy. and treas.; Ellis Collier, mgr. and supt. Cap. stk. \$300,000. Eva, limonite. Open pit, 7,000 tons; steam; horse.
Rye Valley..... Smyth Ry. Marion 523.	Joseph L. Scott. Spring, brown hematite, manganese. Open pit; hand.
"..... "	John M. Williams. Sugar Hill, brown hematite, manganese. Open cut; hand.
Toshes..... Pittsylvania Ry. 622.	Dingee, Weiman & Co., Lynchburg, Va. Cap. \$50,000. Parker, barytes. Shaft, 1,500 tons; steam. C. E. Woody, supt.



LEAD AND ZINC

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, SMELTERS, ETC., AND NAME OF MINE SUPERINTENDENT.
Austinville, . . .	Wythe Ry. 523.	Wythe Lead & Zinc Mine Co., Maj. D. P. Graham, prest.; Dr. R. W. Sanders, secy.; John C. Raper, treas., mgr. and supt. Cap. stk. \$400,000. Wythe, lead, zinc. Shaft, tunnel, open pit, 5,000 tons; electricity, water, furnace.
Bertha, . . .	Wythe Ry. 523.	Bertha Zinc & Mineral Co., New York, N. Y., 33 Wall st. B. S. Clark, prest.; George M. Holstein, auditor; C. H. Boshet, treas.; J. V. Johnston, mgr. Cap. stk. \$3,500,000. Bertha, zinc. Shaft, tunnel, 16,000 tons; steam, furnace. Wm. H. Case, supt.
Sugar Grove, . . .	Smyth Ry. Marion 523.	Rye Valley Mining Co., Baltimore, Md. M. R. Croighton, prest.; Wm. C. Carman, secy.; Louis Cassard jr., treas.; Hampton Woods, mgr. and supt. Cap. stk. \$500,000. Lead. Slope, steam.

MANGANESE

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, BLAST FURNACES, ETC., AND NAME OF MINE SUPERINTENDENT.
Houston Mines, Botetourt Ry. Nace 523.		Penn Mangane Co., Pittsburg, Pa., 35 Fifth av. William White jr., prest.; W. R. Cuthbert, secy. and treas. Houston. Shaft, steam. R. S. Neal, supt.
Marion, . . .	Smyth Ry. 523.	Staley's Creek Manganese & Iron Co. A. C. Cummings, prest.; John S. Apperson, secy. and treas.; John M. Preston, mgr. Cap. stk. \$45,000. Carrier Valley, Pound Mount, brown hematite, manganese. Open cut, shaft.

MICA

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF PRODUCT, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, ETC., AND NAME OF MINE SUPERINTENDENT.
Amelia C. H., . . .	Amelia Ry. 622.	Richmond Mica Co., Richmond, Va., 1000 Main st. J. L. Williams, prest.; E. J. Willis, secy. and treas.; John G. Skelton, mgr. Cap. stk. \$60,000. Champion. Shaft, tunnels; steam, mill. J. Gouza, supt.

MINERAL PAINT

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF PRODUCT, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, PAINT MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
Stanleyton, . . .	Page Ry. Marksville 523.	Oxford Ochre Co., New York City, 24 Liberty st. C. S. Foote, prest.; R. M. Bennett, secy. and treas.; C. B. Foote, mgr. Cap. stk. \$25,000. Oxford Mines, yellow ochre. Shaft, tunnel and pit, 700 tons, steam.

PHOSPHATE

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
Malvern Hill, . . .	Hempden Ry. Elko 132.	Malvern Hill Marl & Phosphate Co., New York, N. Y., 216 Greenwich st. H. J. S. Hall, prest.; F. C. Gager, secy.; L. Hawley, treas.; C. H. Bond, mgr. Cap. stk. \$20,500. Marl phosphate. Slope, open pit, 7,500 tons; steam, hydraulic.

SALT

LOCATION OF MINE OR WELL, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF PRODUCT, KIND OF MINE OR WELL, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, ETC., AND NAME OF MINE SUPERINTENDENT.
Saltville, . . .	Washington Ry. 523.	Houston Salt & Plaster Co., George W. Palmer, prest. and treas.; Charles F. Palmer, secy. and mgr. Cap. stk. \$1,000,000. Saltville, coarse and common. Wells, 450 tons, steam.

## SLATE

LOCATION OF QUARRY,  
RAILWAYS, WATER ROUTES  
AND SHIPPING POINT.

TOWN AND COUNTY.

Arvonla . . . . . Buckingham  
Ry. 132.  
" . . . . . " . . . . .  
Keswick . . . . . Albemarle  
Ry. 132.  
Ore Bank . . . . . Buckingham  
Ry. Arvonla 132.  
" . . . . . " . . . . .  
Snowden . . . . . Amherst  
Ry. 132.

NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK,  
NAME OF QUARRY, KIND OF SLATE, KIND OF QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS,  
KIND OF POWER USED, MILLS, ETC., AND NAME OF QUARRY SUPERINTENDENT.

Big Quarry Slate Co. J. R. Williams, pres.; E. R. Williams, treas., gen. mgr. and supt. Cap. stk. \$50,000.  
Big Quarry. Open pit; steam.  
J. R. Williams & Co. Cap. \$200,000. Old Nicholas. Open pit, 9,500 tons; steam; mill.  
W. B. Lupton & Co., Pittsburg, Pa., 1012 Penn. av. Keswick. Open pit; steam. E. U. Bragdon, supt.  
J. J. Roberts & Co. Open pit, 2,000 tons; steam.  
J. C. Senger. Open pit; steam, horse (developing).  
Williams Bros. Slate Co. J. W. Watts, pres.; Hugh Williams, secy.; J. Gordon Payne, treas.; W. E. Williams, mgr. and supt. Cap. stk. \$40,000. Open pit; steam (developing).

## SOAPSTONE

LOCATION OF MINE  
OR BASE,  
RAILWAYS, WATER ROUTES,  
AND SHIPPING POINT.

TOWN AND COUNTY.

Clifton Station . . . . . Fairfax  
Ry. 622.

NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK,  
NAME AND KIND OF MINE OR BASE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER  
USED, ETC., AND NAME OF SUPERINTENDENT.

Old Dominion Stone Co., Philadelphia, Pa., 1113 Arch st. D. Z. Evans, pres. and treas.; D. Z. Evans Jr.,  
secy.; T. H. Evans, mgr. Cap. stk. \$30,000. Old Dominion, soapstone and sandstone. Open pit, 1,000  
tons; steam; mill. John B. Hart, supt.

## STONE, MARBLE, GRANITE AND ONYX

LOCATION OF MINE  
OR QUARRY,  
RAILWAYS, WATER ROUTES  
AND SHIPPING POINT.

TOWN AND COUNTY.

Buchanan . . . . . Botetourt  
Ry. 132, 523.  
" . . . . . " . . . . .  
Christiansburg . . . . . Montgomery  
Ry. 523.  
Churchwood . . . . . Pulaski  
Ry. Belspring 523.  
Craigs ville . . . . . Augusta  
Ry. 132.  
Fincastle . . . . . Botetourt  
Ry. Springwood 132.  
" . . . . . " . . . . .  
" . . . . . " . . . . .  
" . . . . . " . . . . .  
" . . . . . " . . . . .  
Friedricksburg . . . . . Spotsylvania  
Ry. 601, 615.  
Granite . . . . . Chesterfield  
Ry. 622.  
Herndon . . . . . Fairfax  
Ry. 622.  
Korah . . . . . Henrico  
(P. O. Richmond) Ry.  
132.  
Lowmoor . . . . . Alleghany  
Ry. 132.  
Lynchburg . . . . . Campbell  
Ry. 523, 132.  
" . . . . . " . . . . .  
Manassas . . . . . Prince William  
Ry. 622.  
Manchester . . . . . Chesterfield  
Ry. 622.  
Marion . . . . . Smyth  
Ry. 523.

NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK,  
NAME OF MINE OR QUARRY, KIND OF STONE, KIND OF MINE OR QUARRY, ANNUAL OUTPUT IN TONS OF  
2,000 POUNDS, KIND OF POWER USED, STONE OR MARBLE MILLS, LIMESTONE AND  
CAPACITY, ETC., AND NAME OF MINE SUPERINTENDENT.

George O. Houston, Roanoke, Va. B. M. Paine, mgr. Buchanan, limestone. 30,000 tons.  
John Sexton. Cap. \$5,000. Buchanan, limestone. Open pit, 25,000 tons; steam; mill. T. D. Sexton, supt.  
Virginia Lime & Cement Co. A. A. Phlegar, pres.; M. C. Pelton, treas. and mgr. Cap. stk. \$10,000.  
Limestone. Open pit, 8,000 tons.  
B. S. Prie & Co. Limestone. Open pit; hand; mill.  
Coral Marble Co., Staunton, Va. R. P. Bell, mgr. Cap. stk. \$500,000. Marbledale, marble. Open pit,  
500 tons; hand, steam; mill.  
Beeley Marble Development Co. J. H. H. Figgat, pres.; Turner McDowell, secy.; James Godwin, treas.;  
Alfred Beeley, mgr. Cap. stk. \$300,000. Beeley, lithographic stone, marble. Steam; marble mill  
(developing).  
Fincastle Stone & Marble Co. C. M. Lunsford, pres.; C. H. Vines, secy.; Wm. B. Summon, treas. Cap.  
stk. \$100,000. Lithographic stone, marble. Slope, 500 tons; steam; stone and marble mills. W. Cle-  
ments, supt.  
S. F. Patterson. Limestone. Open pit; limekiln, capacity 30,000 bbls.  
Virginia Black Marble Co. R. T. Herndon, pres.; W. M. Duhany, secy.; James Godwin, treas.; J. W.  
Clarkson, mgr. Cap. stk. \$300,000. Marble. Open pit; steam; mill. W. Clement, supt.  
Bridgewater & Forge Granite & Lumber Co. I. B. Flecken, pres. and treas.; H. Von Schon, secy. and  
mgr. Cap. stk. \$100,000. Granite. Hand, electricity; mill.  
Middendorf & Donald, Richmond, Va., 132 and 134 Virginia st. Cap. stk. \$30,000. Granite. 7,000 tons;  
steam; mill.  
Herndon Stone Co., Washington, D. C. Geo. W. Hunter, mgr. Sandstone. Open pit (developing).  
Richmond Granite Co., 911 Main st., P. O. Box 158. H. P. Buswanger, pres.; John Klemm, secy. and  
treas. Cap. stk. \$100,000. Granite. Open pit, 25,000 tons; steam, hand.  
Lowmoor Iron Co. A. S. Winslow, pres.; N. M. Bell, secy.; Edward A. Low, treas.; Henry Merry, mgr.  
Cap. stk. \$600,000. Low Moor, limestone. Tunnel, 48,000 tons; steam. J. E. Williams, supt.  
James M. Casey, Washington and Jefferson sts. Casey, limestone. 10,000 tons; horse, hand; mill. W.  
H. Hall, supt.  
Lynchburg Construction Co., 811 Main st. Charles E. Heald, pres.; S. M. Williamson, secy. and treas.; R.  
Taylor Gleaves, mgr. Cap. stk. \$100,000. Amherst, gneiss and serpentine. Slope, open pit, 21,000 tons;  
steam, horse; mill. Robert Lackey, supt.  
John R. Tillett, P. O. Box 101. Stonewall, sandstone. Open pit, 7,000 tons; steam, horse, hand.  
Standard Granite Co., Richmond, Va., 2310 W. Cary st. James Netherwood, pres.; H. F. Smith, treas.,  
mgr. and supt. Cap. stk. \$15,000. Standard, granite. Open pit, 3,000 tons; steam.  
Marion Mining & Marble Co., Richmond, Va., care City Bank, John S. Apperson, pres.; Edwin A.  
Palmer, secy. and treas. Cap. stk. \$10,000. Killinger, Scott and 2 others. Open pit (developing).

STONE, MARBLE, GRANITE AND ONYX—(CONTINUED)

LOCATION OF MINE OR QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE OR QUARRY, KIND OF STONE, KIND OF MINE OR QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STONE OR MARBLE MILLS, LIMERILNS AND CAPACITY, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Nace Botetourt (P.O. Botetourt Ry. 523.	Roanoke Black Marble Co., Roanoke City, Va., Terry Bldg. B. L. Greider, pres.; H. H. Greider, secy.; Wm. F. Winch, treas.; S. J. Reed, mgr. Cap. stk. \$100,000. Marble. Open pit; steam (developing).
Petersburg Dinwiddie Ry. 523, 575, 623.	Dr. D. W. Lassiter, 13 Tabb st. East View, granite. Slope; hand.
" " " "	Petersburg Granite Quarrying Co., New York, N. Y., 28 Wall st. Wm. E. Dibble, pres.; Egerton Brown, secy.; J. O. Bowditch, treas. Cap. stk. \$75,000. Granite. Steam; mill.
Price's Forks Montgomery Ry. Christiansburg 523.	Stewart Price. Millstone. Open pit, 150 tons; hand.
" " " "	M. S. Price & Bro. Cap. \$1,000. Millstone. Open pit, 50 tons; hand.
Pulaski City Pulaski Ry. 523.	Miller & Warden. Cap. \$20,000. Peak Creek, sandstone. Open cut; hand, steam. J. K. Warden, supt.
Rocky Point Botetourt Ry. 132.	McCormack Granite Co. E. W. Stevens, gen. mgr. McCormack, lime-stone. Open pit, 60,000 tons; steam; mill.
Waynesboro Augusta Ry. 132, 523.	Lithomar Milling Co., Alexandria, Va. A. G. Uhler, pres.; A. M. Gorman, secy. and gen. mgr.; George Wise, treas. Cap. stk. \$100,000. Lithographic stone, marble, ocher, slate. Water, steam, electricity, hoist.
Winston Culpeper Ry. 583.	L. D. Winston. Granite, sandstone.

SULPHUR

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Sulphur Mines Louisa Ry. 132.	Sulphur Mines Co. of Virginia, Richmond, Va. Wm. G. Cronshaw, pres.; Wm. G. Cronshaw jr., v.-pres.; S. D. Cronshaw, secy. and treas. J. C. Potts, mgr. and supt. Cap. stk. \$600,000. Pyrites. Shaft; steam.

TIN

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, SMELTERS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Betty's Clarke Ry. Boyce 523.	Virginia Tin Mining & Smelting Co., Winchester, Va. Wm. H. Sale, pres.; Charles F. Nelson, secy. and treas. J. M. Pascoe, mgr. and supt. Cap. stk. \$1,000,000. Shaft; open pit; hand (developing).

SEE ALSO SUPPLEMENTARY LIST

# WASHINGTON

## COAL—BITUMINOUS

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, COKE OVENS, AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Black Diamond, King Ry. 179.	Black Diamond Coal Mining Co., San Francisco, Cal., 450 Main st. P. B. Cornwall, prest. and mgr. Geo. Staacke, secy.; Bank of California, treas. Cap. stk. \$5,000,000. Black Diamond. Slope, 132,000 tons; steam and electricity. Morgan Morgans, supt.
Black River, King Ry. Black River Junction 565.	Black River Coal & Transportation Co., Seattle, Wash., cor. Commercial and Main sts. L. M. Garrison, prest.; S. H. Martin, secy. and treas.; W. B. Spencer, mgr. Cap. stk. \$50,000. Black River. Slope, hand (developing). Wm. R. Reese, supt.
Blue Canyon, Whatcom Ry. New Whatcom 53.	Blue Canyon Coal Mining Co., New Whatcom, Wash. M. E. Downs, prest.; John T. Murphy, v.-prest.; J. H. Binckel, secy. Cap. stk. \$500,000. Blue Canyon. Slope; steam; washer (developing). Wm. J. Watkins, supt.
Bucoda, Thurston Ry. 529.	North-Western Coal & Transportation Co., Portland, Ore. Samuel Coulter, prest.; W. W. Humes, secy.; C. W. Coulter, mgr. Cap. stk. \$250,000. Bucoda. Slope, 12,000 tons; steam and horse. Thos. Ismay, supt.
Burnett, Pierce Ry. 529.	South Prairie Coal Co., San Francisco, Cal., 308 California st. John M. Whitworth, prest.; T. H. Henderson, secy. and treas.; C. H. Burnett, mgr. and supt. Cap. stk. \$200,000. South Prairie. Slope, 50,000 tons; steam.
Carbonado, Pierce Ry. Dooty 529.	Carbon Hill Coal Co., San Francisco, Cal., cor. Fourth and Townsend sts. Charles F. Crocker, prest.; Frank S. Dooty, secy. and treas. Cap. stk. \$200,000. Carbon Hill. Tunnels, 175,000 tons; steam and water; washer. D. T. Davies, supt.
Castle Rock, Cowitz Ry. 529.	Castle Rock Mining Co., Portland, Ore., 66 N. Second st. L. Nicolai, prest.; J. A. Newell, secy. and supt.; A. W. Osoebock, treas. Castle Rock. Tunnel; steam.
Cokedale, King (P. O. Franklin) Ry. 179.	Green River Coal & Coke Co., Seattle, Wash., Burke Bldg. John H. Bryant, prest.; John Craig, secy.; A. S. Dunham, treas.; Wesley Wilson, mgr. Cap. stk. \$1,000,000. Green River. Slope; steam; breaker, washer, 200 coke ovens under construction (developing). Geo. A. Brooke, supt.
Durham, King Ry. 529.	Pacific Investment Co., San Francisco, Cal., 316 California st. Charles McCulloch, prest.; Alexander H. Small, secy.; Robert Young, mgr. Durham. Tunnels; steam and horse.
Franklin, King Ry. 179.	Oregon Improvement Co., Seattle, Wash., 301 Burke Bldg. W. H. Starbuck, prest.; W. T. Wallace, secy.; C. B. Tedcastle, treas.; C. J. Smith, mgr. Franklin. Slope, 120,000 tons; steam; breaker. T. B. Cory, supt.
Gilman, King (P. O. Ohney) Ry. 665.	Seattle Coal & Iron Co., Seattle, Wash., Burke Bldg. John H. Bryant, prest.; John Craig, secy.; A. S. Dunham, treas.; Wesley Wilson, mgr. Cap. stk. \$5,000,000. Gilman. Slope and tunnels, 112,000 tons; steam. J. L. Parker, supt.
Jennings, Skagit P. O. and Ry. Sedro 258, 965.	Skagit Coal & Transportation Co., Fairhaven, Wash. C. H. Larrabee, prest. Fairhaven. Tunnel, 6,000 tons; steam; coke oven. R. Jennings, supt.
New Castle, King Ry. 179.	Oregon Improvement Co., Seattle, Wash., 301 Burke Bldg. W. H. Starbuck, prest.; W. T. Wallace, secy.; C. B. Tedcastle, treas.; C. J. Smith, mgr. Coal Creek. Slope, 200,000 tons; steam; breaker. T. B. Cory, supt.
Niblock Mine, King (P. O. Snoqualmie) Ry. 529.	Snoqualmie Coal & Coke Co., Tacoma, Wash., 607 Fidelity Bldg. A. M. Cannon, prest. and treas.; C. B. Niblock, secy. and mgr. Cap. stk. \$1,000,000. Niblock. Tunnel, 150,000 tons; gravity; washer Andrew Stephenson, supt.
Palmer, King Ry. 529.	Green River Coal & Coke Co., Seattle, Wash., Burke Bldg. J. H. Bryant, prest.; A. S. Dunham, v.-prest.; J. Craig, secy.; J. E. Cox, treas.; W. Wilson, mgr. Cap. stk. \$1,000,000. Green River. Shaft and slope; steam (developing). W. J. P. Williams, supt.
Pittsburg, Pierce (No P. O.) Ry. 529.	Acme Coal Co., Tacoma, Wash. C. B. Niblock, prest.; A. L. Horner, v.-prest.; F. M. Wade, treas.; S. J. Maxwell, secy. Cap. stk. \$45,000. Acme. Tunnel, 50,000 tons. T. W. De Lane, supt.
Rocky Ridge, Whatcom (P. O. Silver Beach) Ry. 56, 663.	Rocky Ridge Coal Co., Whatcom, Wash., Bellingham Hotel. H. A. Moore, prest and mgr.; C. C. Hixson, supt.; Puget Sound Loan & Trust Co., treas. Cap. stk. \$500,000. Rocky Ridge. Slope; steam (developing). R. Blackwell, supt.
Tacoma, Pierce Ry. 529, 552, 774.	Connellsville Coal & Coke Co., cor. Twenty-third and Adams. C. W. Griggs, prest.; Geo. Browne, secy.; A. G. Foster, treas. Cap. stk. \$500,000. Connellsville (developing).
Wilkeson, Pierce Ry. 529.	Tacoma Coal Co., Tacoma, Wash., Hotel Effe, Room 1. A. C. Smith, prest.; Geo. O. Kelly, secy. Cap. stk. \$1,000,000. Tacoma. Slope, 60,000 tons; steam; breaker, washer, 30 coke ovens, 3,000 P. I. M. Kelley, supt.
" " "	Wilkeson Coal & Coke Co., Tacoma, Wash., Twenty-third and Adams sts. Henry Hewitt, prest.; P. D. Norton, secy. and treas.; Hugh White, mgr. Cap. stk. \$250,000. Nos. 1, 2, 3 and 4. Tunnel, 150,000 tons; steam; breaker, washer, 75 coke ovens. P. C. Forrester, supt.

## GOLD AND SILVER

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Ambocres, Skagit Ry. 666.	Ruby & State Creek placer Mining Co. E. S. Dodge, prest.; Benjamin Goodwin, secy.; Geo. W. Randall, treas.; M. A. Tullock, mgr. and supt. Cap. stk. \$250,000. Gold. Placer; water.
Arlington, Snohomish Ry. 655.	Stillaguamish Mining Co. John Wellenshiller, prest.; Chas. Wellman, secy.; Vic. Thorp, treas.; John Bentner, mgr. Cap. stk. \$2,000,000. Congo and Domingo, gold and silver. Tunnel; refractory (developing).

## GOLD AND SILVER (CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Bossburg . . . . . Stevens Ry. Young America 655.	Pittwood & Burbridge (lessors). Young America and Bonanza, silver and lead. Tunnel, 16,000 tons; refractory; hand.
Chelun . . . . . Okanogan Ry. 552.	Cascade Range Mining Co., Waterville, Wash. A. E. Case, pres.; R. W. Starr, secy.; A. T. Greene, treas.; A. H. Mirock, mgr. Cap. stk. \$1,500,000. Fourteen claims, gold and silver. Hand developing. W. R. Robinson, supt.
Chevelah . . . . . Stevens Ry. 635.	Cooms, Shaper & Thomson, Spokane, Wash., 267 Rookery. Eagle and Eureka, silver and lead. Shaft; free and refractory, steam. A. R. Thomson, supt.
Cle Elum . . . . . Kittitas Ry. 529.	Culver Gold Mining Co., Seattle, Wash., 519, 520, 521 Bailey Bldg. Henry Bash, pres.; Edwin Hall Warner, secy.; Ezra W. Clark, treas.; Joseph L. Warner, mgr. and supt. Cap. stk. \$200,000. Culver, gold. Tunnel; free and refractory; 10 stamps and concentrator.
Colville . . . . . Stevens Ry. 635.	Dead Medicine Mining Co., Spokane, Wash. George Turner, pres.; I. N. Peyton, secy., treas. and supt. Cap. stk. \$2,500,000. Dead Medicine, silver and lead. Shaft and tunnel; free and refractory; steam.
" . . . . . "	Old Dominion Mining Co., Spokane, Wash. W. R. Newport, pres. and mgr.; S. Oppenheimer, secy.; E. J. Dyer, treas. Cap. stk. \$500,000. Old Dominion, silver and lead. Shafts and tunnels, 10,000 tons; free; steam. J. Handy, supt.
" . . . . . "	Rustler Mining Co., Spokane, Wash. H. E. Houghton, pres.; I. N. Peyton, secy. and treas. Cap. stk. \$250,000. Rustler, silver. Shaft; refractory.
Concomully . . . . . Okanogan Ry. 529.	Bridgeport Mining & Milling Co., Bridgeport, 90m., cor. Gold and Middle sts. Frank L. Rodgers, pres.; E. E. Wheeler, secy. and treas.; E. P. Wheeler, mgr. and supt. Cap. stk. \$300,000. Thompson, Nevada, Montana and Columbia, gold and silver. Shaft and tunnel; free; hand and horse.
Concomully . . . . . Okanogan Ry. Coulee City 529 (100 miles).	A. C. Burnham. Summit, gold and silver. Tunnel, free; hand.
" . . . . . "	Washington Central Mining & Reduction Co., L. Irwin Baldwin, pres.; H. A. Wilder, secy., treas. and mgr. Cap. stk. \$500,000. Gold King, Keno, Monte Cristo and Big Bonanza, gold, silver, copper. Tunnel, 30,000 tons; refractory; water; 10 stamps. Theo. Patterson, supt.
Ellensburg . . . . . Kittitas Ry. 529.	Columbia Gold Mining Co., cor. Fourth and Pearl sts. W. R. Abrams, pres. and treas.; L. C. Pope, secy.; M. S. Smith, mgr. Cap. stk. \$50,000,000. Oakbar, gold, placer; water developing.
Galena . . . . . Shoshomish Ry. 293.	Western Washington Mining & Manufacturing Co., Tacoma, Wash., 1001 Eleventh st. R. G. Brown, pres.; M. H. Nichols, secy. and treas.; C. A. Brown, mgr. and supt. Cap. stk. \$100,000. Bueno Lado, gold, silver and copper. Tunnel; refractory; water developing.
Golden . . . . . Okanogan Ry. Wilbur 529.	Wannick Lake Milling & Mining Co., Spokane, Wash. Joseph Banauer, pres.; N. D. Hanmer, secy.; H. W. Holly, treas.; F. W. Wegner, mgr. and supt. Cap. stk. \$100,000. Spokane and others, gold and silver. 10,000 tons, free; steam, 10 stamps, 2 concentrators.
Kettle Falls . . . . . Stevens Ry. 635 (32 miles).	Silver Queen Mining Co., John F. Sherwood, pres., mgr. and supt., James J. Budd, secy.; C. H. Nelson, treas. Cap. stk. \$32,000. Silver Queen, silver and lead. Shafts; free; hand.
Liberty . . . . . Kittitas Ry. Ellensburg 529.	Donahue & Fairfield Mining & Smelting Co., S. Seattle, Wash., Bailey Bldg. John Fairfield, pres.; Daniel T. Cross, secy. and treas.; William Donahue, mgr. and supt. Cap. stk. \$200,000. Marion, Manistee, Old Gold and 7 others, gold. Tunnel, placer; free and refractory, steam.
Loomis . . . . . Okanogan Ry. Coulee City 529 (120 miles).	Cowherd & Western. Ivanhoe Group, gold and silver. 2,000 tons, free and refractory; steam; mill.
" . . . . . "	Empire Mining Co., Tacoma, Wash., 1301 Railroad st. J. D. Caughran, pres.; P. A. Paulson, secy.; Merchants' Bank, treas.; Capt. P. Curtis, mgr. and supt. Cap. stk. \$1,000,000. Empire Group, gold, shafts and tunnels; free, electricity.
" . . . . . "	Everett Gold Mining & Milling Co., Tacoma, Wash., Fidelity Bldg. John F. Plummer, pres.; Leonard Howarth, secy. and treas.; F. W. Dunn, mgr. Cap. stk. \$1,000,000. Black Bear and War Eagle, gold. Shaft, 15,000 tons; free; water; 5-stamp mill. John Ross jr., supt.
" . . . . . "	Gold Finch Mining Co., Seattle, Wash. Fred E. Soule, pres.; J. S. Schultz, secy. and treas.; W. B. Moore, mgr. and supt. Cap. stk. \$200,000. Gold Finch, gold. Shaft and tunnel, free; electricity.
" . . . . . "	Keystone Mining & Milling Co., Spokane, Wash., cor. Riverside and Howard sts. P. T. Murray, pres.; M. H. White, secy.; A. C. Libby, treas. Cap. stk. \$1,000,000. Dividadero and Keystone, gold and silver. Shaft; free, refractory, hand. William Harris, supt.
Loop Loop . . . . . Okanogan Ry. Wilbur 529.	First Thought Silver Mining Co., Portland, Ore., 515 Morrison st. Jonathan Bourne Jr., pres.; Herbert E. Thompson, secy.; Portland Savings Bank, treas. Cap. stk. \$100,000,000. First Thought, silver. Tunnels; water.
Metallum . . . . . Kittitas Ry. Ellensburg 529.	Gold Nugget Mining Co., Port Townsend, Wash. William Payne, pres.; Walter Bowen, secy. and treas.; B. C. Pilcher, mgr. and supt. Cap. stk. \$70,000. Black, gold. Open pit, placer; water.
" . . . . . "	Swank Creek Mining Co., Tacoma, Wash., 113 Thirteenth st. W. R. Andrews, pres. and mgr.; W. W. Hartley, secy. Cap. stk. \$100,000. Gold, Placer, water. Geo. B. Seely, supt.
Marens . . . . . Stevens Ry. Bonanza 635.	Consolidated Bonanza Mining & Smelting Co., Spokane, Wash. R. S. Oakley, pres. and mgr.; C. H. Armstrong, secy. and supt.; S. Anstler, treas. Cap. stk. \$1,000,000. Bonanza and 5 other claims, silver and lead. Open pit and shaft, 21,000 tons; free; steam, concentrator, 3,120 tons.
Monte Cristo, Shoshomish (No P. O. City 775).	Monte Cristo Mining Co., Seattle, Wash., 617 and 618 Bailey Bldg. Jos. L. Colby, pres. and treas.; Chas. F. Rand, secy.; Wm. C. Butler, mgr. Cap. stk. \$1,000,000. Two claims, silver and lead. Tunnels, refractory; water and electricity developing.
" . . . . . "	Pride of the Mountains Mining Co., Seattle, Wash., 618 Bailey Bldg. Jos. L. Colby, pres. and treas.; Chas. F. Rand, secy.; Wm. C. Butler, mgr. and supt. Cap. stk. \$1,000,000. Pride of the Mountains, "89," Galore and Pride of the Woods, silver and lead. Tunnel, refractory, water (just commenced).
" . . . . . "	Rainy Mining Co., Cleveland, Ohio, Perry Payne Bldg. Jos. L. Colby, pres.; H. C. Henry, secy.; A. L. Dickerman, treas.; Chas. F. Rand, mgr. Cap. stk. \$500,000. Rainy, gold and silver. Tunnel; steam and water. Wm. C. Butler, supt.
Orting . . . . . Pierce Ry. 529.	Sultan Mining & Prospecting Co., Sultan, gold and silver. Refractory developing. (Mine in Okanogan County.)

## GOLD AND SILVER (CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
Port Angeles.....Challam Ry. 529, 552.		Hurricane Hill Mining Co., F. G. Jones, prest. and supt.; L. R. Cole, secy.; J. E. Becker, treas.; J. C. Burk, mgr. Cap. stk. \$300,000. Great Western, silver and copper. Shaft and tunnel; free (developing).
Porter.....Chehalis Ry. 529.		Porter Creek Consolidated Mining Co., S. S. Ford, prest.; S. R. Ford, secy.; J. W. Ray, treas.; Henry Marshall, mgr. and supt. Cap. stk. \$1,000,000. Porter Creek, gold and silver. Open pit; refractory; water.
Ruby.....Okanogan Ry. Sauk 666 (30 miles).		Ruby Placer Mining Co., Anacortes, Wash., G. K. Hiatt, prest.; J. M. Moore, secy., treas. and mgr. Cap. stk. \$200,000. Anacortes and Dandy, gold. Placer; water. McCullough, supt.
Silverton.....Snohomish Ry. 529.		Hall Molique & Co. Anacortes, silver. Tunnel.
"....."		Monte Cristo Development Co., Everett, Wash., Pacific av. W. F. Brown, prest. and mgr.; F. O. Coe, secy.; G. I. Brown, treas. Cap. stk. \$50,000. Eighteen claims, gold and silver (developing). R. M. Burnett, supt.
Snohomish.....Snohomish Ry. 552, 665.		Gold Eagle Mining & Milling Co., Tacoma, Wash., Stephen Holbrook, prest.; W. E. Hacker, secy. and treas.; Win. J. Caplin, mgr. and supt. Cap. stk. \$3,000,000. Seven claims, silver. Shaft, tunnel and slope; free; water (developing).
Snoqualmie.....King Ry. 665 (16 miles).		Silver King Mining Co., Seattle, Wash., Sullivan Bldg., Room 54, J. S. McLain, prest. and mgr.; Oliver P. Briggs, secy. and treas. Cap. stk. \$300,000. Silver King, gold, silver and lead. Shaft and tunnel; free; water and electricity (developing).

## IRON

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, BLAST FURNACES, ETC., AND NAME OF MINE SUPERINTENDENT.
Valley.....Stevens Ry. 635.		Capital Mining Co., Seattle, Wash., P. O. Box 865. J. E. Porter, prest.; S. M. Allen, secy.; J. E. Houghton, treas. and supt. Cap. stk. \$300,000. Capital, limonite. Tunnel and pit, 6,000 tons.

## STONE, MARBLE, GRANITE AND ONYX

LOCATION OF MINE OR QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE OR QUARRY, KIND OF STONE, KIND OF MINE OR QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STONE OR MARBLE MILLS, LIMESTONES AND CAPACITY, ETC., AND NAME OF MINE SUPERINTENDENT.
Chuckanut Ry. 552.	Whatcom	Roesler & Roth, New Whatcom, Wash., Roth Block, cor. Thirteenth and G sts. Cap. \$100,000. Chuckanut, sandstone. Open pit, 35,000 tons; steam; mill. Fred. Harknell, supt.
Colville.....	Stevens	Columbia Marble & Granite Co., Spokane, Wash., Hyde Block. Samuel Douglas, prest.; J. W. Douglas, secy. Cap. stk. \$500,000. Marble (developing).
Sherwood.....	King	Smith & Green. Cap. \$20,000. Sherwood City, sandstone. Open pit; steam and water; mill. Wells Green, supt.
Tenino.....	Thurston	Eureka Sand Stone Co., Tacoma, Wash., cor. Thirteenth st. and Pacific av. Arthur McMullen, prest. and mgr.; F. M. Talbot, secy. and treas. Eureka, sandstone. Open pit, 48,000 tons; steam; mill.
Valley.....	Stevens	Washington Decorative Marble Co., Spokane, Wash. John Rigby, prest., mgr. and supt. Thos. H. Cay- anugh, secy.; Jacob Hoover, treas. Cap. stk. \$250,000. Ophit, onyx, marble and granite. Open pit; steam.
Wenatchee.....	Kittitas	J. C. Steele (local), Tacoma, Wash., 202 Chamber of Commerce. Washington, onyx. Open pit.
Ry. Ellensburg 529.		
Whatcom.....	Whatcom	N. C. Hadley. Selhome, sandstone. Open pit; hand.
Ry. 56, 665.		
Wilkeson.....	Pierce	Mitchell & Smith, Tacoma, Wash., 1340 Pacific av. Cap. \$20,000. Wilkeson, sandstone. Open pit, 30,000 tons; hand. Joseph T. Mitchell, supt.
Ry. 529.		

SEE ALSO SUPPLEMENTARY LIST

## WEST VIRGINIA

## BROMYRITE

LOCATION OF MINE,  
RAILWAYS, WATER ROUTES  
AND SHIPPING POINT.

NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK,  
NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND  
OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.

TOWN AND COUNTY.

Malden Kanawha John M. Collins, Charleston, W. Va. Bromine, 15 tons; chloride of calcium, 700 tons; steam.  
Ry. 132.

## COAL—BITUMINOUS

LOCATION OF MINE,  
RAILWAYS, WATER ROUTES  
AND SHIPPING POINT.

NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK,  
NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED,  
COAL BREAKERS, WASHERS, COKE OVENS, AND NAME OF MINE SUPERINTENDENT.

TOWN AND COUNTY.

Aene Kanawha Stevens Coal Co. F. L. Garrison, mgr. Cap. \$150,000. Aene, Keystone, Drifts, 20,000 tons. E. F. Stevens, supt.  
Ry. Coalburg 151, 3429.

Algoma McDowell Arlington Coal & Coke Co. Lynchburg, Va. T. W. Gillim, pres.; J. R. Gillim, secy. and treas.; James Johnson, mgr. Cap. stk. \$50,000. (Developing.)  
Ry. Powhatan 523.

Austen Preston Austen Coal & Coke Co. Charles Jessop, mgr. Austen. Open pit; horse, hand.  
Ry. 42.

Baneroft Putnam Kanawha & Lake Erie Coal Co. Cap. \$30,000. Baneroft. Drift, 25,000 tons; horse. M. P. Francis, supt.  
Ry. 344.

Caperton Fayette New River Coke Co., Stanton, Va., P. O. Box 18. M. Erskine Miller, pres., treas. and mgr. Cap. stk. \$500,000. New River, Tunnel, 100,000 tons; hand; 150 coke ovens, capacity 50,000 tons. J. H. Ferguson, supt.  
Ry. 132.

Claremont Fayette Beechwood Coal & Coke Co. J. L. Beury, pres.; E. W. Bridge, secy.; John D. Campbell, treas.; C. C. Beury, mgr. Cap. stk. \$45,000. Beechwood, Keystone. Open pit, 140,000 tons; horse; 31 coke ovens, capacity 12,000 tons. Wm. Hunter, supt.  
Ry. 32.

Clarksburg Harrison Central West Virginia Coal & Coke Co. M. L. Hutelinson, pres.; M. D. Post, secy. and treas.; Ira C. Post, mgr. Cap. stk. \$50,000. Drift; steam (developing.)  
Ry. 42, 465, 800.

" Despard Gas Coal Co., Baltimore, Md., 4 S. St. Charles St. F. Mayer, pres.; A. H. Heet, secy.; S. S. Carroll, treas. Cap. stk. \$200,000. Despard No. 2. Tunnel, 45,000 tons; horse, hand, 18 coke ovens, capacity 7,000 tons. Mard Lewis, supt.  
" " "

Clements Marion Hutchinson Bros. & Hlured, Cap. \$6,000. Linden. Drift, 40,000 tons; horse; 50 coke ovens, capacity 25,000 tons.  
P.O. Scottdale Ry. 42. D. B. Brooks, supt.

" Pool Coal & Coke Co., Pittsburg, Pa., 33 Fourth av. John Robinsteen, pres.; C. W. Pool, secy., treas. and mgr. Cap. stk. \$500,000. Clements. Drift; steam; 50 coke ovens (developing.). D. B. Brooks, supt.  
" " "

Clifton Mason Clifton Salt & Bromine Co. George Clifton, propr. Clifton. Tunnel, 16,000 tons; horse. Thomas Middleton, supt.  
Ry. 533, 534.

" Hysell & Edwards, Middleport, Ohio. Sterling. Open pit, 3,500 tons; hand. W. E. Edwards, supt.  
" " "

Coalburg Kanawha Robinson Coal Co. John A. Robinson, pres.; Neil Robinson, secy. and treas.; Arthur Robinson, mgr. Cap. stk. \$50,000. Coalburg. Tunnel; horse.  
Ry. 139, 342.

Coopers Mercer Mill Creek Coal & Coke Co. Wm. Beury, pres.; T. H. Cooper, secy.; John Cooper, treas. and mgr. Cap. stk. \$350,000. Stirling. Tunnel, 245,340 tons; horse, steam; 150 coke ovens, capacity 88,750 tons. Bryan Dennen, supt.  
Ry. 523.

Corinth Preston Oakland Coal & Coke Co., Baltimore, Md., 21 S. Gay st. Jacob H. Taylor, pres.; E. D. Hoffman, secy.; Charles J. Taylor, treas.; Robert I. Anderson, mgr. and supt. Cap. stk. \$500,000. Oakland. Tunnel, 100,000 tons; horse, steam; 56 coke ovens, capacity 25,000 tons.  
Ry. 42.

" Snowy Creek Coal & Coke Co. Wm. T. Gates, pres.; G. T. Plummer, secy.; George H. Sharp, treas.; David Williamson, mgr. Cap. stk. \$1,000,000. Slope; steam (developing.)  
" " "

Crown Hill Kanawha Belmont Coal Co. Cap. \$25,000. Belmont. Tunnel, 70,000 tons; horse, steam. T. E. Embleton, supt.  
Ry. 132.

" G. W. Champ. Cap. \$20,000. Champion. Tunnel; horse. John Barrister, supt.  
" " "

" New York & West Virginia Coal & Iron Co., New York, N. Y., 18 Broadway. Joseph Hayes, pres.; John S. Lockwood, secy. and treas.; Brewer Smith, mgr. and supt. Cap. stk. \$500,000. Crown Hill. Tunnel, 20,000 tons; horse.  
" " "

Dunlow Wayne Dunlow Coal Co. Frederick J. Amweg, pres.; Edward C. Collins, secy.; Edward J. Collins, treas. and gen. mgr. Cap. stk. \$50,000. Open pit; horse (developing.). Thomas Nichol, supt.  
Ry. 132, 523.

Eagle Fayette Wyant Coal & Coke Co. Wm. Wyant, pres.; Thomas Wharton, secy. Cap. stk. \$100,000. Eagle, Diamond. Open pit, 125,000 tons; horse; 54 coke ovens, capacity 24,000 tons.  
Ry. Frederick 132.

Eastbank Kanawha Eastbank Coal & Coke Co. Stuart M. Buck, pres.; G. R. Buck, secy. and treas.; J. W. Wilson, mgr. and supt. Eastbank. Tunnel, 30,000 tons; horse; 12 coke ovens, capacity 3,000 tons.  
Ry. 3429, 132.

Edgewater Fayette Carver Bros. Cap. \$150,000. Edgewater. Open pit, 100,000 tons; gravity. Enoch Carver, supt.  
Ry. 132.

Elk Garden Mineral West Virginia Central & Pittsburg Railway Co., Baltimore, Md., H. G. Davis, pres.; F. W. I. Moore, secy. and treas.; T. B. Davis, mgr. Elk Garden and 6 others. Open pit, 400,000 tons; steam, horse, A. C. Rawlings, supt.  
Ry. 739.

Elkhorn McDowell Crozer Coal & Coke Co., Upland, Pa. Samuel A. Crozer, pres.; Francis E. Weston, secy.; Edward Crozer, treas.; Wm. J. Harris, mgr. Tunnel; steam; 250 coke ovens.  
Ry. 523.

## COAL—BITUMINOUS (CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BRAKERS, WASHERS, COKE OVENS, AND NAME OF MINE SUPERINTENDENT.
TOWN	AND COUNTY.	
Elmo	Fayette Ry. 132.	W. A. Burke Coal Co., Staunton, Va. W. A. Burke, mgr. Elmo. Tunnel, 40,000 tons; horse. Ashby Burke, supt.
Fairmount	Marion Ry. 42, 465.	Central Gas, Coal & Coke Mining Co., O. Jackson, propr. Cap. \$25,000. Central. Open pit, 20,000 tons; horse; 16 coke ovens, capacity 7,000 tons. J. Smaus Jackson, supt.
"	"	Gaston Gas Coal Co., James O. Watson, prest. and mgr.; John A. Boyce, seey. and treas. Cap. stk. \$100,000. Gaston. Drift, 135,000 tons; steam, horse, electricity; breaker, washer, 60 coke ovens, capacity 23,450 tons. S. L. Watson, supt.
"	"	Newburg Orrell Coal & Coke Co., Baltimore, Md., 33 S. Gay st. J. H. Lee, prest. Pahtine, Aurora. Open pit, 83,500 tons; horse. Morgan D. Orr, supt.
"	"	West Fairmount Coal & Coke Co., Charles Mackall, prest.; George De Bolt, seey.; J. E. Watson, treas. and mgr. West Fairmount. Shaft, 150,000 tons; steam; 36 coke ovens, capacity 8,000 tons. David Evans, supt.
Farmington	Marion Ry. 42.	Pittsburgh Gas, Coal & Coke Co., Allegheny, Pa., 125 Sandusky st. John D. Davis, prest.; W. E. McMurray, seey.; W. E. Ross, treas. Cap. stk. \$250,000. Farmington. Shaft.
Farmington	Harrison (P. O. Clarksburg) Ry. 465.	West Fork Coal & Coke Co., R. L. Martin, prest.; Paul Faranu, seey. and treas. Cap. stk. \$25,000. West Fork. Drift, 30,000 tons; horse; 30 coke ovens, capacity 27,000 tons. W. C. Reynolds, supt.
Fire Creek	Fayette Ry. 132.	Fire Creek Coal & Coke Co., M. Erskine Miller, prest., seey. and treas.; G. C. H. Caperton, mgr. and supt. Cap. stk. \$100,000. Fire Creek. Tunnel, 100,000 tons; 28 coke ovens, capacity 30,000 tons.
Fleuding	Wayne Ry. 523.	Coaldale Mining & Manufacturing Co., Ed. Coates, prest.; W. Henning, seey.; H. J. Tondy, fires. and mgr. Cap. stk. \$25,000. Coaldale. Open pit; horse (developing). L. T. Cook, supt.
Freeman's	Mercer Ry. 523.	Booth-Bowen Coal & Coke Co., Wm. Booth, prest.; J. P. Bowen, v.-prest. and supt.; Harry Bowen, seey.; James Booth, treas. and mgr. Cap. stk. \$75,000. Booth-Bowen. Tunnel, 198,174 tons; horse, steam; 91 coke ovens, 12,293 tons coke.
Glen Falls	Harrison (P. O. Clarksburg) Ry. 491.	Glen Falls Coal & Coke Co., Edmund Morgan, prest.; E. F. Moore, seey. Cap. stk. \$150,000. Glen Falls.
Goodwill	Mercer Ry. Bramwell 523.	Louisville Coal & Coke Co., R. T. Watts, prest.; Justus Collins, seey., treas. and mgr. Cap. stk. \$20,000. Louisville. Drift, 110,000 tons; steam, horse; 75 coke ovens, capacity 27,000 tons. Wm. Gamplin, supt.
Harford City	Mason Ry. 533, 534.	Juhling Coal Co., Wm. Juhling, prest. and mgr.; Oswald Juhling, seey. and treas. Cap. stk. \$25,000. California. Slope, 40,000 tons; steam. Richard Turnbull, supt.
"	"	Liverpool Salt & Coal Co., A. E. Smith, prest. and treas.; Charles Clifton, seey. and mgr. Cap. stk. \$15,000. Tunnel, 15,000 tons; horse. Harry Hart, supt.
Kyle	McDowell Ry. Elkhorn 523.	Elk Ridge Coal & Coke Co., J. H. Brannwell, prest.; C. W. Seaman, seey. and treas.; R. R. Goodrich, mgr. Cap. stk. \$50,000 (developing).
Landgraf	McDowell Ry. 523.	Shawnee Coal & Coke Co., Bramwell, W. Va., L. A. Welch, prest.; J. C. Freeman, seey. and treas.; W. R. Graham, mgr. Cap. stk. \$100,000. Tunnel, steam. W. T. S. Jones, supt.
McDowell	McDowell P. O. and Ry. Elkhorn 523.	Eureka Coal & Coke Co., R. H. T. Adams, prest.; Allen W. Talley, seey. and treas.; L. E. Tierney, mgr. Cap. stk. \$100,000. Eureka. Tunnel; steam.
"	"	Greenbrier Coal & Coke Co., Justus Collins, prest.; C. W. Jones, seey. and treas.; Hugh Jones, mgr. Cap. stk. \$100,000. Tunnel. Capacity, 100,000 tons; steam.
Malden	Kanawha Ry. 342, 132.	Pioneer Coal Co., Cincinnati, Ohio, foot of Broadway, A. Montgomery, prest.; J. B. Lovell, seey. and treas. J. J. Lovell, mgr. Cap. stk. \$150,000. Slope, 125,000 tons; steam. John Holder, supt.
Mason	Mason Ry. 533, 534.	Hope Salt & Coal Co., Edward Edwards, prest.; D. C. Davis, seey. and treas. Cap. stk. \$90,700. Hope. Tunnel, 130,000 tons; horse. Henry Williams, supt.
Mayhenry	McDowell Ry. 523.	Elkhorn Coal & Coke Co., E. Barlow, prest. and mgr.; A. D. Robertson, seey. and treas. Cap. stk. \$100,000. Open pit, 100,000 tons; horse; 180 coke ovens, capacity 30,000 tons. J. A. Cardwell, supt.
"	"	Norfolk Coal & Coke Co., Stuart M. Buck, prest.; E. J. Hutcheson, v.-prest.; Joseph S. Clark, seey. and treas. Cap. stk. \$300,000. Norfolk. Drift, 125,000 tons; steam; 120 coke ovens, capacity 40,000 tons.
"	"	Norfolk Coal & Coke Co., Stuart M. Buck, prest., mgr. and supt.; J. S. Clark, seey. and treas. Cap. stk. \$300,000. Norfolk. Tunnel, 180,000 tons; horse, steam; 172 coke ovens, capacity 50,000 tons.
Monongah	Marion Ry. 465.	J. S. Camden, prest.; J. E. Sams, seey. and treas.; B. B. Spillman, mgr. Cap. stk. \$2,000,000. Monongah. Slope, 450,000 tons; electricity, breaker, washer, 323 coke ovens, capacity 125,000 tons. M. G. Tyler, supt.
Montana Mines	Marion Ry. 42.	Montana Coal & Coke Co., James O. Watson, prest.; George De Bolt, seey.; J. E. Watson, treas. and mgr. Cap. stk. \$200,000. Montana. Open pit, 185,450 tons; steam; washer, 158 coke ovens, capacity 75,000 tons. J. C. Gaskill, supt.
Moundsville	Marshall Ry. 42.	Moundsville Coal Co., J. C. Bardall, prest.; J. O. Brooks, seey. and mgr.; H. W. Hunter, treas. Cap. stk. \$50,000. Moundsville. Shaft, 80,000 tons; steam. John Brooks sr., supt.
Mount Carbon	Fayette Ry. 122.	Great Kanawha Colliery Co., Ltd., Synington Macdonald, mgr. Cap. stk. \$500,000. Great Kanawha. Tunnel, 130,000 tons; horse; 66 coke ovens, capacity 25,000 tons.
Mount Clare	Harrison Ry. 800.	Mount Clare Coal Co., J. A. Crislap, prest. and mgr.; I. H. Jones, seey.; Wm. I. Davison, treas. Cap. stk. \$24,000. Slope, tunnel, 30,000 tons; horse.
Newell	Fayette (P. O. Sewell Depot) Ry. 132.	Cumard Coal Co., Rush Run, W. Va. J. Fred Effinger, prest.; F. Howden, seey., treas. and mgr. Tunnel. John H. Bell, supt.
Nuttallburg	Fayette Ry. 132.	Nuttallburg Coal & Coke Co., Nuttallburg, Keeney's Creek. 180,000 tons; hand; 70 coke ovens. W. H. Holland, supt.
Opekiska	Monongalia Ry. 42.	Acme Coal & Coke Co., E. Ryder, prest.; Frank Elden, seey. and treas.; C. E. Hutcheson, mgr. Cap. stk. \$60,000. Opekiska. Drift, 60,000 tons; horse; 20 coke ovens, capacity 10,000 tons. Wm. Hanson, supt.
Piedmont	Mineral Ry. 42, 200.	Davis & Elkins Coal Co., T. B. Davis, prest.; W. T. Blackiston, seey., mgr. and supt.; H. G. Buxton, treas. Cap. stk. \$100,000. Windor. Drift, 100,000 tons; steam.



## COAL—BITUMINOUS (CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, COKE OVENS, AND NAME OF MINE SUPERINTENDENT.
TOWN	AND COUNTY.	
Plymouth Ry. 344.	Pulham	Carver Coal Co., Edgewater, W. Va. John Carver, pres.; Enoch Carver, secy. and treas.; James Carver, mgr. and supt. Cap. stk. \$50,000. Plymouth. Tunnel, 75,000 tons; horse.
Powellton Ry. Handley 132, 342B.	Fayette	Mount Carbon Co., Ltd., London, Eng., 500 Capital Bldg. H. C. Newson, pres.; A. B. Seel, secy.; Evan Powell, mgr. Cap. stk. \$200,000. Powellton. Tunnel, 150,000 tons; horse; breaker, 202 coke ovens, capacity 75,000 tons. W. A. Newhall, supt.
Powhatan Ry. 523.	McDowell	Powhatan Coal & Coke Co., J. J. Thorne, pres.; Alfred D. Wolf, secy. and treas.; Lawrence E. Tierney, mgr. Cap. stk. \$100,000. Powhatan. Open pit and tunnel, 180,000 tons; steam and horse; tipples; 150 coke ovens, capacity 35,000 tons. James Hetherman, supt.
Quinnimont Ry. 132.	Fayette	Quinnimont Coal & Iron Co., W. R. Wister, pres.; Charles Gilpin jr., secy. and treas.; D. C. Boyce, mgr. Cap. stk. \$200,000. Quinnimont. Drift, 70,000 tons; steam; 100 coke ovens, capacity 23,000 tons. John McIntosh, supt.
Rofe Ry. Elkhorn 523.	McDowell	Roanoke Coal & Coke Co., Roanoke, Va., Terry Bldg. J. B. Fishburne, pres.; A. D. Rice, secy. and treas.; W. S. Conell, mgr. and supt. Cap. stk. \$50,000. Tunnel; horse; 10 coke ovens (developing).
Rush Run Ry. 132.	Fayette	Brooklyn Coal Co., J. Fred. Effinger, pres.; John H. Howard, secy.; W. P. Tams, treas.; F. Howard, mgr. Cap. stk. \$55,000. Pinlow. Drift, 50,000 tons. John H. Bell, supt.
"	"	Red Ash Coal Co., J. Fred. Effinger, pres.; John H. Howard, secy.; W. P. Tams, treas.; F. Howard, mgr. Cap. stk. \$55,000. Red Ash. Drift, 50,000 tons. John H. Bell, supt.
"	"	Royal Coal & Coke Co., J. Fred. Effinger, pres.; John H. Howard, secy.; W. P. Tams, treas.; F. Howard, mgr. Cap. stk. \$55,000. Prince. Drift, 50,000 tons. John H. Bell, supt.
"	"	Rush Run Coal & Coke Co., J. Fred. Effinger, pres.; John H. Howard, secy.; W. P. Tams, treas.; F. Howard, mgr. Cap. stk. \$55,000. Rush Run. Drift, 50,000 tons. John H. Bell, supt.
Simpson Ry. 42.	Taylor	Simpson Coal Co., W. E. Colborn, mgr. and supt. Simpson. Tunnel, 40,000 tons; horse.
Spilman Ry. Camden 533, 534.	Mason	Consumers' Coal & Mining Co., B. D. Spilman, pres.; O. A. Roush, secy. and treas.; H. E. Spilman, mgr. and supt. Cap. stk. pd. up \$15,000. Camden. Open pit, drift, 50,880 tons; steam, electricity.
Springfield Ry. Meadow Creek 132.	Hampshire	Springfield & New River Developing Co., Springfield, W. Va., J. E. Myres, pres. and mgr.; J. W. Ferguson, secy. and treas. Cap. stk. \$25,000. (Developing.)
Spring Hill Ry. 132, 344.	Kanawha	Black Band Mining & Manufacturing Co., Spring Hill, W. Va., J. W. Humbird, pres.; Robert McDonald, secy.; A. M. Workfledge, mgr. Black Band. Drift, 200 tons; steam. James Noble, supt.
Thomas Ry. 729.	Tucker	H. G. Davis Coal Co., H. G. Davis, pres.; F. S. Lands-true, secy. and supt.; H. G. Buxton, treas. and mgr. Cap. stk. \$80,000. Thomas. Drift, shaft, 200,000 tons; horse; 50 coke ovens, capacity 10,000 tons.
Tunnelton Ry. 42.	Preston	West End Coke Co., A. J. Bonafeld, pres. and mgr.; U. T. Orr, secy.; W. H. Watkins, treas. Cap. stk. \$100,000. West End. Open pit, 15,000 tons; horse; 10 coke ovens, capacity 4,200 tons. John W. Bonafeld, supt.
Tyreconnell Mines Ry. 42.	Taylor	Newburg Orrel Coal & Coke Co., Baltimore, Md., 33 S. Gay st. Cap. stk. \$50,000. Tyreconnell. Tunnel; steam.
Union Mines Ry. Handley 132.	Kanawha	Mount Morris Coal Co., Charles Trudgen, pres. and treas.; Park Chapman, secy.; Samuel Chirgvin, mgr. Cap. stk. \$10,000. Mount Morris. Tunnel, 75,000 tons; horse.
Vivian Ry. 523.	McDowell	Peerless Coal & Coke Co., R. C. Luthier, pres.; D. B. Lewis, secy.; Geo. C. Clausen, treas.; H. C. Zacharias, mgr. Cap. stk. \$150,000. Peerless Colliery. Tunnel; steam; 60 coke ovens.
Wellsburg Ry. 584.	Brooke	Forbes, Carmichael & Co., Wellsburg. Tunnel, open pit, 17,000 tons; horse. William Forbes, supt.
Winifrede Ry. 132, 324.	Kanawha	Winifrede Coal Co., Philadelphia, Pa., 518 Walnut st. Theodore Wright, pres.; D. W. Chandler, secy. and treas.; R. B. Cassady, mgr. and supt. Cap. stk. \$800,000. Winifrede. Open pit, 350,000 tons; steam; horse.

## SALT

LOCATION OF MINE OR WELL, RAILWAYS, WATER ROUTES AND SHIPPING POINT.		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF PRODUCT, KIND OF MINE OR WELL, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN	AND COUNTY.	
Hartford City Ry. 534.	Mason	Liverpool Salt & Coal Co., A. E. Smith, pres. and treas.; Charles Clifton, secy. and mgr. Cap. stk. \$15,000. Wells, 65,000 brls.; steam.
Malden Ry. 132.	Kanawha	J. Q. Dickinson & Co., Cap. \$60,000. Well, 31,000 brls.; steam.
Mason Ry. 533.	Mason	Southth Salt Co., B. J. Redmond, pres. and treas.; I. H. Moore, secy.; J. C. Kaulz, mgr. Cap. stk. \$30,000. Domestic. Wells, 60,000 brls.; steam. Virgil Moore, supt.

## SAND

LOCATION OF MINE OR BANK, RAILWAYS, WATER ROUTES, AND SHIPPING POINT.		NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE OR BANK, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, ETC., AND NAME OF SUPERINTENDENT.
TOWN	AND COUNTY.	
Berkeley Springs Ry. 42.	Morgan	Berkeley Sand Co., Pittsburg, Pa., 113 Carson st. J. D. Wilson, pres.; F. K. Bryce, secy.; Thomas F. Challinor, treas. Cap. stk. \$0,000. Sand. Open pit, 30,000 tons; steam.

## STONE, MARBLE, GRANITE AND ONYX

LOCATION OF MINE OR QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE OR QUARRY, KIND OF STONE, KIND OF MINE OR QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STONE OR MARBLE MILLS, LIMESTONES AND CAPACITY, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Alderson.....Monroe Ry. 132.	Alderson Brown Stone Co., Richmond, Va., 1115 Main st. James D. Crump, prest.; George W. Clark, secy. and treas. Cap. stk. \$100,000. Alderson, sandstone. Open pit, 5,000 tons; steam. T. P. Honsby, supt.
Hinton.....Summers Ry. 132.	Virginia Brown Stone Co., Cincinnati, Ohio, 54 Carew Bldg. John L. Scanlan, prest.; H. L. Thornton, secy.; Charles McDonald, treas. and mgr. Cap. stk. \$100,000. Sandstone. Open pit, 10,000 tons; steam; mill. John McCool, supt.

SEE ALSO SUPPLEMENTARY LIST

## WISCONSIN

## GOLD AND SILVER

LOCATION OF MINE,  
RAILWAYS, WATER ROUTES  
AND SHIPPING POINT.

TOWN AND COUNTY

NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK,  
NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND  
OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.

Ellis ..... Pepin  
Ry. Maxwell 141/3 mi. Wabasha Mining Co., Wabasha, Minn. C. Johnson, pres't., treas. and mgr.; J. H. Mullen, secy. Cap. stk. \$500,000. Wabasha, silver. Shaft; free.

## IRON

LOCATION OF MINE,  
RAILWAYS, WATER ROUTES  
AND SHIPPING POINT.

TOWN AND COUNTY

NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK,  
NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND  
OF POWER USED, BLAST FURNACES, ETC., AND NAME OF MINE SUPERINTENDENT.

Commonwealth Florence Commonwealth Iron Co., Cleveland, Ohio, 61 and 62 Wade Bldg. E. W. Oglesby, pres't.; C. W. Merrell, secy.; John F. Whitelaw, treas. Cap. stk. \$500,000. Commonwealth, Badger and Davidson, hematite. Shafts and open pits, 151,870 tons; steam. O. C. Davidson, supt.

Florence Florence Florence Iron River Co., New York City, 46 Wall st. John Scott, pres't.; H. Paderstein, secy. and treas. Florence, red hematite. Shaft, 200,000 tons; steam. S. T. Beattie, supt.

Hubbard ..... Dodge  
(P. O. Iron Mountain) Ry. Iron Ridge 311. Northwestern Iron Co., Milwaukee, Wis., 67 New Insurance Bldg. Irving M. Bean, pres't. and mgr.; W. K. Packman, secy.; Chas. F. Hsley, treas. Cap. stk. \$500,000. Iron Ridge, red hematite. Open pit, 18,000 tons; horse.

" Winter's Metalle Paint Co., Iron Mountain, Wis. L. B. Winter, pres't., treas. and mgr.; F. W. Barrows, secy. Cap. stk. \$10,000. Iron Ridge, hematite. Open pit, 800 tons; steam.

Hurley Ashland Montreal River Iron Mining Co., Cleveland, Ohio, 39 Wade Bldg. J. H. Wade jr., pres't.; E. W. Oglesby, secy.; G. A. Giffelson, treas.; Geo. H. Abel, mgr. and supt. Cap. stk. \$500,000. Montreal, hematite. Shafts; steam.

" Odanah Iron Co., Milwaukee, Wis., 148 New Insurance Bldg. S. S. Curry, pres't.; H. S. Haselton, secy.; Francis Hinton, treas. Cap. stk. \$550,000. Carey, West Carey and Odanah, hematite. Shafts; steam. C. H. Munger, supt.

" Penokee & Gogebic Consolidated Mining Co., Cleveland, Ohio, Perry-Payne Bldg. Joseph L. Colby, treas. Cap. stk. \$1,000,000. Colby, bessemer, hematite. Shaft, 200,000 tons; steam. W. J. Wolcott, supt.

Iron Belt Ashland Iron Belt Mining Co., Cleveland, Ohio. L. H. Severance, pres't.; John L. Severance, secy.; D. E. Leslie, treas. Cap. stk. \$5,000,000. Iron Belt, bessemer, red hematite. Shaft, 150,000 tons; steam. Duncan McNichie, supt.

Ironton Sauk Iron Mountain Ore & Furnace Co. G. W. Andrews, pres't., mgr. and supt.; H. C. Gridley, secy.; J. C. O. Gorman, treas. Cap. stk. \$200,000. Sauk, red hematite. Open pit, 3,000 tons; hand and horse; furnace.

Knight Ashland Union Iron Mining Co., Ashland, Wis. H. H. Guisberg, pres't.; F. H. Payne, secy.; L. Kolman, treas.; Wm. Jocko, mgr. and supt. Cap. stk. \$10,000. Sampson, shaft; steam.

Vaughn Ashland Germania Iron Mining Co., Hurley, Wis. E. A. Hayes, pres't.; W. P. Lyon, secy.; J. O. Hayes, treas. and mgr. Cap. stk. \$1,000,000. Germania, brown hematite. Shafts, 100,000 tons; steam and compressed air. D. D. Smith, supt.

" Gogebic Developing Co., Chicago, Ill. Chas. F. Harding, pres't.; Geo. F. Westover, secy.; Frank Farwell, treas.; R. R. Trezona, mgr. and supt. Cap. stk. \$5,000,000. F. Hennepin, Pence and Snider, red hematite. Shaft, 55,000 tons; steam.

Weyerhaeuser Chippewa Minnesota Mining Co., Minneapolis, Minn. W. H. Hinkle, pres't.; J. Hume, secy.; Frank Foote, treas.; J. N. Stacy, mgr. Cap. stk. \$1,000,000. Minnesota, bessemer. Shafts; hand (developing).

## LEAD AND ZINC

LOCATION OF MINE,  
RAILWAYS, WATER ROUTES  
AND SHIPPING POINT.

TOWN AND COUNTY

NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK,  
NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND  
OF POWER USED, SMELTERS, ETC., AND NAME OF MINE SUPERINTENDENT.

Benton La Fayette Benton Lead & Zinc Mining Co. P. A. Ostrom, pres't.; J. Buchan, secy. and treas.; T. H. Ewing, mgr. and supt. Cap. stk. \$18,000. Benton Blend, zinc. Shaft, 2,000 tons; horse.

" Calvert Bros. Cap. \$4,000. Well Strike, lead. Shafts, 100 tons; horse. Joseph Alton, supt.

" Coltman Mining Co. Coltman, lead and zinc. Tunnel, 1,300 tons; hand.

Dodgeville Iowa Davis Bros. Cap. \$4,000. Dodgeville, lead and zinc; horse.

" Evans Bros. Cap. \$2,000. Kangaroo, zinc and lead. Shafts, 150 tons; horse and hand. T. M. Evans, supt.

" Joseph Sobey & Co. Cap. \$5,000. Dodgeville, lead and zinc. Shafts, 330 tons; horse. Thos. B. Davis, supt.

" Whitford & Kelley, Cap. \$10,000. Calumet and Hecla, lead. Shafts, 4,000 tons; steam. Joseph Shafer jr., supt.

Harrison Grant Hillary, Richter & Co., Platteville, Wis. Crabtree, zinc. Shaft, 200 tons; hand.

(P. O. Platteville) Ry. 141, 156.

## LEAD AND ZINC—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, SMELTERS, ETC., AND NAME OF MINE SUPERINTENDENT.
Grant Ry. Cuba City 150.	Jamestown	May & Brant, South Menominee. Lead. Shafts; free; horse and hand; furnace. Conrad May, supt.
Iowa Ry. Edmund 150.	Linden	Linden Mine Co. Wm. Adams, prest. and supt.; John Bowden, secy.; John Vial, treas.; John Adams, mgr. Cap. stk. \$100,000. Linden, lead and zinc. Shaft, 200 tons.
"	"	W. Ross & Co., Mineral Point, Wis. Linden, lead and zinc. Shafts, 200 tons.
Iowa Ry. Rewey 150.	Mifflin	Livingston & Mifflin, Livingston, Wis. Cap. \$10,000. Coker, lead and zinc. Shaft, 1,200 tons; steam. John Kain, supt.
"	"	Union Mining Co., Mineral Point, Wis. Wm. Bainbridge, prest.; George Bainbridge, secy. and treas.; Jas. Spensley, mgr. and supt. Cap. stk. \$100,000. Union, zinc. Shaft (developing).
Iowa Ry. 141.	Mineral Point	Wm. & Jas. A. Hoare. Hoare, lead and zinc. Shaft, 500 tons; horse and hand.
"	"	Jones & Snow. Zinc. Shafts, 1,500 tons; horse. John Jackson, supt.
"	"	Spensley, Jones & McLehon. Bonanza, zinc. Shaft, 1,000 tons; horse. James Thrasher, supt.
"	"	Tyack & Oates, Iowa st. (local). Lead and zinc. Shaft, 45 tons; hand.
La Fayette Ry. Benton 150.	New Diggings	Empress Mining Co. Joseph Coulthard, mgr. and supt. Empress, zinc. Shaft and tunnel, 400 tons; hand.
"	"	Eureka Mining Co., Benton, Wis. Wm. Curwin, prest.; P. H. Whaley, secy. and treas. Eureka, tunnel, 200 tons. T. Coniskey, supt.
"	"	Ida Mining Co., Richard Sherwin, secy.; George Hoffman, mgr. and supt. Ida, lead and zinc. Shaft, 1,000 tons; steam.
"	"	Robert E. Lee Mining Co., Etna, Wis. T. A. McCarthy, prest.; Joseph Coulthard, secy. and supt.; John Coulthard, treas.; M. J. McCarthy, mgr. Cap. stk. \$25,000. Robert E. Lee, zinc. Shaft and tunnel, 500 tons.
"	"	Sallie Waters Mining Co. M. Newman, prest. and supt. Will McElvney, secy., treas. and mgr. Sallie Waters, lead and zinc. Shaft, 1,000 tons; steam.
"	"	Zinc Carbonate Co., Shullsburg, Wis. John H. Savage, prest.; A. Hayden, secy. and treas.; F. C. Richmond, mgr. Cap. stk. \$25,000. Lead and zinc. Tunnel, 2,200 tons; steam. Henry Hoffman, supt.
Grant Ry. 141, 150.	Platteville	Graham & Holzer. Graham's, lead. Shaft, 35 tons; hand.
"	"	Spensley Hutchinson. Silver Plume. Lead and zinc. Shaft, 1,500 tons; horse.
"	"	Murphy & Stephens. Cap. \$10,000. Lead. Shaft, 100 tons; hand.
"	"	Schroeder Bros. & Wolf. Cap. \$2,500. Lead. Shaft, 55 tons; hand.
"	"	Stephens & Stephens. Lead and zinc. Shaft and tunnel, 200 tons; hand.
La Fayette Ry. 141.	Shullsburg	Lucky Hit Mining Co. Lucky Hit. Lead and zinc. Shaft, 50 tons; horse.
"	"	Wisconsin Lead & Zinc Co., New York City, 2 Nassau st. W. Rutch, prest.; Frederick Swift, secy. and treas.; Wm. P. Blake, gen. mgr.; Cap. stk. \$1,000,000. Galena, Little Giant, Dry Bone, McCarthy and Helena. Lead and zinc. Shafts, tunnels, open pits, 6,000 tons; steam; furnace. Capt. Higney, supt.
La Fayette Ry. and P. O. Shulls- burg 141.	White Oak	Pick & Gad Mining Co., Shullsburg, Wis. A. A. Townsend, mgr. and supt. Pick and Gad. Lead. Shaft and tunnel, 15 tons.

## MINERAL PAINT

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF PRODUCT, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, PAINT MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
Browd Ry. 380, 150.	Green Bay	Pascal Degtraudgagnage. Whitney Bluff. Open pit, 1 ton; steam.

## STONE, MARBLE, GRANITE AND ONYX

LOCATION OF MINE OR QUARRY RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE OR QUARRY, KIND OF STONE, KIND OF MINE OR QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STONE OR MARBLE MILLS, LIMESTONES AND CAPACITY, ETC., AND NAME OF MINE SUPERINTENDENT.
Marinette Ry. 451.	Amberg	Amberg Granite Co., Chicago, Ill., 119 and 121 La Salle st. W. A. Amberg, prest. and treas.; W. R. Hinsdale, secy. and mgr. Cap. stk. \$150,000. Aberdeen, Argyle, Athelstane, Martindale and Pike, granite. Open pit, 16,000 tons; steam. Ezekiel Edwards, supt.
Ashland Ry. 142, 320, 327.	Ashland	Superior Brownstone Co. W. H. Singer, prest.; W. W. Whitney, secy. Cap. stk. \$50,000. Bass Island, brown sandstone. 10,000 tons; steam; mill.
Bayfield Ry. 386, 220.	Bayfield	Flag River Brownstone Co., Duluth, Minn., 541 Lake av. S. J. F. Fredin, prest.; E. A. Wilson, secy.; C. W. Wilson, treas.; G. J. Miller, mgr. Cap. stk. \$80,000. Flag River, brownstone. Open pit.

## STONE, MARBLE, GRANITE AND ONYX (CONTINUED)

LOCATION OF MINE OR QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE OR QUARRY, KIND OF STONE, KING OF MINE OR QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STONE OR MARBLE MILLS, LIMESTONES AND CAPACITY, ETC., AND NAME OF MINE SUPERINTENDENT.
Bayfield (Continued.)	Bayfield	Iron River Brownstone Co., Duluth, Minn., 606 First National Bank Bldg. A. E. McCorde, pres.; J. F. Capzill, secy. and mgr.; W. G. Crosby, treas. Cap. stk. \$100,000. Iron River, brown sandstone. Slope, 12,000 tons; steam and horse; August Broman, supt.
Beloit Ry. 141, 150.	Rock	William Samp, 412 Wheat st. City, limestone.
Berlin Ry. 141.	Green Lake	Berlin Granite Co. Wm. Bannerman, pres., mgr. and supt. Cap. stk. \$12,000. Berlin, granite. Open pit, 5,000 tons; horse.
"	"	Berlin & Montello Granite Co., Chicago, Ill., 162 Washington st. J. H. Shepard, pres.; C. B. Beach, secy. and treas.; W. H. Bairstow, mgr. Granite. Open pit, 30,000 tons; steam. Geo. Knowles, supt.
"	"	Archibald McCallum, Sweeting st. Cap. \$5,000. McCallum's, blue granite. Open pit, 12,000 tons; horse. J. Popham (local). Popham's, building stone. Open pit; hand.
Black River Falls, Jackson Ry. 143.	Jackson	Arceadian Brownstone Co., Chicago, Ill., 161 LaSalle st. A. J. Cheney, pres.; Austin Moody, secy.; W. S. Maxwell, treas. and mgr. Cap. stk. \$100,000. Arceadian, brown sandstone. Steam.
Brule Ry. 529.	Douglas	A. T. Wickham. South Side, stone, sand, clay. Slope; hand.
Barnside Ry. and P. O. Inde- pendence 296.	Trempealeau	A. T. Wickham. South Side, stone, sand, clay. Slope; hand.
Byron Ry. 827.	Fond du Lac	Christopher Geiger. Cap. \$15,000. Limestone and flagging.
"	"	Hamilton Lime & Stone Co., Ketchikan, Wis. A. K. Hamilton, pres. and treas.; Martin Corwin, secy. and mgr. Cap. stk. \$35,000. Limestone. Open pit; steam; kilns, 20,000 tons. C. M. Fisher, supt.
Dodgeville Ry. 319.	Iowa	Davis Brothers. Cap. \$5,000. Dodgeville, limestone. Horse; limekiln, 12 tons.
Duck Creek Ry. 141, 150.	Brown	Rionx & Bentley. Cap. \$5,000. Duck Creek, limestone. Open pit; steam, hand and horse.
Eden Ry. 150.	Fond du Lac	Marblehead Lime Co., Chicago, Ill., 68 and 50 Canal st. A. T. Howe, pres.; C. C. Bishop, secy. and treas.; A. Newton, mgr. Cap. stk. \$100,000. Eden, limestone and flagstone. Open pit; limekiln, 700 tons. T. G. Kinder, supt.
"	"	Nost Bros., Marblehead, Wis. Cap. \$50,000. Limestone, 15,000 tons.
Fox Lake Ry. 141.	Dodge	A. Fanshaw. Cap. \$1,000. Fox Lake, limestone. Open pit; horse and hand.
Fulton Ry. Edgerton 141.	Rock	G. W. Coxhead, Edgerton, Wis. Building and limestone. Open pit, 800 tons; hand, limekilns, 1,200 tons.
"	"	John Horton. Building stone. Open pit; powder.
Green Bay Ry. 891.	Brown	Pascal Degrandgange. Whitney Bluff, limestone. Steam; mill; limekiln 20 tons.
Green Lake Ry. Ripon 141, 150.	Green Lake	Green Lake Granite Co., Chicago, Ill., 109 and 109 1/2 Tacoma Bldg. John D. Caton, pres.; John D. Sherwood, secy.; Chas. E. Towne, treas. Cap. stk. \$100,000. Green Lake, granite. Open pit, 7,500 tons; steam.
Hortonyville Ry. 419.	Outagamie	David Hodgins. Cap. \$5,000. Limestone. Open pit; kiln.
Houghton Ry. 143.	Bayfield	Hartley Bros., Minneapolis, Minn., 418 Hennepin av. Hartley's, brown sandstone. 10,000 tons; steam; mill.
Howard P. O. and Ry. Duck Creek 150.	Brown	M. Brunette, Velp, Wis. Cap. \$100,000. Old Duck Creek, blue limestone. Open pit, 37,500 tons; steam; mill.
"	"	Wm. Finnegan Brick Manufacturing Co., Fort Howard, Wis. Cap. stk. \$50,000. Blue limestone. Open pit; steam. W. E. Finnegan, supt.
Hubbard Ry. and P. O. May- ville 141.	Dodge	Mayville White Lime Works, Mayville, Wis. Chas. Ruedebusch, pres.; Emil F. Ruedebusch, secy. and treas.; Herman H. Ruedebusch, mgr. Cap. stk. \$34,000. Brown's Corner Stone, limestone. Open pit, 20,000 tons; steam and electricity; mill. David Powers, pres.
Jameau Ry. 150.	Dodge	J. D. Finney. Stone. Open pit; hand; mill.
Kaukauna Ry. 150, 149.	Outagamie	Kaukauna Stone Quarry Co. Cap. \$6,000. Limestone. Open pit, 3,300 tons; steam. J. Jones, supt.
Knapp Ry. 143.	Dunn	Goodyear & Saddle Mount Sandstone Co., La Crosse, Wis. Levi Wisler, pres.; G. R. Vincent, secy. and treas.; Jas. M. Reynolds, mgr. and supt. Cap. stk. \$42,000. Goodyear and Saddle Mount, sandstone. Open pit; steam; mill.
Madison Ry. 141, 150, 319.	Dane	David Stephens. Cap. \$20,000. Stephens, limestone and sandstone. Slope, 30,000 tons; steam, electricity and hand; mill. John Muenster, supt.
Marsfield Ry. 143, 827.	Wood	Johnson & Ward, Milwaukee, Wis., Room 5 Old Insurance Bldg. Wisconsin, red and gray granite. (Developing.)
Medina Ry. 149, 827.	Outagamie	Medina Stone Quarry Co., Appleton, Wis., 708 Appleton st. C. R. Morrison, pres. and treas.; R. S. Baird, secy.; supt. and mgr. Cap. stk. \$10,000. Medina, limestone. Open pit, 5,000 tons; steam.
Menomonie Falls Ry. 450.	Waukesha	Menomonie Falls Quarry Co., Milwaukee, Wis., 100 Wisconsin st. Winifred Smith, pres.; Samuel Rosendale, secy.; Henry Herman, treas.; A. H. Hadfield, mgr. Cap. stk. \$100,000. Menomonie Falls, limestone. Open pit, 40,000 tons; steam; mill. R. J. Blair, supt.
Montello Ry. 827.	Marquette	Berlin & Montello Granite Co., Chicago, Ill., 162 Washington st. Jason H. Shepard, pres.; C. E. Beach, secy. and treas.; W. H. Bairstow, mgr. Cap. stk. \$250,000. Montello, granite. Open pit, 10,000 tons; water; mill. Edward Burns, supt.
Mount Pleasant P. O. and Ry. Racine 141, 150.	Racine	Fox's Lime & Stone Co., Racine, Wis. Cap. \$18,000. Fox's, building and limestone. Open pit, 25,000 tons; steam, horse, kilns, 10,000 tons. J. J. Fox, supt.

## STONE, MARBLE, GRANITE AND ONYX (CONTINUED)

LOCATION OF MINE OR QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE OR QUARRY, KIND OF STONE, KIND OF MINE OR QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STONE OR MARBLE MILLS, LIMERILNS AND CAPACITY, ETC., AND NAME OF MINE SUPERINTENDENT.
Mont Pleasant . . . Racine (Continued.)	Horlick's Lime & Stone Co., Racine, Wis. Alex. Horlick, prest.; G. W. Horlick, secy. and treas. Cap. stk. \$20,000. Horlick's, lime and building stone. 15,000 tons; kilns, 6,000 tons. J. A. Horlick, supt.
New Diggings, La Fayette Ry. Genoa 150.	Joseph Coulthard, Elia, Wis. Empress, bluestone. Shaft and tunnel, 500 tons; horse and hand.
New Richmond St. Croix Ry. 143, 827.	Oakes & Sons. Limestone, soapstone and sandstone. Open pit; water. Wm. Oakes, supt.
Oshkosh . . . Winnebago Ry. 141.	Oshkosh Quarry Co., cor. Knapp and Thirteenth sts. Wm. Faber, prest. and treas.; A. Lutz, secy.; Robert Lutz, mgr. and supt. Blue limestone. Open pit, 48,000 tons; steam.
Pewaukee . . . Waukesha Ry. 141.	Waukesha Stone Co., Milwaukee, Wis., 469 Third st. Oscar Knie, prest. and mgr.; Daniel Meyers, secy.; Fred Kraus, treas. Cap. stk. \$100,000. Waukesha, limestone. 80,000 tons; steam. Frank W. Harland, supt.
Platteville . . . Grant Ry. 141, 150.	Place & Gerds, Cedar st. Cap. \$1,000. Bride, limestone. Open pit, 13,000 tons; hand.
Presque Isle . . . Ashland Ry. and P. O. Ashland 386.	Ashland Brown Stone Co., Chicago, Ill., 1140 The Rookery. G. A. Bodenschatz, prest.; E. H. Brown, secy.; J. G. Bodenschatz, treas.; A. M. Brown, mgr. Cap. stk. \$100,000. Ashland, brownstone. Open pit, 20,000 tons; steam. A. E. Dickinson, supt.
Sheboygan . . . Sheboygan Ry. 150, 380, 449.	Sheboygan Lime Works, 822 Niagara st. Mrs. H. E. Roth, prest. and treas.; Herman L. Roth, secy. and mgr. Cap. stk. \$40,000. Limestone. Open pit; steam; kilns. Martin Schultz, supt.
Sparta . . . Monroe Ry. 141, 150.	Simon W. Bunce (local). Cap. \$300. Freestone. Open pit, 1,780 tons; hand.
Sturgeon Bay Door Ry. 380.	John M. Laurie. Cap. \$8,000. Laurie's, stone. Open pit, 10,500 tons; horse and hand.
Trempealeau Trempealeau Ry. 135, 150, 236.	J. A. Johnson. Riverview, free and limestone. Slope; hand.
Washburn . . . Bayfield Ry. 143.	Babeock & Smith, Houghton, Wis. Cap. \$30,000. Washburn, brown sandstone. Open pit, 90,000 tons; steam. W. H. Smith, supt.
" " "	Prentice Brownstone Co., Ashland, Wis., 200, 202, 204 and 206 Knight Block. F. Prentice, prest., treas. and mgr.; J. B. Niles, secy. Cap. stk. \$125,000. Prentice, sandstone. Open pit, 43,296 tons; steam; stone mill.
Wauwatosa . . . Milwaukee Ry. 141.	Monarch Stone Quarry Co., Milwaukee, Wis., 371 Broadway. H. Niedecken, prest.; J. W. Bingham, secy. and gen. mgr. Cap. stk. \$100,000. Monarch, dimension and rubble stone. Open pit, 130,000 tons; steam. H. H. Greene, supt.
" " "	Story Brothers, Milwaukee, Wis., Room 7, 204 Grand av. Story Bros., limestone. Open pit, 30,000 tons; compressed air.
White Water . . . Walworth Ry. 146.	G. W. Coburn. Coburn, limestone. Open pit; hand, 1,600 tons.

SEE ALSO SUPPLEMENTARY LIST

## WYOMING

## ASPHALTUM

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Piedmont, . . . . . Uinta Ry. 776.	Chas. Guild & Sons. Katie. Open pit.

## COAL BITUMINOUS

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, CORE OVENS, AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Almy, . . . . . Uinta Ry. 776.	Union Pacific Coal Co., Omaha, Neb. No. 7. Slope, 140,000 tons; steam. W. T. Ramsay, supt.
Black Buttes, Sweetwater Ry. 776.	Black Butte Coal Mining Co., William Matthews, pres.; P. C. Kettle, secy. and supt.; C. B. Sergis, treas. and mgr. Cap. stk. \$100,000. Black Butte. Slope, 60,000 tons; horse.
Buffalo, . . . . . Johnson Ry. Gillette ss.	Robert Foote (dead). Cap. \$4,000. Diamond. Slope, 4,000 tons; horse.
" " " "	Munkres & Mather (local). Cap. \$20,000. Munkres and Mather. Slope, 5,000 tons; horse. G. W. Munkres, supt.
Cambria, . . . . . Weston Ry. Newcastle ss.	Cambria Mining Co., Beatrice, Neb. W. H. Kilpatrick, pres.; C. W. Collins, v. pres.; R. J. Kilpatrick, secy. and treas. Cap. stk. \$300,000. Juno and Antelope. Tunnel, 346,500 tons; compressed air; breaker. William Job, supt.
Carbon, . . . . . Carbon Ry. 776.	Union Pacific Coal Co., Omaha, Neb., Ninth and Farnam sts. Cap. stk. \$20,000,000. Carbon No. 2. Slope, 173,372 tons; steam. E. J. Hall, supt.
Cokeville, . . . . . Uinta Ry. 776.	E. M. White. Birch creek. Shaft; steam washer. C. M. White, supt.
Dana, . . . . . Carbon Ry. 776.	Union Pacific Coal Co., Omaha, Neb., Ninth and Farnam sts. Cap. stk. \$20,000,000. Dana. Slope, 17,503 tons; steam.
Evanston, . . . . . Uinta Ry. 776 (11 miles).	Porter, Ditsworth & Lizert. Alma Porter, mgr. Cap. stk. \$20,000. Cannel. Slope, 2,000 tons; steam. George Ditsworth, supt.
" " " " " " " " Ry. Almy 776.	Rocky Mountain Coal & Iron Co., San Francisco, Cal., cor. Fourth and Townsend sts. Charles F. Crocker, pres.; Frank S. Donly, secy. and treas. Cap. stk. \$1,000,000. Almy. Slope, 180,000 tons; steam. A. E. Bradbury, supt.
Ham's Fork, . . . . . Uinta Ry. 776.	Overstreet & Dodson, Salt Lake City, Utah, Box 109. J. F. Dodson, pres.; R. E. Dodson, secy.; I. M. Dodson, treas.; G. W. Overstreet, mgr. and supt. Cap. \$3,000. Peacock. Slope; horse and hand (developing).
Hanna, . . . . . Carbon Ry. 776.	Union Pacific Coal Co., Omaha, Neb., Ninth and Farnam sts. Cap. stk. \$5,000,000. Hanna, Nos. 1 and 2. 19,858 tons; steam. G. R. Hill, supt.
Lander, . . . . . Fremont Ry. Rawlins 776.	James E. Gillis (dead). Cap. \$1,000. Gillis. Slope, 1,000 tons; horse.
New Castle, . . . . . Weston Ry. 89.	New Castle Mining & Improvement Co., Beatrice, Neb. J. B. Weston, pres.; R. J. Kilpatrick, secy. and treas.; W. H. Kilpatrick, mgr. and supt. Cap. stk. \$200,000. New Castle. Tunnel, 35,500 tons; compressed air; 30 ovens.
Rawlins, . . . . . Carbon Ry. 776.	I. C. Miller. Shaft and tunnel; hand. Jacob E. Fridley, supt.
Rock Springs, Sweetwater Ry. 776.	Inter State Coal Co., Ogden, Utah, 248 Washington st. E. T. Dolanski, secy. and treas. G. G. Griffith, mgr. and supt. Cap. stk. \$200,000. Inter State. Tunnel, steam.
" "	Rock Springs Coal Co. H. G. Paley, pres.; John W. Donnellan, secy.; A. Kendall, treas.; P. J. Quealy, mgr. and supt. Cap. stk. \$200,000. Nos. 1 and 2 and incline. Slope, 110,000 tons; steam.
" " " " " " " " " " " " " " " "	Sweetwater Coal Mining Co., M. T. Greene, pres.; S. R. Frazier Jr., secy. and treas.; Chas. R. Kelsey, mgr. and supt. Cap. stk. \$200,000. Sweetwater. Drill, 100,000 tons; horse.
" " " " " " " " " " " " " " " "	Union Pacific Coal Co., Omaha, Neb., Ninth and Farnam sts. Cap. stk. \$20,000,000. Rock Springs No. 1. Slope, 229,708 tons; steam. G. L. Black, supt. Rock Springs No. 3. Slope, 252,217 tons; steam. G. L. Black, supt. Rock Springs No. 4. Shafts and tunnel, 120,508 tons; steam. G. L. Black, supt. Rock Springs No. 5. Shaft, 26,183 tons; steam, horse. G. L. Black, supt. Rock Springs No. 7. Tunnel, 81,325 tons; steam and horse. G. L. Black, supt. Rock Springs No. 8. Shaft, 21,652 tons; steam and horse. G. L. Black, supt.
" " " " " " " " " " " " " " " "	Vandyke Coal and Mining Co., Fred W. Gray, pres. and treas.; P. C. Kettle, mgr. and supt. Vandyke. Slope and tunnel, 36,000 tons; horse.
Sheridan, . . . . . Sheridan Ry. Gillette ss.	Geo. Brundage. Local. Black Diamond. Tunnel, 1,000 tons; hand.
" " " " " " " " " " " " " " " "	Briar Hill Coal Co. (local). Briar Hill. Tunnel; hand.
" " " " " " " " " " " " " " " "	P. O. Inyan Kara.

## COPPER

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, FURNACES, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Swan..... Carbon Ry. Fort Steel 776 (75 miles).	Milliken & Hanley, Carbon, Wyo. Michael Hanley, pres., mgr. and supt.; John Milliken, treas. and secy. Cap. \$10,000. Axis, copper. Shafts, 300 tons; hand.

## GOLD AND SILVER

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Atlantic City... Fremont Ry. Rawlins 776.	Garfield Mining Co., Boston, Mass., 45 Oliver st. A. O. Norton, pres.; Hon. Harry C. Peabody, secy.; C. W. Baldwin, treas.; M. B. Lovell, mgr. Cap. stk. \$500,000. Garfield, gold. Tunnels, shafts, 10,000 tons; free; steam. A. M. Sparhawk, supt.
"....."	Emile Granier, Cap. \$400,000. Christina Lake, gold. Placers, 20 claims; free; hydraulic. Geo. A. Zimmerman, supt.
"....."	Robert McAuley, Mary Ellen, gold and silver. Shaft; hand.
Carbon..... Carbon Ry. 776.	Gold Hill Mining & Milling Co. H. B. Allen, pres.; J. S. Allen, secy.; Mander Peterson, treas.; Geo. H. Fales, mgr. Cap. stk. \$60,000. Occidental, gold and silver. Shaft; free; steam; 10 stamps. John Martin, supt.
Gold Hill..... Carbon P. O. & Ry. Rawlins 776.	John Booker. Cap. \$2,500. Wild West, gold. Open pit; refractory; steam; 10 stamps. Col. Downey, supt.
Laramie..... Albany	Oiras Mining Co., Laramie, Wyo. Lionel Sartorio, pres.; Fred Douglas Willau, secy. and treas.; W. C. Knight, mgr. and supt. Cap. stk. \$1,000,000. Keystone and Blue Jay, gold. Shafts, 7,000 tons; free, refractory; steam, water; 20 stamps.
Miners' Delight, Fremont Ry. Rawlins 776.	George Bishop. Coming Day, gold. Tunnel; free; hand.
"....."	John Disner, Gold. Placer.
Welcome..... Crook Ry. Whitewood, S. Dak., 274.	Inter Ocean Mining Co., Chas. J. Finch, mgr. Cap. stk. \$40,000. Inter Ocean, gold. Open pit, 22,500 tons; steam; mill, 100 tons. R. G. Anderson, supt.
"....."	Rinehart, Finch & Co. Cap. \$20,000. Gold Finch, Gold Bank and Gold Coin, gold and silver. Shafts and tunnels; hand.
"..... Fremont P. O. & Ry. Red Lodge Mont., 520 (150 miles).	Dunham Mining Co. S. C. Hunter, pres.; A. E. Flager, secy. and treas.; R. B. Dunham, mgr. Cap. stk. \$1,500,000. Gold. Tunnel; refractory.

## IRON

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, BLAST FURNACES, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Sundance..... Crook Ry. Newcastle ss.	Midland Mining & Developing Co., Rapid City, S. Dak. John J. Rachford, pres.; E. M. Roberts, secy.; W. W. Hinton, treas.; Samuel Scott, mgr. and supt. Cap. stk. \$25,000,000. Iron, hematite. Open pit, placer.

## STONE, MARBLE, GRANITE AND ONYX

LOCATION OF MINE OR QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE OR QUARRY, KIND OF STONE, KIND OF MINE OR QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STONE OR MARBLE MILLS, LIMEKILNS AND CAPACITY, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Rawlins..... Carbon Ry. 776.	Kearney Stone Works, Kearney, Neb. J. T. O'Brien, pres.; H. J. Stedman, secy. and treas.; J. Mur- dock, mgr. Cap. stk. \$60,000. Gray, stone. Open pit, 6,250 tons; steam. James McPherson, supt.

SEE ALSO SUPPLEMENTARY LIST



# SUPPLEMENTARY LIST

OF

# MINING COMPANIES AND OPERATORS

IN THE

## UNITED STATES OF AMERICA

WHOM WE HAVE REASON TO BELIEVE ARE AT POINTS GIVEN, BUT WHO HAVE  
 FAILED TO FURNISH DETAILED INFORMATION  
 FOR REGULAR LISTS

### ALABAMA

#### COAL BITUMINOUS

NAME	POSTOFFICE
J. W. Lowry	Arkadelphia
A. Harris	Banzon
Harrison Mining Co.	Bessemer
American Coal Co.	Birmingham
Yulecan Coal & Coke Co.	Birmingham
Z. Cornelius	Blountsville
Isaac Elice & Co.	Brookside
E. M. Tutwiler	"
James Bynum	Carlton Hill
J. F. Reid Coal Co.	"
Kansas City Coal & Coke Co.	"
Champion Mining Co.	Champion
Warrior Coal & Coke Co.	Coaldale
Win. Coal & Co.	Cottling
Joe Caming	Connellsville Mines
W. W. Prude jr.	Cottondale
Marshall Smith	Cullman
Douglison Coal Co.	Day's Gap
Harrison Coal Co.	Dogwood
W. L. Watson	Ego
Sam Cohn	Gadsden
S. D. Jacobs	"
J. S. Paden	"
Etowah Mining Co.	Grudup
Eureka Coal & Coke Co.	Helena
South Birmingham Coal & Iron Co.	"
Zenilda Coal Co.	"
D. Bales	Liberty
Milner Coal & Ry. Co.	New Castle
Black Diamond Coal Co.	Patton
Virginia & Alabama Coal Co.	"
C. A. Nolan	Pratt Mines
Horse Creek Coal Co.	Sharon
Ivy Leaf Coal Co.	"
May Ellen Coal Co.	"
Harry Wadkins	Trussville
Tuska Coal, Iron & Lead Co.	Tusculoosa
Pearson Coal, Iron & Railroad Co.	Warrior
Woodward Iron Co.	Woodward
Birmingham Mfg. Co.	Wynond

#### COLD

Alabama & Georgia Mining Co.	Anniston
The Talladega Gold Mining Co.	Talladega

#### IRON

Fremont Flitch.	Anniston
Marens Stacks	"
John Tonkin	"
Flowah Mining Co.	Attalla
Morange Mining Co.	"
Southern Iron Co.	"
Bluffton Iron Co.	Bluffton
Cedar Bluff Land, Mining & Mfg. Co.	Cedar Bluff
J. R. Sewell	"
W. H. Denson & Co.	Collinsville
Z. T. Lawrence	Farrill

NAME	POSTOFFICE
Fort Payne Furnace Co.	Fort Payne
T. M. Anderson	Gadsden
Sheffield & Birmingham Coal, Iron & Ry. Co.	Gambie
Stevens & Co.	Huffman
C. M. Morgan	Irontdale
Jacksonville Iron & Steel Co.	Jacksonville
Jenifer Iron Co.	Jenifer
Piedmont Iron & Land Co.	Piedmont
Alabama Construction & Mining Co.	Talladega
J. Camp	"
D. M. Rogers	"
W. H. Skaggs	"
J. M. Sims	Trussville
A. Burn	Tusculoosa
Penn. & Alabama Co.	"

#### PHOSPHATE

Mobile Phosphate Mfg. Co.	Mobile
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#### STONE, GRANITE, MARBLE AND ONYX

Simon Jewell	Anniston
W. H. Rhea	Attalla
J. H. Wesson	"
W. L. Wilson	"
J. M. Faneher	Furnace
M. Cabot	Gate City
Mr. Lawrence	Huntsville
F. M. Cabot	Irontdale
M. L. Pritchett	Jackson
Ross & Corbett Co.	Johns
R. E. O'Brien	Schuria
W. N. Martin	Trussville
R. D. Smith	"

### ALASKA

#### COAL

Cooper Mining & Trading Co.	Kodiak
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#### COLD AND SILVER

F. Cook	Douglas
Peter Johnson	"
Henry Meade	"
Mexican Mining & Milling Co.	"
Prof. Stutze	"
Geo. Stuggy	"
Isaac Bointer	Jackson
W. D. McLeod	"
Aylward & McLaughlin	Jameau
Charles Bart	"
W. M. Bennett	"
Henry Boushry	"
Carroll, Murray, Fuller & Wells	"
Eastern Alaska Mill & Mining Co.	"
Granger & Co.	"
Kamantaras & Co.	"
Wm. McLernon	"

NAME	POSTOFFICE
Silver Bow Basin Mining Co.	Jameau
Silver Queen Mining Co.	"
Takon Consolidated Mining Co.	"
W. T. Webster	"
R. Albertstone	Sitka
Nicholas Haley	"
T. R. Mooney	"
W. F. Turner	"
P. C. Wellenhueller	"
Orlando Grant	Loring
Sam. Gilbert	"
Richard Stack	"

### ARIZONA

#### COPPER

Geo. Bolpeter	Apia Fria Valley
Copper King Mining Co.	Clifton
H. D. Underwood	Tucson
P. Gates	Globe
Wes. Trappe	"
Jerome Mining Co.	Prescott

#### COLD AND SILVER

Hudson Bros.	Apia Fria Valley
Bogan & Treseott	Arivaca
W. C. Clark	"
H. F. Dorch	"
New Colorado Mining Co.	"
Salvador Pignatari	"
Silver Queen Mining Co.	"
Frank Stegall	"
W. W. Wallace	"
Yellow Jacket Mining Co.	"
Frank Biffar	Cherry
Jos. E. Brookman	"
Willis Cross	"
Etta Mining & Milling Co.	"
Richard Lyon	"
Sutton McWhorter	"
Gold & Silver Cliff Mining Co.	Clifton
Joseph Brewster	Globe
Joseph Henry	"
George Kincaid	"
Rescue Mining Co.	"
Wilson & Kenberry	"
W. H. Woodson	"
John Earnest	Gold Basin
John Fox	"
Chas. Hand	"
S. C. Howe	"
Joseph E. Anderson	Greaterville
E. B. Humbug	"
F. F. Childers	"
P. J. Cuyne	"
Dani. Johnston	"
Johnson Bros	"
J. Saunders	"
Thos. W. Steele	"
E. R. Jago	Mammoth
Coyler & Cuyler	Phoenix
Phoenix Mining Co.	"
Frank Kuhnle	Prescott

NAME	POSTOFFICE	NAME	POSTOFFICE	NAME	POSTOFFICE
Lynx Creek Gold & Land Co.	Frescott	L. E. Pelly	Silver Hill	Hopkins, Nash & Co.	Adin
Lynx Creek Hydraulic Mines		R. E. Wolf	"	S. Lewis	"
Senator Mining Co.		W. H. Wolf	"	Frank Vanderlist & Co.	"
Jessie H. Brown	Silver King			Daisy Hill Mining Co.	Alameda
Geo. Lobb				Amador Gold Mining Co.	Amador City
Monarch of Sea Mining Co.				Elipse Mining Co.	"
John Paul				Little Amador Mining Co.	"
Jacob Pengilly		Jesse M. Barrett	Batesville	Quartz Mountain Mining Co.	"
Dani. Regan		J. H. Patterson & Bro.	"	Foster Mines	Anderson
George Sarlich		M. W. Rogers	"	Bald Hill Mining Co.	Angels Camp
D. H. Taft		Siloam Springs Mining & Prospecting Co.	Siloam Springs	Calaveras Cons. Gold Mining Co.	"
Sam Thorpe				J. M. Bryan	Auburn
Richard Trevelthan				Eric Mining Co.	"
R. S. Wright				Frank Hartley	"
Old Guard Mining Co.	Tombstone			J. W. White	"
D. T. Ehlers	Tucson			Britishgrave Mining Co.	Bangor
Quijota Mining Co.				R. E. Miller Mining Co.	Bear Valley
H. S. Stevens				F. E. Hall	"
Vulture Milling & Mining Co.	Vulture			D. R. Moran	"
Blossom Mining Co.	Yuma			Rising Sun Mining Co.	"
Lapar Mining Co.				Wm. Catwan	Benton
P. P. Matheson				W. G. Couch	"
Paymaster Mining Co.				Henry Garner	"
Frank Vornell				J. F. Milner	"
				Osborn Gold Mill and Mining Co.	Berkeley
				L. Cassette	Big Oak Flat
				D. E. Longfellow	"
				J. C. McLaughlin	"
				H. M. Stanley	"
				Harrison & Murray	Black Bear
				J. J. Smith & Co.	"
				Bulwer Cons. Mining Co.	Bodie
				Peter Anderson	Bridgport
				A. Fitzpatrick	"
				Inter State Cons. M. Co.	"
				Hilbert & Burris	Browns Valley
				New York House Mining Co.	"
				Joseph Dominguez	Butte Valley
				John Castello	"
				Duryea & Co.	"
				John Filiose	"
				J. W. Gardner	"
				J. H. Hunter	"
				Hugh Kelley	"
				Frank Koffler	"
				A. G. Leateman	"
				C. H. Lee	"
				John McMillan	"
				R. Mather	"
				Samuel Olson	"
				T. W. Orton	"
				B. Pagnoni	"
				Ham Fabner	"
				William Peck	"
				J. Perini	"
				J. Pollard	"
				H. Rattford	"
				Sawerood Bros	"
				Jack Sorselle	"
				A. W. Vanderpool	"
				Edward Ware	"
				Dr. Henry White	"
				William Wilson	"
				John Goff	Cahuilla
				Imbus & Nichols	Calico
				Goodwin & Stillus	"
				D. Gravel	"
				Robt. Groer	"
				Louis Hertsinger	"
				King & Finney	"
				Carl Back	"
				C. R. Knapp	"
				James McGluehy	"
				McLennan, Miller & Co	"
				John Shanklin	"
				Sullivan, Read & King	"
				I. S. Weaver	"
				White, Wheeler & Hornell	"
				Bratton Mining Co.	Callisoga
				Silverado Mining Co.	"
				Las Boras Mining Co.	Cambria
				Campo Seco Quartz Mining Co.	"
				Cottonwood Mining Co.	Campo Seco
				C. Margras	Cerro Gordo
				Swansea Mining Co.	"
				John Thomas	"
				Samuel Allen	Chinese Camp
				A. M. Baker	"
				N. Currie	"
				C. Drescher	"
				Bond, Heath	"
				F. Knopp	"
				C. McManus	"
				G. Seagle	"
				Geo. A. Webster	"
				J. R. Moffitt	"
				B. T. Brown	Clinton
				P. E. Flotsam	"

## LEAD AND ZINC

Bullion City Mining Co.	Fayetteville
J. W. Bradley & Co.	Powell
J. Davis & Linton	"
H. E. Milum & Co.	"
R. E. Pierce & Co.	"
Powell Mining Co.	"
Reader Bros.	"

## STONE, GRANITE, MARBLE AND ONYX

T. H. White	Bryant
Beaver White	River
Stone & Mining Co.	Eureka Springs
W. F. Blakemore	greewood
W. B. W. Heartsill	"
Heartley Stone Co.	Huntington
W. J. Skarrd	Lone Rock
Jas. Kelly	Russellville
Joe Crawley	Strickler
S. F. Dale	"
Wm. Dale	"

## STONE, GRANITE, MARBLE AND ONYX

Big Bug Onyx Co.	Frescott
M. J. Sullivan	Tucson

## CALIFORNIA

## ALUMINUM

American Aluminum Co.	San Francisco
Pacific Coast Aluminum Co.	"

## ASPHALTUM

Santa Barbara Asphalt Co.	La Patera
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## COAL BITUMINOUS

James Muir	Clayton
Chaney Coal Co.	Elsmore
Siskiyou Coal Mining Co.	Hornbrook
Sacramento & Ione Coal Co.	Ione
Eureka Coal Mining Co.	Livermore
Livermore Coal Co.	"
Black Diamond Coal Co.	Los Angeles
Croxon & Ashurst	New Idria
Josh. Kelley	Newcastle
Carbon Hill Coal Co.	San Francisco
Coal Harbor Coal Mining Co.	"
T. Ellsworth	"
Oregon Coal & Navigation Co.	"
Pacific Improvement Co.	"
Cooper Coal & Commercial Co.	Santa Rosa
John Langley, Box 22	Trinity River side
Jinking Richards	Tracy
James Tredwell	"

## COPPER

Cave Meadows Mng. Co.	Cedarville
John Donher	Clayton
Union Copper Mine	Copperopolis
Copper Hill Mining Co.	Duggert
W. A. Barnett	Pope Valley
Imperial Paint & Copper Co.	San Francisco
Tepezala Copper Mining Co.	"
Del Norte Copper Co.	Smith River
C. C. Butner	Spenceville
Copper Creek Mine	Trinity Center
Spoopendyke Mine	Victor

## COAL AND SILVER

Dump Mining Co.	Acton
New York Mining Co.	"
Red Rover Mining Co.	"
Tranquida Mining Co.	"
M. Aulley & Co.	Adin
Blue Belle Mining Co.	"
Evening Star Mining Co.	"
Hayden Hill Tunnel Co.	"

## ARKANSAS

## COAL BITUMINOUS

Stevell & Co	Coal Hill
R. M. Winn & Co	"
Rice Bros	Fayetteville
J. D. Reader	Hackett
National Coal Co	"
J. J. Alexander	Huntington
G. M. Anderson	"
D. A. Foley	"
D. Harrielson	"
G. A. Hutchinson	"
Stillwell & Co	Little Rock
Russellville Coal Mining Co.	Russellville
J. N. Sweet Coal Mng. Co.	"
H. Lee	Strickler
J. R. Smith	"
Blue Mt. Oil & Mineral Co.	Waveland

## GOLD AND SILVER

Crystal Spgs. Mining Co.	Crystal Springs
C. H. Jacobs	"
J. C. Edwards	Fayetteville
Fayetteville Mining Co.	"
D. M. Harbison	"
C. T. Kumai Co.	"
C. F. Lang	"
W. H. Lang	"
Stephen Lemons	"
Wm. Patterson	"
East Louisiana Mld. Mine	Hot Springs
E. M. Ferguson	Huntington
Old Bull Mining Co.	Little Rock
Froel Blucher	Petty
Saml. Davis	"
Wm. Davis	"
C. Hughes	"
A. A. Pence	"
J. W. Wingfield	"
J. E. Wingfield	"
Manmoth Mine Co.	Silver City
Montezuma Mining Co.	"
Narrow Gauge Mining Co.	"
Silver Hue Mining Co.	"
Walnut Mining & Milling Co.	"
W. T. Bolland	Silver Hill
Evans Cossell	"
Geo. Davis	"
Lee Davis	"
M. C. Duggan	"
David Hankins	"

N. NAME	POSTOFFICE	N. NAME	POSTOFFICE	N. NAME	POSTOFFICE
Andrew Kilpatrick	Clinton	Phumas Cons. Mining &		W. O. Havenmale	Julian
D. H. Stewart	"	Milling Co	Greenville	Indy Mining Co.	"
Summers' Cons. M. & M. Co.	"	C. C. Backman	Greenwood	Warlock Mining Co	"
John Triedell	"	F. Carvajal	"	Thos. Boland	Keeler
Flying Dutchman Min-	"	W. Dixon	"	J. D. Chamnell	"
ing Co	Course Gold Gulch	J. Gallagher	"	Snyder Mine	Kennett
Hawk Eye Mining Co.	"	A. H. Barry	"	Tom Lane Mining Co.	Kernville
Morning Star Mining Co.	"	M. Howe	"	D. W. Baughman	Lang
New Citizens Mining Co.	"	H. Linck	"	D. Mendez & Co.	"
Texas Flat Mining Co.	"	T. Marson	"	C. C. Mueller	"
Oak Tree Mining Co.	Colfax	S. A. Moss	"	W. Thomas	"
A. J. Peterson	Colonia	H. Radbruch	"	John Weston	"
T. C. Buney	Columbia	F. Winkelman	"	Joseph E. Youngblood	"
R. C. Travis	"	J. A. Wolf	"	Thomas Porter	Lapanza
M. Kenna & Kanig	"	W. F. Armstrong	Grizzly Flats	H. C. Peterson	Letner
McTherson & Hillton	"	Win. Cole	"	J. J. Anderline	Lewiston
J. B. Pownall	"	A. J. Graham	"	C. L. Blakemon	"
Andrew Carlson	Copely	J. W. Kendall	"	Blakemon & Spring-	"
H. P. Christensen	"	Lawrence Levy & Melton	"	stead	"
Thos. Foster	"	J. M. Mochan	"	V. M. Hamberlin	"
Golden Galf Mining Co.	"	Moore & Claybourne	"	John Collopy	"
Joel Holman	"	John B. Perry	"	J. M. Crow	"
J. K. King	"	Sprunger & Joiner	"	Frank Daniels	"
Oliver Langfield	"	G. & M. Wheeler	"	J. J. Daniels	"
Minnesota Mining Co.	"	Wiley Sexton	"	J. H. Fisher	"
Musser & Co.	"	August Delleram	Graveland	J. Gifford	"
Chas. B. Nichols	"	L. K. Hough	"	R. Hamilton	"
Geo. W. Nichols	"	Wm. H. Sney	"	C. Hekey	"
David Pasenti	"	James Bozli	Happy Camp	Chas. Ingraus	"
J. C. Punetny	"	S. C. Howard	"	J. Jacobie	"
Reiley & Bliss	"	Ock & Co	"	Ah Jhu	"
Robert Stevens	"	J. Reeve	"	M. McKinney	"
J. H. Stowell	"	Mrs. M. Reeve	"	Jas. Norton	"
Rolan Aubrey	Cottage Grove	Shinar Bros	"	M. Olsen	"
John Brown	"	G. B. Temple	"	Ah Sawm	"
Elliott Bros	"	W. H. Ellenwood	Happy Creek	Geo. Summers	"
Fields & Co	"	S. Richardson	"	Taylor & Latham	"
A. Halvorson	"	L. P. Smith	"	W. P. Harlow	Loomis
Samuel Stenshaw	"	Cleveland Cons. Mining	"	Alpine Springs Land &	"
Cook Bros. Estate	Coullerville	Co	Hart	Water Co	Los Angeles
Martin & Walling	"	Bald Eagle Mining Co.	Havilah	Cajon Mining & Water	"
Jas. W. Reed	"	Blue Bell Mining Co.	Hayden Hill	Co.	"
Alyord Mining Co.	Daggell	Golden Eagle Mining Co.	"	Gaviota Mining Co.	"
C. P. Dunnegan	"	North Star Mining Co.	"	Pacific Gold & S&C	"
C. W. Halberg	"	Emma F. & Logan Co.	Holone	Extraction Co	"
F. S. Johnson	"	S. W. Clark	Honley	Rowland & Lacey Petro-	"
A. J. Laswell	"	J. W. Courtney	"	and Land Co	"
J. L. Mellin	"	W. T. Gorman	"	Santiago Canyon Silver	"
Oro Mountain Mng. Co	"	A. Harvey	"	Mining Co.	"
J. B. Osborn	"	J. H. Hazlett	"	Trabuco Gold Mining Co.	"
J. A. Owens	"	J. Jacobs	"	C. W. Bader	Magalia
J. D. Quinn	"	Thos. Lawler	"	John Bader & Bro	"
W. E. Steadman	"	J. McGraw	"	A. Burt	"
Big Pine Mining Co	"	W. Ritchie	"	D. D. Campbell	"
Breuer & Wheeler	Damascus	Thomas Shultz	"	F. Christian	"
Chas. Anthony	Darwin	A. G. Smith	"	Mrs. C. H. Church	"
A. J. Gould	"	W. A. Wright	"	J. Coad	"
James Horry	"	George Ryan	Hildreth	D. C. Crandal	"
Hau Luch	"	J. H. Briner	Hornbrook	M. H. Dewey	"
Waterman & Co.	"	S. W. Clary	"	A. Glover	"
John Wilson	"	E. W. Davies	"	M. Goodday	"
Barted Mining Co	Dendwood	John Dollarhide	"	L. J. Lewis	"
Bismark Mining Co	"	A. Giddings	"	J. McDonald	"
T. Grass	"	Jas. Goodrich	"	E. McKinney	"
Geo. Hahn	"	Hizlett & Coyle	"	J. Maloy	"
M. Ramm	"	Geo. Lee	"	W. T. Morgan	"
The Bald Mountain Ex-	"	William Lee	"	Joe Moore	"
pos. Drift Mng. Co	Downieville	McGraw Bros	"	W. J. Morris	"
Mabel Cuspol. Mng. Co	"	A. W. Niles	"	J. Morrison	"
Mt. Moriah Quartz Mng.	"	E. A. Niles	"	T. Mugford	"
Co.	"	Sam Faine	"	C. Polster	"
Eureka Oil Co	Eureka	Pool & Truax	"	George Pary	"
Grange & Finlor	Forest Hill	Prince & Brown	"	H. Rife	"
Dardnell Mining Co.	"	William Pullen	"	R. Shipley	"
Paragon Mining Co	"	Lawley Roberts	"	C. C. Slocum	"
Cottonwood Mng. & Mng.	"	Jill Romaine	"	George Wylier	"
Co	Et. Bidwell	Shornake & Almy	"	H. Yaman	"
Union Mining Co	Genesee	Sidsly & Hughes	"	Thos. Richard	Mariposa
Jas. Brown	Georgetown	Jas. Sterling	"	J. J. Ellingham	"
Chris. Raab	"	W. B. Thomas	"	Francis Mining Co	"
Balfie Mining Co	Grantville	L. Thora	"	W. E. Galloway	"
P. O. Bonnell	"	Rummell & Co	"	Galloway & Ridgway	"
Eric Mining Co	"	G. D. Wiley	"	J. W. Reed	"
Gambrians Mining Co.	"	Hirsch Mining Co	Independence	Geo. Robinson	"
W. McLean	"	Kersarge Mining Co	"	David Clark	Markleville
Maybank & Parsons	"	Moxim Mill & Mining Co.	"	C. Coleman	"
National Mining Co	"	John S. Besse	Iskip	Chas. Dudley	"
A. Beard	"	Boyer & Carpenter	"	Al Nelson	"
Rocky Glen Mining Co	"	M. Bracken	"	Black Maria Cons. Co	Marysville
E. D. Steynson	"	John Costa	"	Catskill Trvel Mng. Co.	"
Brunswick Consolidated	"	Daniel Klausberg	"	Eastern Star Mining Co	"
Gold Mining Co	Grass Valley	Thos. McVey	"	Mark Antony Gold &	"
Clinch & Co	"	Booker & Lacy	"	Silver Mining Co	"
Henry Davis	"	W. C. Pidge	anyo	Marysville Tunnel &	"
Milton & Roach	"	R. C. Spears	"	Quicksilver Mng. Co.	"
Merriman Gold Mng. Co.	"	Swansea Bell M. Co	"	E. F. Meek Mining Co.	"
Mono Gold Mining Co.	"	App & Co.	Jamestown	W. C. Ozden	"
Mt. George Mining Co.	"	H. Carlin Jr	"	John Potter Mining Co.	"
Providence Mining Co.	"	Gray Eagle Mining Co.	"	J. J. Ploy	"
Henry Pacific Cons. Mng.	"	Crookshank Co.	John	Jas. A. Sured Mining Co.	"
Co	Greenville	Gusley Co	"	Chas. E. Swetz Mng. Co.	"
Johnny Bull Mining Co	"	Chaparral Mining Co.	Julian	Fillmore Hill Mining Co.	"
		Gold King Mining Co.	"		

NAME	POSTOFFICE	NAME	POSTOFFICE	NAME	POSTOFFICE
Tinductoo Gold & Silver Mining Co.	Marysville	Job Pingrey	Ophir	Carson Creek Mining Co.	San Francisco
Blue Jay Gold Mng. Co.	Maybort	Charles Bristol	Orleans	Cons. New York Mining Co.	"
McCullin & Hutton	Michigan Bar	H. Knudson	"	Room 29 Nevada Bk.	"
Taylor & Tracy	"	J. A. Pearce	"	Crossbow Gold Mining Co.	"
M. C. Bishop	Michigan Bluff	P. P. Wilder	"	"	"
M. C. Gorcan	"	Easthek Bros.	Oro Fino	Crown Point Mining Co.	"
G. W. Cusick	"	"	"	Room 8 8 1/2, Ex. Bldg.	"
Alfred Dixon	"	Wright & Co.	"	Danassus Mining Co.	"
Pissell & Co.	"	H. G. Chickering	Panama	Diamond Creek Colo. Gold & Silver Mfg. Co.	"
D. L. Gorman	"	John Curran	"	217 Sansome st.	"
A. Hank & Co.	"	Peter Gallagher	"	F. S. Douth	"
Harneson & Co.	"	Frederick Russell	"	Fourth & Townsend sts.	"
P. N. Jurgenson & Co.	"	Gabalan Mining Co.	Perris	El Leopold Gold & Silver Mining Co.	"
Ed Kayenough	"	Henry Krause	"	Golden Prize Cons. Mining Co.	"
J. H. Keowle	"	Thos. Moorehouse	"	"	"
Thomas McCull	"	Jerry Shea	"	327 Market st.	"
W. B. Marshall	"	H. C. Steel	"	Gold Mountain Mining Co.	"
Win. Mitchell	"	Reed & Askey	Pine Grove	25 Grant st.	"
Morehead & Co.	"	J. H. Bradley	Placeville	Grass Valley Hydraulic & Land Co.	"
Muir Tunnel Co.	"	Cedar Springs Gold Grove Mining Co.	"	Gray Eagle Mining Co.	"
Myers & Co.	"	Delmoacia Quartz Co.	"	Haven & Haven	"
R. Noble	"	Epley Gold Quartz Co.	"	Head Center & Tranquility Mining Co.	"
S. Park & Co.	"	Gentle Annie Gold Quartz Co.	"	310 Pine st., R. 15 & 17.	"
L. Podesta	"	Lyons Gold Gravel Mining Co.	"	Industrial Mining & Milling Co.	"
Wm. M. Ray & Co.	"	C. N. Meyers	"	Care Nowlin & Fassett.	"
Roger, Watson & Davis	"	Pacific Gold Quartz Co.	"	Locomotive Mining Co.	"
H. Sherman	"	Perry & Thompson	"	300 Montgomery st.	"
P. Shields & Co.	"	Parley Gold Quartz Co.	"	M. J. McDonald Est.	"
Stuart & Co.	"	Ringold Gold Quartz Co.	"	Manmoth Garfield Gold Mining Co.	"
Sutcliffe Bros.	"	True Cons. Gold Co.	"	North Belle Isle Mining Co.	"
E. G. Thompson	"	Plymouth Cons. Gold Mining Co.	"	R. 15 & 17, 310 Pine st.	"
Steve Thompson	"	Reaves Gold Mining Co.	Plymouth	Occidental Cons. Mining Co.	"
Frank Fitzgerald	Modoc	Virginia Mining Co.	"	Burke & Lewis	Quartz Valley
Sierra Batters Gold Mining Co.	Mohawk	J. P. Lee & Co.	"	Edwards & Lee	Quincy
V. A. Berthel	Mokattunne Hill	Geo. B. Freeman	"	D. Conradi	Rail Road Flat
C. P. Colby	"	L. Ponge	"	Geo. B. Freeman	"
Geo. Edwards	"	Judge Aaron Bell	Redding	Cleveland Cons. Mines & Fred Grabfrend	"
Wm. Hutchinson	"	Cleveland Cons. Mines	"	C. K. McEwler	"
Chong Kee & Co.	"	Frederick Russell	"	W. P. Miller	"
A. Knell	"	Texas Cons. Mines	"	A. B. Paul	"
P. Maguire jr.	"	Hlex Gold Mining Co. Ltd. Rich Gulch Consolidated Santa Rosa Mining Co.	Riverside	Texas Cons. Mines	"
Pearsall & Estrade	"	Eagle Mt. Mining Co.	"	Hlex Gold Mining Co. Ltd. Rich Gulch Consolidated Santa Rosa Mining Co.	"
Thompson & McNabb	Mono Lake Nevada City	Enterprise Mining & Milling Association.	"	Eagle Mt. Mining Co.	"
Geo. F. Allan	"	Monongu Mining & Milling Co.	"	Enterprise Mining & Milling Association.	"
Plummer Quartz Mining Co.	"	Twenty-Nine Palms Mining & Milling Co.	"	Monongu Mining & Milling Co.	"
Thomas Derby	New Almaden	D. A. Wheeler	"	Twenty-Nine Palms Mining & Milling Co.	"
C. T. Adams	Newcastle	Hopwood & Black	Rocky Point	D. A. Wheeler	"
Jas. Batts	"	McNair & Holt	"	Hopwood & Black	Rocky Point
P. M. Crary	"	Banner Gold Milling & Mining Co.	Sacramento	McNair & Holt	"
John Holbrook	"	Middle Creek Milling & Mining Co.	"	Banner Gold Milling & Mining Co.	Sacramento
Peter Harris	"	Pajaro Mining Co.	"	Middle Creek Milling & Mining Co.	"
Mad. E. L. Hubbard	"	Sacramento Mexican Mining Co.	"	Pajaro Mining Co.	"
R. Jones	"	H. Bader	San Andreas	Sacramento Mexican Mining Co.	"
J. D. Matthews	"	W. A. Wallace	"	H. Bader	San Andreas
J. H. Mitchell	"	San Diego Improvement Co.	"	W. A. Wallace	"
W. A. Hantz	"	Alfred Abbey	San Diego	San Diego Improvement Co.	"
Stephen Quinn	"	912 Hyde st.	"	Alfred Abbey	San Diego
Adolph Schuabel	"	Alpha Consol. Milling & Mining Co.	"	912 Hyde st.	"
Dr. Al. Schuabel	"	79 Nevada Block	"	Alpha Consol. Milling & Mining Co.	"
G. T. Taylor	"	American & Mexican Mining & Milling Co.	"	79 Nevada Block	"
G. L. Threlkeld	"	Andes Silver Mining Co.	"	American & Mexican Mining & Milling Co.	"
Anton Zantgraf	"	Arctic Placer Mining Co.	"	Andes Silver Mining Co.	"
Jacob Zantgraf	"	Care of Jas. L. King.	"	Arctic Placer Mining Co.	"
J. R. Brown	Nimshew	Bainbridge Placer & Quartz Mining Co.	"	Care of Jas. L. King.	"
Lucky Strike Mining Co.	"	Best & Belcher Mining Co.	"	Bainbridge Placer & Quartz Mining Co.	"
Oro Fino Mining Co.	"	Room 33 Nevada Block.	"	Best & Belcher Mining Co.	"
S. C. Bevens	North Bloomfield	Black Hawk & Gravel Mining Co.	"	Room 33 Nevada Block.	"
C. O. Jepsen	"	Blair Cons. Mining Co.	"	Black Hawk & Gravel Mining Co.	"
J. R. Jones	"	Bonanza Mining Co.	"	Blair Cons. Mining Co.	"
Sue Kee & Co.	"	Ballou Mining Co.	"	Bonanza Mining Co.	"
D. R. McKilliam	"	Butte Belle Gold Mining Co.	"	Ballou Mining Co.	"
R. Russen	"	California Ramble Co.	"	Butte Belle Gold Mining Co.	"
Hansen Quartz Mng. Co.	Novelty	321 Market st.	"	California Ramble Co.	"
P. Anderson	Oak Bar	"	"	321 Market st.	"
Ely Kelley	"	"	"	"	"
Lang & Zollieoffer	"	"	"	"	"
J. W. Dunlap	Oakdale	"	"	"	"
Snowday Mining Co.	"	"	"	"	"
J. W. Woodside	"	"	"	"	"
Alameda Co. Imp. Co.	Oakland	"	"	"	"
El Sueno Gold & Silver Mining Co.	"	"	"	"	"
Golden King Mng. Co.	"	"	"	"	"
G. W. Grayson	"	"	"	"	"
A. G. Grunett	"	"	"	"	"
W. J. Gunnell	"	"	"	"	"
E. M. Hall	"	"	"	"	"
W. E. Lamb	"	"	"	"	"
E. W. Roberts	"	"	"	"	"
C. A. Stetefeldt	"	"	"	"	"
Stiles Gold Quartz Mng. Co.	"	"	"	"	"
S. B. Storel	"	"	"	"	"
Geo. E. Whitney	Ogby	"	"	"	"
T. E. Johnson	Oro	"	"	"	"
Jacob Murray	Ophir	"	"	"	"
B. F. Hartley	"	"	"	"	"
F. H. Lavalie	"	"	"	"	"
Wm. Pellow	"	"	"	"	"
Lozano Pellow	"	"	"	"	"

NAME	POSTOFFICE	NAME	POSTOFFICE	NAME	POSTOFFICE
Sallinas & Mercer Mining Co.	Sierra City	Wm. H. Parsons	Middletown	McCur & Johnson	Lincoln
Steelman & Hayes Co.	"	J. W. Ransdell	"	Altamont Stone Co.	Livermore
Wm. Tell Mining Co.	"	Andrew Rosen & Co.	"	F. Hoy	Looms
Campbell & Co.	South River	Geo. A. Saary	"	James M. Connolly	Lordsburg
Belleview Mining Co.	Soulsbyville	Col. F. Von Licht & Co.	"	The Doeley Granite Co.	Los Angeles
Jas. Burns	"	New Idria Mining Co.	New Idria	C. Schaefer	"
Currie Mining Co.	"	E. A. Hardy	Old Hill	122 W. Sixth st.	"
Thos. Eureka Mining Co.	"	Billy Choo Mining Co.	Ohio	R. Mathewson	Lower Lake
Hibbing Bros.	"	Cumberland Mining Co.	"	R. Barrow	Mt. Eden
T. W. Marshall	"	John & Lewis Barnett	Popo Valley	J. Barton	"
Scott, Howe & Co.	"	J. Walters	"	Bamberger & Lagoro	"
T. Soubsy	"	California Iron & Steel	"	P. Christiansen	"
Soulsbyville Mining Co.	"	Wks., 438 California st.	San Francisco	John Johnson	"
Alex. Dougherty	Spenceville	Robt. Elliott	San Luis Obispo	F. Lund	"
John Sullivan	"	R. E. Jack	"	C. Madison	"
Thos. Welch	"	William Ladd	Tracy	John Michelson	"
Stone, Trimlow & Co.	Steger			P. Michelson	"
Grizzly Gulch Co.	Stella			D. & C. Pestdorf	"
Richard Hetschel	"			L. N. Whitley	"
Knickerbocker Co.	"	Mark Hand	Keeler		Newcastle
Mad Mule Co.	"	Robert Locket	"	L. Vogle	Oakdale
Mad Ox Co.	"	J. A. McKenzie	"	Alameda Macadamizing Co.	Oakland
Phoenix Co.	"	Jas. Stanborough	"	Laundry Farm Stone	"
Rattlesnake Co.	"	S. Wausen Mining Co.	"	Quincy Co.	"
Red Hill Co.	"			J. L. Lockhart	Ohio
Spring Gulch Co.	"			Gatt & Gatt	Penryn
John K. Williams	"			D. Griffith	"
Virnie Mining, Milling & Refining Co.	Stockton			G. Schwabenberg	"
Mrs. J. Mahoney	Sutter Creek			Lewis Bell & Co.	Quincy
R. W. & W. T. Thomas	Sweetland			Bennett & Bell	"
R. W. Beckerton	Trompsdal			H. G. Horsch	"
R. H. Brown	"			Goodrich & Kelly	"
Castello Bros.	"			E. A. Leitch	"
D. L. Dawson	"			J. Miller	"
E. Dason	"			Henry Ore	"
Lois Hoffman	"			Stephen & Edwards	"
Joseph Montizo	"			Thomas & Thompson	"
Charles Perry	"			F. Vere	"
Peterson Bros.	"			J. H. Whitlock	"
San Jacinto Estate Mining Co.	"			P. E. Knowles & Co.	Raymond
Arthur Crowley	Three Rivers			Alex. Wood	"
Jas. Hamilton	"			Arlington Granite Works	Riverside
Marcus Lavalley	"			J. L. Grant	Rocklin
Tom White	"			Samuel Reuter & Co.	"
G. W. Barnes	Toll House			Matt Lathley & Co.	"
Block & Ladley	"			Matt Leuber	"
Bloss & McClary	Trinity Center			T. Quinn	"
New Deep Gravel Gold Mining Co.	"			M. Hertzig	San Andreas
Regan & Roberts	"			Cuyamaca Quarry Co.	San Diego
Strude & Bowden	"			San Diego Granite Co.	"
Kiss Mining Co.	Victor			American River Land & Lumber Co.	San Francisco
J. H. Means	"			329 Sansome St.	"
Sidewinder Mining Co.	"			Callisto Co.	"
Maryland Mining Co.	Washington			Deegan & Brady	"
Spanish Mining Co.	"			E. W. Mc Donald	"
Washington Mining Co.	"			J. E. Montgomery st.	"
Lake Shore Gold & Silver Mining Co.	Woodland			A. Mc-ratty	"
H. S. Huensing	Yankee Hill			P. Marsieno	"
A. First	"			217 Sacramento St.	"
H. Hawkins	"			H. Osterloh	"
E. R. Lant	"			37 Commercial St.	"
J. Melior	"			Pacific Paving Co.	"
A. Patterson	"			Pacific Stone Co.	"
J. W. Spencer	"			Sixth and King sts.	"
G. W. Stout	"			N. E. Perrine Con. & Pav. Co.	"
M. H. Wells	"			204 Montgomery st.	"
O. W. Ward	Yosemite			Santa Cruz Rock Pav. Co.	"
Birdseye Creek Gold Mining Co.	Yon Bet			Ventura Asphalt Co.	"
Goodwin & Lawrence	"			Western Granite & Marble Co.	San Jose
John H. Hussey	"			Bituminous Block Mfg. Co.	San Louis Obispo
South Yuba Coal & Mining Co.	"			California Bituminous Rock Co.	"
The Ballarat Mining Co.	Yreka			James Cornaack	"
John Daggott	"			M. Greenberg & Co.	"
				E. Grant	"
				J. F. Morr	Santa Barbara
				J. Cope	Santa Cruz
				Henry Cowell & Co.	"
				211 Union St.	"
				C. W. Frost	Santa Rosa
				Guy E. Grose	"
				Otto Johnson	"
				L. Laurin	"
				Thos. O'Connor	"
				Charles Osborn	"
				J. D. Sullivan	"
				James Warner	"
				Edward Fieldhaus	Stuelling
				Wm. Trudgen	Sonoma
				H. Weel	"
				F. Dohi	S. Las Guilliferos
				Wochler & Pietsch	Spencerville
				Keith & Leaby	Victor
				A. C. St. John	"
				Victor Marble Co.	"
				H. S. Curtis	Yankee Hill

LEAD AND ZINC

MINERAL PAINT

PHOSPHATE

QUICKSILVER

SALT

SLATE

STONE, GRANITE, MARBLE AND ONYX

CVPSUM

IRON

## COLORADO

## ASBESTOS

NAME	POSTOFFICE
Asbestos Mining & Manufacturing Co.	Denayer
The Pacific Asbestos Co.	"
P. H. Whiting	"
33 Jacobson Block	"

## ASPHALTUM

American Asphalt Co., Denver

## COAL

H. H. Eddy	Axiol
James Bros.	"
Pfeiffer & Wheeler	"
Thomas Shirwin	"
Engene Taylor	"
Esac Mettrey	Chapman
Western Coal Co.	Colorado Springs
M. A. Blackner	Cortez
J. Y. Carpenter	"
Thomas Coppenger	"
J. H. McCracken	"
G. W. Taylor	"
J. A. Beatty	Delta
Black Diamond Coal Co.	Denver
Caledonia Coal Co.	"
Cannon Coal Co.	"
Cannon Fuel Co.	"
Colorado Oil & Gas Co.	"
Independent Coal Co.	"
Marshall Consolidated Coal Co.	"
The San Louis Coal & Coke Co.	"
Simpson & Spencer Coal Co.	"
The Sterling Mining & Prospecting Co.	"
City Coal Co.	Durango
Mollar & Brown Coal Co.	Eaton
R. G. Rodgers Coal Co.	"
Cleveland Coal Co.	Erie
Garfield Coal Co.	"
McKissick Coal Co.	"
Saint Vrain Coal Co.	"
Stewart Coal Co.	"
Union Coal Co.	Francerville
Price, Humstone & Carr	Hesperus
Fox Coal Co.	Langford
John F. Moore	La Veta
Marshall Coal Co.	Louisburg
Louisville Coal Mining Co.	Louisville
Edward C. Bart	Panonia
John M. Underwood	"
Grand View Coal Co.	Rico
Canon City Coal Co.	Rockvale
J. W. Seairis	San Miguel
Wm. Nuttall	Villa Grove

## COPPER

Dr. Allan	Boulder
M. V. Johnson	"
Mrs. Mary Miller	"
J. W. Nicholson	"
Chas. L. Spencer	"
California Mng. Co., Ltd.	Central City
Hill Ranch Mining Co.	"
Saratoga Mining Co.	"
Daniel Jenkins	De Beque
Shirley & Hinds	"
H. C. Parker	Eagle
D. & R. G. R. R.	Florence
Dewer City Mining Co.	Gunnison
Engene McCormick	Hillside
J. D. Yoris Copper Mine	"
E. Frankinberry	La Veta
John Herbin	"
T. L. Morgan	Platte Canon
G. H. Reynolds	Ridgway
A. M. Thomas	"

## GOLD AND SILVER

Domire & Son	Alder
Dubols & Co.	"
Land & Hawkins	"
Phillips & Ferris	"
Alamosa Mine	Alamosa
Brownlow Mining & Milling Co.	Alma
T. W. Dinty	"
Eagle, Stayner & Roof	"
Ohio Bonanza Mng. Co.	"
Silver Gem Mining Co.	"
W. Thomas	"

NAME	POSTOFFICE
Wilson Bros.	Alma
Allaganay Tunnel Co.	Asberaft
Elmira Mining Co.	"
Express Mining Co.	"
Chas. Morrissey	"
Treasure Vault Mining Co.	"
Wm. Warner	"
Wolverine Mng. Co.	"
Yellow Boy Mining Co.	"
Aspen Favorite Mining Co.	Aspen
Aspen Mountain Tunnel & Mining Co.	"
Bear Mt. M. & M. Co.	"
The Cash Gold Mining Co	"
Champion Empire Mining Co.	"
The Colorado Mine & Tunnel Co.	"
Holden Mining & Smelting Co.	"
Hunter Park Mining Co.	"
Miller Mining & Tunnel Co.	"
Paystone Mining & Milling Co.	"
Saturn Mining Co.	"
Sheep Mountain Tunnel & Mining Co.	"
Solitaire Mining Co.	"
David Welch	"
Arthur Colburn	Axiol
Hon. J. C. Botsanger	Hald Mountain
Hawley Gardner Mining Co.	"
H. B. Morse	"
New California Mining Co.	"
Warlock Mining Co.	Banner
J. M. Alexander	Barry
C. J. Bales	"
W. A. Bray	"
Harry Cocking	"
C. F. Curtis	"
E. E. Daniels	"
W. R. Bonnell	"
Ford & Anderson	"
Fred French	"
Diek Houghton	"
S. F. Hunt	"
Geo. A. Jones	"
Chas. L. Lang	"
C. P. Limun	"
Mary McKimney Mining Co.	"
T. S. Mayer	"
W. G. Shearer	"
H. P. Woodend	"
Francis Wright	"
J. C. Palmer	Beaver Creek
W. F. Payne	"
Geo. H. Toof	"
J. A. Davis	Berthoud
J. E. Dunley	"
A. W. Osborne	"
Ed. Pullian	"
B. F. Turner	"
P. Turner	"
J. K. Wallace	"
Carr Mining Co.	Black Hawk
J. Claudia Mining Co.	"
E. L. Drake	"
B. H. Koch, Menhemet & Co.	"
John & John R. Meller	"
Queen of the West Leasing Co.	"
Running Lode Mining Co.	"
A. E. Stanton	"
Toronto Mining Co.	"
Victoria Gold & Silver Mining & Milling Co.	"
Callope Mining Co.	Bonanza
The Empress Josephine Mining Co.	"
George Bogree	Boulder
J. C. Boyd	"
Wesley Brainer	"
Wm. Brown	"
Mart Cunnelford	"
Chas. Davis	"
Guy Fairhurst	"
James Henderson	"
J. W. Irwin	"
Henry Meyring	"
Geo. Mitchell	"
H. Neikirk	"
W. H. Nicholson	"
J. S. Pine	"
J. Wells Smith	"
L. R. Stearns	"
Gus Tent Jr.	"

NAME	POSTOFFICE
P. J. Werley	Boulder
Jos. Yates	"
Bacon Mining Co.	Breckenridge
Boss Nine Mining Co.	"
F. E. Christie	"
Farncomb Hill Mining Co.	"
C. A. Finding	"
R. W. Foote	"
Governor Mining Co.	"
R. R. Kirk	"
Little Corporal Mining Co.	"
John Maize	"
Mohawk Mining & Milling Co.	Brighton
Olava Placer Mine	"
Puzzell Mining Co.	"
The Gov. Routh Mining & Milling Co.	"
Lawrence Mining & Milling Co.	"
Requa Gold & Silver Mining & Milling Co.	Canon City
Yellow Medicine Mine	Capitol City
Wm. Donald	Carlton
J. L. Lord	"
Geo. A. Parhuck	"
Clay Co. Mining Co.	Central City
Fontaine Mining Co.	"
Fox Hall Tunnel & Mining Co.	"
Golden Treasure Mining Co.	"
Gunnell Mining Co.	"
Inglais Gold Mining Co.	"
Justice Mining Co.	"
Rialto Mining Co.	"
San Juan Mining Co.	"
Geo. Cuffman	Chumarron
M. W. Cline	"
J. Diekey	"
A. C. Fay	"
W. A. Thomas	"
Murdie M. & M. Co.	Clancey
John Craven	Climax
Pat Dobbin	"
Jos. Fischer	"
John Johnson	"
J. W. Lewis	"
Sid. McKeely	"
Mike Ward	"
Colorado City & Manitou Pros. & Mining Co.	Colorado City
Adhe E. Mining & Milling Co.	Colorado Springs
Antlers Mining & Milling Co.	"
Beaumont M. & M. Co.	"
Beaver Cons. Mining Co.	"
Beaver Creek M. & M. Co.	"
Big Pocket M. & M. Co.	"
Blue Bell M. M. & Pros. Co.	"
Brookvale Mining & Tramway Co.	"
Cleopatra Mining Co.	"
H. Colbraun	"
Cut Diamond Mining & Milling Co.	"
Des Moines Gold Mining Co.	"
The Economic Mining & Reduction Co.	"
Edina Mining & Milling Co.	"
Eldridge Constock Gold Mining Co.	"
Elba Mining & Milling Co.	"
Enterprise Mining & Land Co.	"
The Etta Consolidated Mining Co.	"
Expert Mining Co.	"
Florence M. & M. Co.	"
Goldstone Mining Co.	"
Gold Gelsor Mining Co.	"
The Lemhi Placer Mining Co.	"
The Leslie E. Keeley Mining & Milling Co.	"
Little Maud Mining Co.	"
Lottie Gibson Mining & Milling Co.	"
Magna Charta Mining and Milling Co.	"
Mammoth Gold Mining Co.	"
Midland Gold Mining Co.	"
Mollie Eppert Mining & Milling Co.	"

NAME	POSTOFFICE	NAME	POSTOFFICE	NAME	POSTOFFICE
Monument Treasure Mining & Milling Co.	Colorado Springs	Peruvian Gold Mining Co.	Cripple Creek	Jackson Mining & Exploring Co.	Denver
Mount Esther Mining & Milling Co.	"	J. W. Ridgeway	"	Little Anacoda Mining & Milling Co.	"
ML Ross M., M. & L. Co.	"	Rosette Mining Co.	"	Little Gold Mining & Milling Co.	"
Mutual M. & M. Co.	"	W. Stratton	"	The Loop Gold Mining Co.	"
Myrtle Mining Co.	"	The Tam O'Shanter Gold Mining Co.	"	Liechtenhaugh Pulverizer Mining & Milling Co.	"
Napoleon Gold Mining Co.	"	The Temoj Mining & Milling Co.	"	Mergold Mining & Investment Co.	"
Nugget Mining & Milling Co.	"	The Vera Boyner Mining & Milling Co.	"	Miller Mining & Tunneling Co.	"
Ophir Mining & Milling Co.	"	R. A. Work	"	Mineral Developing Co.	"
Poland Mining Company	"	F. B. Wortman	"	The Mint Mining Co.	"
Pony Express Mining Co.	"	P. Conroy	Crisman	ML Egbert Mining & Milling Co.	"
Princess Gold Mining Company	"	Geo. Keenan	"	New Zealand Mining Co.	"
Railway Conductors' Mining & Milling Co.	"	Daye Vessels	"	Orphan Girl Cons. Mining & Milling Co.	"
Ramona M. & M. Co.	"	J. W. Vinton	"	The Palo Mining & Milling Co.	"
Red Mountain Cora Bell Mining Co.	"	Geo. H. Williamson	"	Pneumatic Ore Milling & Mining Co.	"
Rock Glen Town & Mng. Co.	"	The Creedmoor Mining Co.	Del Norte	Reno Mining & Milling Co.	"
Rock Island Gold Mining & Milling Co.	"	Equitable Mining & Prospecting Co.	"	The Rio Grande Gold Placer Mining Co.	"
Rocky M., M. & Investment Co.	"	Home Run Mining Co.	"	The Rising Sun Mining & Milling Co.	"
Scotia Mining & M. Co.	"	American Girl Mining Co.	Denver	Rhyolite Mining & Milling Co.	"
Summit M. & M. Co.	"	Arceuth Placer & Lode Mining Co.	"	Rio Grande Valley Prospecting & Mining Co.	"
Sunny Bell Mining & Milling Co.	"	The Arvilla Tunnel & Mining Co.	"	Romanee Cons. Gold & Silver Mining Co.	"
The Uncle Sam Mining & Milling Co.	"	The Atlanta & Creede Mining Co.	"	Salmon River Placer Mining Co.	"
Washington Mining Co.	"	Bachelor Mount Mining & Milling Co.	"	The Sanford Mining Co.	"
Wyatt Mining Co.	"	Barbara Gibson Mining & Milling Co.	"	Sheba Queen Mining Co.	"
Yule Creek Marble & Mining Co.	"	Barthol Mining & Milling Co.	"	Shenandoah Mining & Milling Co.	"
T. Bennett	Como	The Beacon Mining & Milling Co.	"	Summit Mining & Smelting Co.	"
Neddie Mining & Milling Co.	Copper Rock	Bernice Mining & Milling Co.	"	The Sun-Set Gold Mining Co.	"
A. Barrett	Cortez	Buffalo Creek Gold Mining Co.	"	Sutton Mining & Milling Co.	"
J. Billingsley	"	Burton Gold & Silver Mining Co.	"	The Tabor Investment Co.	"
S. Biley	"	Cambria Mining Co.	"	Tabor Mines & Milling Co.	"
John Buckley	"	Camp Bird Mining & Milling Co.	"	Toronto & Montreal Mining & Milling Co.	"
W. E. Crane	"	Cardinal Mining & Milling Co.	"	Union Trust & Loan Co.	"
Jas. W. Hanna	"	Carlton Cons. Mining Co.	"	The Warren Gold Mining & Milling Co.	"
E. Thomas	"	Chester Annal. Mining Co.	"	Windsor Mining Co.	"
A. L. Thompson	"	Chicago & Creede Cons. Mining & Milling Co.	"	Wyoming & Colorado Mining, Milling & Investment Co.	"
John Wilson	"	Colorado Cripple Creek Gold Mining Co.	"	The Yankee Hill Mining & Milling Co.	"
Black Bros.	Cottonwood Spgs.	Colorado Enterprise Leasing & Mining Co.	"	Adolph Ballif	Dillon
A. M. Jenney	"	Colorado & Mexico Exp. & Dev. Co.	"	Thos. Dicus	"
Fox Bros.	"	Cardinal Mining & Milling Co.	"	G. E. L. Gould	"
A. M. Morse	"	Carlton Cons. Mining Co.	"	Thos. Hamilton	"
Annie Rooney Mining Co.	Creede	Chester Annal. Mining Co.	"	John Makey	"
Camp Bird Mining Co.	"	Chicago & Creede Cons. Mining & Milling Co.	"	Richard Newnes	"
The Common Sense Mining Co.	"	Colorado Cripple Creek Gold Mining Co.	"	S. F. Pratt	"
Eliel Mining Co.	"	Colorado Enterprise Leasing & Mining Co.	"	A. L. Van Alstine	"
Meister & Morgan	"	Colorado & Mexico Exp. & Dev. Co.	"	Edw. Ward	"
Park Resident Cons. Mining Co.	"	Cardinal Mining & Milling Co.	"	C. W. Warren	"
Riall Collins Tunnel Co.	"	Copper Rock Gold Mint Co.	"	A. L. Wilson	"
Stanhope Mining Co.	"	The Corson Development Co.	"	W. H. Hunt	Dolores
Watrous Mining Co.	"	Cripple Creek Gold Extr. & Purify Co.	"	J. H. Knight	"
Eureka Mining Co.	Crested Butte	Currency Mining Co.	"	W. M. May	"
Excelsior Mining Co.	"	J. M. Curry	"	John Seil	"
Ityvanite Mining Co.	"	Decatur Mines Syndicate Ltd.	"	John Anderson	Dumont
Irwin Milling Powers Co.	"	The Denver Boy Gold Mining & Milling Co.	"	E. S. Bailey	"
Jenny Lind Mining Co.	"	E. Deringer	"	Edward Bowden	"
Ruby King M. Co.	"	The Dunsmuir Pure Gold Mining Co.	"	W. L. Boyd	"
Harrison Nash	Crestone	The Elkhart Cons. Mining Co.	"	R. W. Binn	"
Spar Mining Co.	"	The Fair Chance Mining Co.	"	Chris Clawson	"
Avanada M. & M. Co.	Cripple Creek	Free Gold Hill Cons. Mining & Milling Co.	"	Alex. Cooper	"
Benita Gold Mining Co.	"	Florella Mining & Milling Co.	"	S. Dingle	"
The Blue Bell Mining Co.	"	Garfield Coal Mining Co.	"	M. Doyle	"
Blue Bird Placer M. & M. Co.	"	Globe S. & R. Co.	"	J. E. Drake	"
A. Bower	"	The Gold & Silver Extraction Mining & Milling Co.	"	J. C. Eastley	"
Brewsters Bros.	"	The Gold Maid Mining & Milling Co.	"	S. Eldred	"
The Bull Hill Mining & Tunnel Co.	"	Golden Rule Mining Co.	"	Thos. Green	"
C. Cadamus	"	The Great Southern Gold & Silver Mining Co.	"	H. M. Jones	"
California Gold Mining & Milling Co.	"	The Gregory Silver Mining & Milling Co.	"	Kaverny Mining Co.	"
Comstock-Eldredge Gold M. Co.	"	Grey Eagle & Potositas Cons. Mining Co.	"	Amos Knabb	"
Cripple Creek Brokerage & Investment Co.	"	Hambarger Mining & Prospecting Co.	"	S. J. W. La Munnyon	"
Cripple Creek Placer Mining Co.	"	Idaho Springs Mining & Developing Co.	"	N. A. Lartigue	"
The Cripple Creek Silver Bell Mining Co.	"			Ohio Gulch Mining Co.	"
M. A. Dickinson	"			Oneson Pratt	"
E. G. Darrow	"			Ned Pearl	"
Gill & Vardaman	"			Alex. Seaton	"
Gold Deposit Mining Co.	"			J. W. Smith	"
L. G. Halley	"			Phil Stephens	"
Peter Helzig	"			S. Thompson	"
J. E. McCoy	"			C. Whitecomb	"
J. P. Madden	"			D. E. Wilson	"
T. S. Marble	"				
Marshall & Adams	"				
The Mattie W. Mining & Milling Co.	"				

NAME	POSTOFFICE	NAME	POSTOFFICE	NAME	POSTOFFICE
Oro Fino Mining Co.	Durango	Putkin Mining Co.	Gunnison	Carson Mining Co.	Lake City
Bertoff Bros.	Eagle	Frank Allen	Gypsum	Jas. Colville	La Veta
S. J. Hockett	"	Beach & Waldron	Hahn's Peak	F. L. Dryden	"
Clear Creek Mining Co.	Empire	Chas. Gibson	"	Wm. Spranger	"
Little Howard Mining Co.	"	A. S. Hutchison	"	O. D. Staplin	"
North Mining Co.	"	Cashier M. Co.	Hall Valley	Taylor Markey	"
Pausing Mining Co.	"	Comet Cons. Mining Co.	"	E. F. Wayne	"
R. J. Farley	Eureka	Great Eastern Mining Co.	"	Joe Reynolds M. Co.	Lawson
Eureka Mining Co.	"	J. M. Kline	"	Allegheny Mining Co.	Leadville
Little Josephine Mining Co.	"	Engene Knight	"	Elgin S. Co.	"
"	"	Whale Mining Co.	"	The Leadville Mine-Leasing Co.	"
Wm. McFarland	"	D. H. Wilson	"	Rubin Mining Co.	"
J. D. Niswonger	"	W. E. Baldwin	Haworth	Twin Lakes Hydraulic	"
W. H. Taggart	"	Frank Brazil	"	Gold Mining Co.	"
Geo. W. Tallman	"	J. F. Bush	"	Long's Peak Mining & Milling Co.	Longmont
Cato Mining Co.	Fairplay	Samuel Gardner	"	M. A. Rowen	"
Mudhill Mining Co.	"	Mike Connors	"	F. Beaumont	Magnolia
Thos. Sheldon	"	O. H. Dunham	"	C. Buckingham	"
Henry Booher	Farmham	Leslie Gillette	"	M. Conrfort	"
L. Gilbert	"	Salem M. Hardy	"	Forlorn Hope Mining Co.	"
E. Rollins	"	Gilbert Hayes	"	T. Graham	"
West Bros.	"	John Howard	"	A. Haly	"
P. W. Wood	"	James Kelly	"	G. Lytle	"
Blue Belle Mining Co.	Florissant	William Kerr	"	J. E. Martin	"
F. R. Castello	"	Henry McGuirey	"	J. Maxwell	"
N. S. Davis	"	J. Mace	"	W. P. Sale	"
Thos. Donnell	"	J. Mathews	"	W. Strickland	"
Florissant Mining Co.	"	A. E. Reynolds	"	J. Reid	"
D. Everett	"	Speck & Ruspier	"	W. F. Sale	"
John Wilson	"	Thomas Vails	"	J. H. Sisco	"
C. L. Wilson	"	Raich Bros.	Hobron	J. H. Preece & Co.	Mancoes
Forrest Mining Co.	Fort Collins	T. C. Graden	Hesperus	John Wesch	"
Relief Mining & Milling Co.	"	J. D. S. Hopkins	"	Manhattan S. M. & M. Co.	Manhattan
Seven Mile Mining & Milling Co.	"	W. B. Ritter	"	Agnes C. Mining Co.	Manitou
Valero Mining & Milling Co.	"	Wm. T. Vails	"	Calmet M. & M. Co.	"
W. Z. Cozens	Fraser	Dr. J. P. Wallace	Hillside	Claude Mining & Milling Co.	"
D. Morgan	Fulford	L. R. Hayden	"	Empress of Aspen Mining Co.	"
Gold Link Mining & Milling Co.	Geneva Falls	John Howard	"	Joseph Barnes	Marble
Cascade & Hudson Co.	Georgetown	Camp Fancy M. Co.	Holy Cross	L. B. Cline	"
Guy F. Clark	"	French Min. M. Co.	"	Dunley Bros.	"
Thos. Cornish	"	Emmas Mine	Horseshoe	E. E. Nisbett	"
Dunderburg Mining Co.	"	Jonah Paragium	Howard	E. Gilley	Mesker
J. M. S. Eagau	"	John Taylor	"	Geo. Welty	"
Kertley Mine	"	A. M. Wilson	Howardsville	P. M. Deek	Mineral Point
Montreal Mining Co.	"	Ed. Birehshadler	"	P. C. Logan	"
Pay Rock Mining Co.	"	John Fernando	"	Polar Star Mining Co.	"
Pelican Mining Co.	"	Hy Forsyth	"	Syracuse Trade M. Co.	"
Seven-Thirty Mining Co.	"	Andrew Kauth	"	Silent Friend M. Co.	Monarch
Terrible Mining Co.	"	G. D. Kimball	"	Jefferson Mining Co.	Moreland
Wm. Freeman	Glenwood Springs	Louis Meyer	"	The American Cons. Mining & Milling Co.	Moond City
Broad Mountain Mining Co.	"	R. Negold	"	Potosi Mining Co.	Mt. Sneffels
DeFrance Mt. Mining Co.	"	O. A. Nelson	"	Revenue Tunnel Co.	"
W. E. Boyevaux	"	Ed. Olson	"	Trust Ruby Mining Co.	"
H. W. Emen	"	O. B. Riedel	"	Wheel of Fortune Mine	"
T. C. Ewing	"	T. M. Tripper	"	Cottonwood Placer Co.	Naturita
J. H. Fesler	"	C. J. Allen	Idaho Springs	D. W. Lawrence	"
Chas. First	"	J. J. Elliott	"	Paul Warner	"
Wm. Gelder	"	Fortunas Gold & Silver Mining Co.	"	Richard Clements	Nederland
Glenwood Mining Co.	"	Idaho Springs Mining & Development Co.	"	C. M. Edwards	"
H. R. Katun	"	Louis M. Alcott Co.	"	W. Hetzer	"
Ed Korupkat	"	H. P. Lowe	"	James L. Hughes	"
C. Lee	"	David Lunley & Co.	"	George Light	"
P. Meadows	"	Malhev & Sullivan	"	Charles Lovless	"
Robt. Murray Mining Co.	"	P. F. Osbiston	"	Thos. Matters	"
John Shumak	"	W. C. Renshaw	"	Fred Mullins	"
Little Josephine Mining Co.	Golden	Herbert Westcott	"	Pierce Press	"
Cash M. & M. Co.	Gold Hill	Carbonate King Mining Co.	Ironton	John Rodell	"
King Mining Co.	"	Colorado Boy Mining Co.	"	Wm. H. Snelson	"
Long Gulch Mining Co.	"	John Ferrill	"	L. H. E. Soersen	"
Prussian Mining Co.	"	J. L. C. Mining Co.	"	Guys C. A. Trollope	"
St. Joe Mining Co.	"	Kentucky Mining Co.	"	Guy Wing	"
Victoria Mining Co.	"	Monks Queen Mining Co.	"	C. H. Packard	New Windsor
A. E. Goodwin	Gothie	Gen. W. Gates	"	Joe Auspurgel	Ophir
Argent Consolidated Mining & Milling Co.	Grand Junction	Paymaster Mining & Milling Co.	"	Gold Crow & Osceola Co.	"
Goeblie Mining & Milling Co.	"	Roseoe Conkling Mining Co.	Jackson	Lennox Sears	"
Isaac Alden	Grand Lake	The Argo Gold Mining & Milling Co.	Jamestown	Eli Silsky	"
J. Cairns	"	James Conway	"	L. M. Webber	"
L. Coffin	"	E. C. Dunbar	"	Garibaldi Mining Co.	Oro City
A. A. Fairhart	"	W. H. Emmanuel	"	Iron Silver Mining Co.	"
J. Elliott	"	W. H. Evans	"	Joseph Carson M. Co.	"
W. C. Gregg	"	Chas. Faivre	"	La Platta Mining Co.	"
John Smart	"	J. Jay Mining Co.	"	Leo Mining Co.	"
Greeley Mining & Milling Co.	Greeley	A. J. McCorkle	"	Lillian Antioch Mining Co.	"
Big Packer Mining Co.	Green Mt. Falls	Tim O'Connor	"	Winnie & A. Y. Mining Co.	"
Green Mt. Falls Co.	"	Sungler Mining Co.	"	J. C. Hradley	Oster
Jewett Tunnel	"	Geo. Walker	La Garita	James Britt	"
The Gunnison Prospecting, Mining & Milling Co.	Gunnison	J. W. Barnes	"	John Gray	"
J. S. Lawrence	"	Mark Biedell	"	Assa Poor	"
John McCormack	"	D. H. Dunn	"	John Sullivan	"
Pericles Placer Mining Co.	"	W. F. Knowlton	"	Humboldt Mining & Milling Co.	Ouray
		J. R. McLeod	"	Kevo Mining Co.	"
		G. D. Nickel	"	Memphis Mining Co.	"
		J. S. Sanderson	"	Menlo Park Mining Co.	"
		J. H. Shaw	"	Ouray Gold Mining Co.	"
		James Stone	"	Ruby Mountain Mining & Milling Co.	"
				Silver King Mining Co.	"
				G. W. Tuggan	Park Dale



NAME	POSTOFFICE	NAME	POSTOFFICE	NAME	POSTOFFICE
W. H. Murray	Park Dale	Black Hawk Mining Co.	Rico	Con. Murphy	Summit Park
John McNaughton	Paonia	J. O. Campbell	"	J. W. Ransford	"
J. H. Randolph	"	C. H. Carpenter	"	B. E. Shepard	"
I. O. Sandborn	"	Wm. Chiesman	"	Bear Creek Mining Co.	Telluride
Marvin Stewart	"	Enterprise Mining Co.	"	Geo. A. Britle	"
L. C. R. Case	Parrot	Grand View Mining Co.	"	F. M. Dunlap	"
Ernest Richardson	"	Dani. Kirby	"	Gold King Mining Co.	"
C. C. Vaughans	"	Leila Davis Mining Co.	"	Hector Mining Co.	"
S. & C. Wheeler	"	Logan Mining Co.	"	Mendota Mining Co.	"
The Chronicle Mining Co.	Pitkin	F. P. Newby	"	E. E. Rankle & Co.	"
Columbus G. & S. Min-	"	Wellington Mining Co.	"	The Telluride Consoli-	"
ing Co.	"	Dr. Crawford	Ridgway	dated Mining Co.	"
Gold Brick Mining &	"	Thos. Herean	"	Chas. V. Noble	Thomasville
Milling Co.	"	H. L. Judd	"	Geo. M. Noble	"
Silver Basin Mining Co.	"	Fred H. Turner	"	John Clark	Tin Cup
Troyen Mining Co.	"	Belmont Dev. Co.	Robinson	Chas. Foreman	"
Robert Berleo	Placerville	Crown Point Mining Co.	"	B. C. Gray	"
S. P. Bingham	"	Diamond Mining Co.	"	Wm. Haynes	"
J. C. Chap	"	Ewing Leasing Co.	"	J. P. Korn	"
Walter Evans	"	G. B. E. Mining Co.	"	Thos. McAniff	"
M. R. Hall	"	Homestake Mining Co.	"	F. B. Massey	"
San Miguel Hydraulic	"	Rattler Mining Co.	"	F. Mitchell	"
Mining Co.	"	St. Louis Mining Co.	"	A. N. Perrault	"
W. E. Steele	"	Town Site Mining Co.	"	W. W. Allen	Tomphi
W. H. Wheeler	"	H. E. Woods	"	J. D. Carns	"
S. W. Young	"	W. Livingood	Rockwood	S. S. Dawson	"
John Barnhardt	Portland	John Noary	"	Fred Grewer	"
N. S. Clark	"	E. S. Road	"	Jas. McAnley	"
J. B. Clemmons	"	J. S. P. Brown	Bohrnsville	A. T. Rankin	"
G. Franklin	"	Grand Union Co.	"	Richmond Gold & Silver	"
S. Oliver	"	J. P. Leaning	"	Mining Co.	"
R. Pines	"	Newport Mining & Mill-	"	J. W. Whittington	"
E. Rewalt	"	ing Co.	"	Trinidad Gold & Silver	"
Frank Roid	"	Ed. J. Stephenson	"	Mining Co.	Trinidad
F. Virden	"	Red Ravine Cons. Min-	"	Bright Hoops Mining Co.	Trout Lake
W. Walker	"	ing Co.	Romley	Hon. Chester Green-	"
C. Ward	"	M. D. Housman	Russell	wood	"
Alambrera Mining Co.	Pueblo	Joseph Russell	"	Clara Mining Co.	"
Bachelor Hill Mining Co.	"	Mountain Lion Mining	"	Iron Springs Mining Co.	"
Captain Iner. Mining Co.	"	& Milling Co.	Saguache	Jos. L. Roberts	"
Caracole Mining Co.	"	Fresco C. Mining Co.	St. Elmo	San Juan Mining Co.	"
Copper Monarch Mining,	"	Falcon Gold Mining &	"	A. H. & A. Anderson	Twin Lakes
Smelting & Refining	"	Milling Co.	Salida	W. H. Beal	"
Co.	"	Hugo Henkeler	San Isabel	Will A. Buchanan	"
Denver City Cons. Min-	"	Howard Hopkins	"	Geo. E. Collins	"
ing Co.	"	Barnes McArtney	"	John Gomers	"
Diamond R. M. Co.	"	Harrison Nash	"	J. Hutchinson	"
Franklin Mining Co.	"	Belmont Mining & Mill-	"	George Lane	"
International Mining Co.	"	ing Co.	San Miguel	Lewis & Henry Markt	"
J. A. Joy	"	F. A. Dunlap	"	Jas. Ringold	"
The Lead Hill Mining &	"	Gold King Mining Co.	"	L. R. Starpe	"
Milling Co.	"	Hagenbans, Vorse & Co.	"	John A. Storm	"
Lucky Tunnel Mining Co.	"	James & Weller	"	Warren Cutler & D.	"
Nelle Sanborn Mining	"	Keystone Gold Mining	"	Foster	"
Co.	"	Co.	"	Dr. A. E. Wright	"
Philo S. & R. Co.	"	Keystone Placer Co.	"	P. F. Griffith	Villa Grove
Phil Sheridan Mining &	"	John McEwen	"	J. B. Hall	"
Milling Co.	"	E. E. Rankle	"	W. J. King	"
Pueblo Bell Mining &	"	Turkey Creek Mining Co.	"	Caroline Mining Co.	Virginia
Milling Co.	"	Union Mining & Milling	"	Monarch Mining Co.	"
Pueblo Cons. Gold Min-	"	ing Co.	"	Terrible Mining Co.	"
ing Co.	"	Chas. Austin	Sargents	Laule Enterprise	Wagon Wheel Gap
Pueblo & Creede Mining	"	F. P. Gunnell	"	Patten & Sou	"
& Milling Co.	"	F. H. Sanderson	"	G. W. Thorne	"
Pueblo S. & R. Co.	"	Booker & Lupton	Sharpsdale	H. Turner	"
Rocky Mountain Mining	"	Wm. Decker	"	Waters & James	Walsenburg
& Development Co.	"	John T. Reed	"	Silver Mount Mining Co.	Ward District
Spring Creek Gold Min-	"	Taylor & Jack	"	Baxter Mining Co.	"
ing & Milling Co.	"	The Bassick Contact Gold	"	Columbia Mining Co.	"
Victor Smuggler Gold	"	& Silver Mining & Mill-	"	Grandview Mine	"
Milling Co.	"	ing Co.	Silver Cliff	Ni West & Mandaline	"
E. B. Wicks	"	John Dietz	"	Mining Co.	"
Yellow Jacket Mining &	"	H. W. Foss	"	Oriental Mine	"
Milling Co.	Red Cliff	Greyser M. & M. Co.	"	John Reid	"
J. J. Campbell	"	J. W. Lawrence	"	Golden Hope Mining Co.	W. Sulphur Springs
Champion Cons. Mining	"	Stover & Hammond	"	John Anderson	White Cross
& Milling Co.	"	H. Townsend	"	George Boyd	"
J. G. Da Lee	"	Gabriel Bartolomea	Silver Plume	J. H. Brown	"
H. T. Elder	"	Dawson & Co.	"	Jas. Chapman	"
Ground Hog Mining Co.	"	Thomas Estabro	"	Comston Mining Co.	"
D. A. Mills	"	James Hinds	"	M. E. Holland	"
Geo. E. Simonton	"	Ernest Baotff & Co.	Silverton	Leonard Low	"
Jas. Southum	"	Silverton Mining Co.	"	Park View Mining Co.	"
Chas. H. Taylor	"	A. Dooling	Stonewall	Red Gulch M. Co.	"
Harry Wilkinson	"	Thad Adams	Sugar Leaf	Jas. Sloan	"
Wyoming Valley Mining	"	A. H. Barth	"	Jas. Steinbeck	"
Co.	"	California Mining Co.	"	George Whitson	"
American Belle Mining	Red Mountain	Geo. Canfield	"	H. F. Wright	"
Co.	"	J. G. Cones	"	Robt. Fernsworth	Woodland Park
Bob Tail Mining Co.	"	R. F. Copes	"	Wm. C. Sunders	"
Carbonate King Mining	"	W. H. Fepes	"	John H. Smith	"
Charles N. Collins	"	J. Henderson	"	D. Spauldin	"
Cora Belle Mining Co.	"	Seymour Johnson	"	Alvin Stump	"
Genesee Vanderbilt Min-	"	S. G. Knott	"	A. G. Templeton	"
ing Co.	"	Milson Mining Co.	"	David Vaun	"
Guston Ltd. Mining Co.	"	J. F. Monell	"		
National Belle Mining	"	J. T. Murray	"		
Co.	"	C. J. Pate	"		
Silver Lodge Syndicate	"	C. J. Partridge	"		
Mining Co.	"	S. B. Shultz	"		
Vankee Girl Mining Co.	"	J. H. Thompson	"		
A. P. Adams	Rico	H. S. Hickox	Summit Park		
		G. W. Ingram	"		

## CYPSPUM

Denver Gypsum Co. Denver

## IRON

B. W. Lewis, Ginnison  
J. M. Duckert, Hillside

NAME	POSTOFFICE
Gem Mining Co.	Hillside
Jack A. Brown	Meeker
Frank Holman	Osier
<b>LEAD AND ZINC</b>	
Wm. Brown	Jamestown
Chas. Kelley	Ridgeway
J. A. Stuart	"
Pohl & Co.	Robinson
D. H. Lewis	Sargents
Capt. J. F. Altum	White Pine

<b>MICA</b>	
New Mexico Mica Mining Co.	Denver

<b>MINERAL PAINT</b>	
Franklin Paint Mills	Denver

<b>SLATE</b>	
Yule Creek Slate & Mining Co.	Colorado Springs

<b>STONE, GRANITE, MARBLE AND ONYX</b>	
J. L. Chaston	Alkins
J. E. Smith	Becker Creek
Henry Breach	Boulder
G. W. Giggy	"
W. Iredale	"
T. E. Owen	"
Ed. Williams & Co.	"
J. N. Williams	"
Dunderberg Mine	Bridgeport
Douglas Lava Co.	Colorado Springs
Orlando Metall	"
Stewart Stueco & Cement Co.	Denver
Peter Baxstrom	Corral
James Boyle	De Beque
Cherry Red Sand Stone Co.	Denver
Douglas Stone Quarry Co.	"
1510 Seventeenth St.	"
Mexican Onyx Co.	"
Roy & Savard, cor. W. 14th av. & S. 6th st.	"
Houser & Red	Dolores
F. W. Atkinson	Florissant
Stout Stone Quarries	Fl. Collins
Peachblow Sandstone Co.	Glenwood Springs
J. B. & Wm. Church	Golden
J. Simmons	"
F. G. Zugelder	Gunnison
Coppinger, Jackaway & Stubbs	Hesperus
Y. I. Edwards	"
A. Wild	Loveland
J. W. Tumbleson	Lyons
E. F. Barnett	Manhattan
W. C. Holmes	"
T. J. Montgomery	"
J. Zimmerman	Marble
W. D. Parry	"
E. E. L. Ryeland	Rockwood
J. B. Wheeler & Co.	"
Wood & Kline	"
Dick Toy	Meeker
Sam C. R. Arker	Monarch
Newcastle Kaolin Mining & Mfg. Co.	Newcastle
J. J. Carlett	Osier
Jenkins-Ferguson Co.	Silver Cliff
A. T. Roys	"
Porter Coal Co.	Porter
Pueblament Plaster Co.	Pueblo
J. C. Hamlin	Rangely
Chas. Hefley	"
J. W. McCaslin	"
R. Toney	"
F. Stanton	Ridgeway
J. Hocking	Rockwood
R. W. English Lumber Co.	Sulda
Western Onyx Marble Co.	"
Orto Read	San Miguel
W. G. Washington	Silver Cliff
J. Miller	Thomassville
Willer Creek L. & L. Co.	"
Hy. Alexander	Twin Lakes
T. Mooney	Walsenburg

<b>CONNECTICUT</b>	
<b>COLD AND SILVER</b>	
E. C. Barriek	Bridgeport
Austerlitz Gold Mining Co.	Norwich
Mine Hill Quarry Co.	Roxbury Station

NAME	POSTOFFICE
Lathrop M. & Red. Co.	Hartford
Kent Iron Co.	Kent Furnace
Davis Digging Co.	Lakeville
Forbes Ore Bed	"
Geo. H. Burgess	New Haven
Brook Pitt Mining Co.	Ore Hill
Chatfield Mining Co.	"

<b>STONE, MARBLE, GRANITE AND ONYX</b>	
C. B. Wooster	Ansonia
Frank Armstrong	Bridgeport
Bridgeport Quarry Co.	"
P. Garvey	"
J. S. Hubbell	"
J. W. Southey	"
Connecticut Brownstone Co.	Crownwell
New England Brownstone Co.	"
Malin Collins	Danbury
A. M. Curtis	East Gastonbury
Lester Holmes	"
H. T. Linger	East Killingly
J. D. Mead	Greenwich
T. Rich & Son	"
Henry Webb	"
J. Scully & Son	Groton
Sech Bolden & Son	Hartford
Alexander Dallas	"
Haddam Granite Quarry Co.	Middleton
Scottie & Murphy	"
T. M. Clark	Milford
Opie & Cuddy	Mystic
Trevina Bros	"
John Hamm	New Britain
C. F. Stoll	New London
Booth Bros	Niantic
James V. Luce	"
David McNaughton	"
Milstone Granite Co.	"
White Granite Co.	"
E. B. Durley	Norwich
O. F. Gibson	Orono
Gorman Bros	S. Manchester
J. W. Boswell	Sterling
Bramford Granite Co.	Stony Creek
J. N. Derbie & Co.	"
R. R. Jull	"
W. H. Osborn	Williamantie

<b>DELAWARE</b>	
<b>STONE, GRANITE, MARBLE AND ONYX</b>	
Daniel Dougherty	Wilmington
Green Serpentine Marble Co.	"
McKendrick & Scott	"
416 E. Eleventh st.	"
P. P. Tyre	"

<b>FLORIDA</b>	
<b>PHOSPHATE</b>	
Capital Phosphate Co.	Anthony
Compagnie des Phosphates de France	"
Mullen & Meadows Co.	"
J. W. Roberts Phosphate Co.	"
Royalty Phosphate Co.	"
Siannah Co.	"
Atlanta & Florida Phosphate Co.	Arcadia
Altha River Phosphate Co.	Bartow
Berkley Phosphate Co.	"
Brown Valley Phosphate Co.	"
Pharr Phosphate Co.	"
Cherr Phosphate Co.	"
J. M. Clement	"
Frank Hughes	"
Hunt, Lay & Jostyn	"
M. W. La Rue Phosphate Co.	"
Lay Phosphate Co.	"
Lybascn Phosphate Co.	"
Pharr Phosphate Co.	"
Plant City & Bartow R. R. Co.	"
Tenasco Phosphate Co.	"
Tennessee & Florida Land Co.	"

<b>FLORIDA</b>	
<b>PHOSPHATE</b>	
Capital Phosphate Co.	Anthony
Compagnie des Phosphates de France	"
Mullen & Meadows Co.	"
J. W. Roberts Phosphate Co.	"
Royalty Phosphate Co.	"
Siannah Co.	"
Atlanta & Florida Phosphate Co.	Arcadia
Altha River Phosphate Co.	Bartow
Berkley Phosphate Co.	"
Brown Valley Phosphate Co.	"
Pharr Phosphate Co.	"
Cherr Phosphate Co.	"
J. M. Clement	"
Frank Hughes	"
Hunt, Lay & Jostyn	"
M. W. La Rue Phosphate Co.	"
Lay Phosphate Co.	"
Lybascn Phosphate Co.	"
Pharr Phosphate Co.	"
Plant City & Bartow R. R. Co.	"
Tenasco Phosphate Co.	"
Tennessee & Florida Land Co.	"

NAME	POSTOFFICE
Glen-Alth Phosphate Co.	Bay Hill
Baldwin Phosphate Co.	Blue Springs
Bowling Green Phosphate Co.	"
Bowling Green Phosphate Co.	Bowling Green
E. W. Dikie	Chilpey
Adams & Gordon Phosphate Co.	Citra
Duane Phosphate Co.	"
Cleveland Phosphate Works	Cleveland
De Land Manufacturing Co.	"
Hurns Chemical Co.	De Land
Dummetton Phosphate Co.	Dummetton
Early Bird Phosphate Co.	"
Evans & Hubbard	"
International Phosphate Co.	"
Prospect Phosphate Co.	"
L. Btekes & Son	Ellaville
J. G. McGillin	Fernandina
B. Orentz & Co.	"
Jas. Morrison	Fort Mead
Leet ony Phosphate Co.	Fort Myers
R. G. Perin	"
Gainsville Phosphate Phosphate Manufacturing Co.	Gainsville
G. W. Sutherland	"
Wacassissa Phosphate Manufacturing Co.	"
Diamond Phosphate Co.	Istachatta
Imperial Phosphate Co.	"
Silver Phosphate Co.	"
Boea Grande Pebble Co.	Jacksonville
Bowling Green Phosphate Co.	"
Clarkson, Robertson & Co.	"
Florida Development Co.	"
Little Bros. Fertilizer & Phosphate Co.	"
Mamlatlan Phosphate Co.	"
Pebble & Soft Phosphate Co.	Kendrick
Florida Pebble Phosphate Co.	Kissinwe
Lacoochee Phosphate Co.	Lacoochee
Lacoochee Phosphate Co.	Lacoochee
Argyle Phosphate Co.	Lake City
A. A. Scott	Lakeland
Citrus Queen Phosphate Co.	Leesburg
Chilpey Phosphate Co.	"
Gem Phosphate Co.	"
N. S. Altha River Phosphate Co.	"
Salter Phosphate Co.	Ocala
J. T. Jones	"
Nesterlands Phosphate Co.	"
New York Phosphate Co.	"
Pawawakee Phosphate & Mining Co.	"
Peninsular Phosphate & Mining Co.	"
Phoenix Phosphate Co.	"
Standard Phosphate Co.	"
Withlacoochee River Phosphate Co.	"
Zugelder Phosphate Co.	"
Hernando Phosphate Co.	Oriole
Crown & Crescent Phosphate Co.	Orlando
W. L. McDonnell	"
Ranger Phosphate Co.	"
J. B. Parramore	"
J. H. Dean	Palatka
Shell Mound Phosphate Works	Panamaoffee
Eureka Phosphate Co.	Pantherton
B. M. Brauner	Peru
Phosphate Co. of England	"
G. A. K. Stevens	Phosphoria
Withlacoochee Bluff Phosphate Co.	"
Wekiva Phosphate Co.	St. Augustine
J. S. Smith Jr.	Stunford
E. C. Gordon	S. Jacksonville
Gulf Stream Phosphate Co.	Sparr
Caloosatehic R. Phosphate Co.	Tallahassee
G. A. Hays	Tampa
D. A. Jones	"
Peru Phosphate Co.	"
Sterling Phosphate Co.	"
Trenton Phosphate Co.	Trenton
Geo. T. King	Villa City
Lord & Peck	Winter Park
De Soto Phosphate Mining Co.	Zaff

GEORGIA

NAME	POSTOFFICE
<b>COPPER</b>	
Toole & Raimes	Villa Rica
<b>COLD</b>	
Franklin Gold Mine	Creighton
Tony Ridge Gold Mine	Sandersville
Magruder Gold Mines	Washington
<b>IRON</b>	
Chattahoochee Iron Co.	Canton
Hematite Mining Co.	Cave Spring
Hematite Iron & Mining Co.	Cedartown
New England Co.	New England
<b>MICA</b>	
J. W. Long	Clayton
L. M. Lefford	Pine Mountain
J. A. Sheppard	Social Circle
<b>PHOSPHATE</b>	
Atlanta Phosphate & Mining Co.	Atlanta
<b>SALT</b>	
I. W. L. Maddox	Stockbridge
<b>SLATE</b>	
Georgia Slate Co.	Rockmart
Rockmart Slate Co.	"
Southern Slate Co.	"
<b>SOAPSTONE</b>	
Atlanta Tale Mfg. Co.	Atlanta
<b>STONE, GRANITE, MARBLE AND ONYX</b>	
Oglethorpe & Elbert Blue Granite Co.	Athens
Liddell & Johnson	Atlanta
T. Lloyd St.	"
M. E. McTendish	"
M. E. Miller	"
Robbins Bros.	"
Venable Bros.	"
Old Capital Bldg.	Cole City
Brake Coal Co.	Conyers
Alexander Currie	Crawford
Wm. Doyle	Elberton
Swift & Wilcox	Emerson
Emerson Lumber & Mining Co.	Emerson
Gainesville Marble Wks.	Gainesville
J. J. Norman	Graysville
H. H. Jones & Co.	Griffin
J. O. Jelks	Hawkinsville
W. G. Finlayson	Lithonia
E. G. New	"
J. R. Hightower	Monticello

IDAHO

COAL BITUMINOUS

Idaho & Wyoming Coal & Mining Co.	Idaho Falls
<b>COPPER</b>	
W. H. Bailey	McAuley
Cook & Hermann	"
C. Degroff	"
Jos. Fitzginn	"
Theo. Faust	"
Wm. Faust	"
<b>COLD AND SILVER</b>	
I. O. Adams	Bay Horse
J. L. Alger	"
M. & S. Clayton Co.	"
Jas Cochran	"
E. E. Dempsey	"
Excelsior Mining Co.	"
Chas. Fetter	"
C. Hurst	"
Joyce & Waters	"
C. B. McKinnon	"
N. Mitchell	"
New Banner & Gill	"
Reed & Clark	"
Bellevue King Mining Co.	Bellevue

NAME	POSTOFFICE
Michigan Mining Co.	Bellevue
Queen of the Hills Mining Co.	"
Relief Mining Co.	"
Bella Mining Co.	Boise City
Idaho Improving & Developing Co.	"
Badger Mining Co.	Bonanza City
Black Mining Co.	"
Bonanza Mining Co.	"
Gray Mount Mining Co.	"
Hindled Treasure Mining Co.	"
Hope Mining Co.	"
Lucky Boy Mining Co.	"
Montezuma Mining Co.	"
Mount King Mining Co.	"
Daniel O'Connell	"
Pilot Mining Co.	"
Tanto Mining Co.	"
Whale Mining Co.	"
Yankov Fork Mining Co.	"
Idaho Developing Co.	Bonnors Ferry
Jeanette Mining Co.	"
Union Mining Co.	Burke
Columbia Mining Co.	Clarks Fork
End Carmel	Clayton
Wmly Clark	"
John Dale	"
Lou Erskine	"
Richard Fitzgerald	"
P. Germain	"
Angus Gillis	"
Diek Hillman	"
Henry Kirk	"
Peter Kirk	"
Wm. Little	"
Jas. McCullough	"
Alex. McLeod	"
J. P. Marlat	"
Dan Osgood	"
J. Popworth	"
Matt Pitterson	"
Jos. Sanders	"
Hank Smith	"
H. F. Ferry	"
H. F. Whitecomb	"
Andrew Wilson	"
James Gordin	De Lamar
Wm. Henderson	"
M. Jordan	"
Frank Lepley	"
Ed Moss	"
Carl Neitzel	"
James A. Paek	"
Steve Rely	"
Al. Schieren	"
Fred D. Stimpson	"
Willenegger Bros.	"
Azerite Co.	Fort Lenth
Lenth Mining & Milling Co.	"
McKallap Bros.	"
Phenix Co.	"
Peckman & Sharkey	"
Bouldert Creek Mining Co.	Fry
Black Lead M. Co.	Gepesee
H. J. Bundy	"
Peter Hagan	"
P. Jackson	"
L. Jacobson	"
L. J. Johnston	"
Chas. Sampson	"
J. L. Schuttis	"
Austin Paezer Mining Co.	Hailey
Twin Falls Paezer Mining Co.	"
Pend d'Oreille Mining & Milling Co.	Hope
Idaho Mining Co.	Idaho City
Scotia Mining & Milling Co.	"
Brown & Co.	Idaho Springs
W. D. Rusk	Junction
Mike Carey	Ketchum
A. H. Hollerhild	"
Frank Fulford	"
Greenlow & Rumsey	"
Philadelphian & Idaho Co.	"
Popham Bros.	"
A. A. Staver	"
Warm Spring M. Co.	"
Eureka Cons. Mining Co.	Leona
Herr Cook	McAuley
Thos. Cosgrill	"
C. De Graff	"
Geo. Gardner	"
Wm. Gerard	"
Henry Gilbert	"
Tim Hirsch	"
N. S. Kellogg	"
Henry Lamb	"

NAME	POSTOFFICE
Orrin Lamb	McAuley
Eletcher Neill	"
Geo. W. Owens	"
Sydney Parker	"
Major Powell	"
Fred Pritchard	"
W. H. Rambo	"
J. C. Rasberry	"
Joseph Rodgers	"
Jas. Rummel	"
R. J. Rutter	"
Wm. Sutherland	"
E. L. Vandervoerke	"
J. W. West	"
Sierra M. & M. Co.	Millan
Potlatch Mining & Milling Co.	Moscow
E. J. Clark	Mullan
Martin Curran	"
James Davis	"
Wm. Dixon	"
Gold Queen Co.	"
Grouse Mining Co.	"
H. S. Harris	"
Sierra Mining Co.	"
A. W. Steele	"
Yon Like Mining Co.	"
Idaho Mining Co.	Murray
Buckeye Mining Co.	"
Golden King Mining Co.	"
Ida Mining Co.	"
Occident Mining Co.	"
Treasure Box Mining Co.	"
J. M. Bernard	Nampa
Cox & Wallerhouse	"
Frank Given	"
Tom Kakeritz & Co.	"
Martin & Needham	"
Clipper Mining Co.	Nielholla
Viola Mining & Smelting Co.	"
Frederick Bolke	Oakley
Jas. Cooper	"
John Fairchild	"
Jas. Hogan	"
Geo. Simpson	"
Blake Bros.	Osburn
Carson & Co.	"
H. M. Freeman	"
C. S. Jennings	"
Thos. Kemp	"
Nellie Mining Co.	"
S. V. W. Osburn	"
Thos. Reynolds	"
Benj. Butler	Pend d'Oreille
W. P. Grainger	"
Heun & Carpenter	"
H. L. Jackson	"
A. Klockman	"
E. M. Peters	"
E. Phillips	"
C. S. South	"
J. Weil	"
Josiah Williams	"
A. B. Wylie	"
Gold Hill Mining Co.	Pine
W. G. Vreese	Placerville
H. Ashcroft	"
H. Corcoran Co.	"
Granite Creek Ditch Co.	"
Jas. Groves	"
John Halley	"
H. W. Knight	"
John Larsen	"
M. Neils	"
Ranch Co.	"
Henry Reid	"
M. Riley Co.	"
W. G. Vreese	"
Bonham & Co.	Quartzburg
D. Carroll	"
D. E. Coughanour	"
Fred Coughanour	"
M. Crossin	"
John Dickenson	"
M. Driscoll	"
William Hamilton	"
Anton Sevia	"
Patrick Sheridan	"
S. Smith	"
Hardscrabble Mining Co.	Rocky Bar
Snowdrift Mining Co.	"
Wide West Gold Mining Co.	"
P. Salmon Placer M. Co.	Salmon City
C. J. Johnston & Co.	Saw Tooth
Saw Tooth M. & M. Co.	"
Vienna Mining Co.	"
Eureka Cons. Mining & Const. Co.	Soma
Idaho Mining Co.	Silver Mountain
Crown Mining Co.	Wallace
Custer Mining Co.	"

NAME	POSTOFFICE	NAME	POSTOFFICE	NAME	POSTOFFICE
Jarvey & Son	Wallace	A. Swanson	Cable	Sprague & Nickels	Fredonia
Heekle Mining Co.	"	Jeffrey Bros.	Campbell Hill	Wm. Maddox	Frenchburg
Porter Bros.	"	Grover & Sons	Canon	James Charlton	French Village
J. M. Long	Wardner	Pat Linden	"	Lawrence Fisher	"
Langshore & Lovett	"	T. H. Luker	"	C. Strawbringer	"
C. F. Drake	Weiser	Charles Minett	"	Patrick Powers	Galesburg
J. C. Hill	"	Charles Savill	"	Heriden Coal Co.	Galva
Louis Sommer	"	Silvis Bros.	Carbon Bluff	A. Lowell	Georgetown
C. W. Walker	"	Wm. G. Bartells	Carlville	Martin Ayers	Gilchrist
		T. J. Loomis	"	M. M. Green	"
		Carterville Coal Co.	Carterville	Chas. Moran	Grape Creek
		Geo. McMath	"	Wm. G. Sanders	"
		Consumers Coal Co.	Cassville	Wm. Whorrock	"
		Evan Jones	Cathay	J. Blakey	Grassie Creek
		Thos. J. Jones	"	Buntling Bros.	"
		A. Ohnstead	"	Chonetaw Coal & Mining	"
		Eli Shepherd	"	" Co.	"
		Pittinger & Davis	Centralia	Sim Pierson	Greenville
		Chas. Trill	Chesterfield	Wm. Bough	Harrisburg
		Star Coal Co.	Coal City	Alex. Daniels	"
		W. B. Sufferin & Bros.	"	John Daniels	"
		Wm. Cook	Coal Valley	Wm. Horrocks	"
		M. Curry	"	Wm. Lopenan	"
		Park & Miller	"	Joseph Moody	"
		Wm. Pompeier	"	Lewis Dillon	Humphreys
		Wm. Sackville	"	Central Coal Co.	Hess Junction
		Robert Summerson	"	T. Burdick	Industry
		Thomley & Lewis	"	E. C. Jones	"
		Fred Vonach	"	Jasper Birch	Island City
		Colleen Coal Co.	Colleen	Charles Scott	"
		Lewis Atkinson	Colchester	Matthew Atkinson	Kewanee
		Sam. Bright	"	Bates Bros.	"
		Colchester Coal Co.	"	Jones & Lamb	"
		Gibson & Smith	"	B. Kiley	"
		Geed Gordon	"	Orlando Libby	"
		Thos. Gordon	"	Wm. H. Lyle	"
		Gordon & Barrett	"	Martin & Tucker	"
		Wm. Hodgeson	"	Joseph Price	"
		John Hunter	"	Wm. Ponder	"
		S. Justin	"	F. Fahnestock	Kingston Mines
		Moses King	"	J. Hards	"
		Lewis Lewis	"	Newsum Bros.	"
		Wm. McIntosh	"	New Kinnamund Coal Co.	Kinnamund
		Joseph Mout	"	Bryner Bros.	Kirkwood
		Benj. Nelson	"	Geo. England	Knoxville
		Talomo & Co.	"	Eric Harkstrom	"
		John Pearson	"	Nelson & Anderson	"
		Geo. Wakefield	"	Nathan Shaw	Kramm
		Michael Whalen	"	C. E. Berg	La Fayette
		Vernon Coal Co.	Colfax	Wm. Dodsworth	Laura
		Crossley & Co.	Crab Orchard	John Sample	"
		Peter Ball	Cuba	F. S. Brinkley	Leamington
		John Johnson	"	Bennett Coal Co.	Lebanon
		T. D. McGinnis	Dahlgren	Buckheat Coal Co.	Lewisstown
		Geo. W. Benson	Danville	Fly Florin	"
		J. Graceville	"	John McArthur	Liverpool
		Columbia Mining Co.	"	Wm. Allison	Loding
		Jas. A. Covey	"	John Hynd	"
		Danville Mining Co.	"	Kline & Sons	London Mills
		Hy. Pittman	"	John Berry	"
		Albert Hall	"	Morton & Bros	Mapleton
		Kellyville Coal Co.	"	J. O. Shaugnessy	"
		Jewellly & Son	"	Chas. Howard	Marietta
		M. McGinnis	"	Wilson Varner	"
		Wm. Shaffer	"	W. M. Rex	Marion
		John Swanson	"	Wm. Reid	"
		J. H. Toth	"	Johnson Coal Co.	Marissa
		John Moley	Belhi	New Enterprise Coal Co.	"
		J. D. Schmidt	Bemis	D. Zinsdorf	"
		J. Winchell	Duncan Mills	Carney Bros.	Marselles
		Richard Baillie	On Quin	James Beatty	Mascoutah
		Enterprise C. & C. Co.	"	J. Harding	Middle Grove
		Joseph Schmidt	East Peoria	Wm. McArthur	Milan
		George Wieland	"	David Walsh	"
		Wm. Harper	Edwards	Hy. Fowler	Millersburg
		Chas. Kinsley	"	Union Coal Co.	Millstadt
		Wm. Lansdale	"	Fred Van Velzor	"
		Richard Pillmann	"	Consolidated Coal Co.	Mission Field
		Wolf Bros. Coal & Min-	"	John Scott	Modena
		ing Co.	Edwardsville	Jus. Wilford	Monica
		P. Wenderly & Co.	"	Thos. Hubbard	Mummonth
		Cox & Harris	Elkville	John Mauler	"
		Elmwood Coal Co.	Elmwood	Wm. H. Poppe	"
		Brightner & Baldwin	"	Thomas Swan	"
		Wm. Hargraves	Exeter	Andrew Welch	"
		Edm. Apitague	Fairbury	Green & Jonathan	Moro
		Fairbury Co.	Fairmount	Wm. Owens	"
		Geo. Emmett	"	Wm. Richardson	"
		Fairmont Coal Mining	"	Alexander Bell	Morris
		" Co.	"	Geo. Blair	"
		J. Aberniskey	Fairview	Jas. Cryer	"
		Josiah Karr	"	Frank Gilbride	"
		B. T. Melick	"	Hy. Kay	"
		M. J. Stout	"	Wm. F. Nelson	"
		Wm. Richman	Fancher	Alexander Teller	"
		Thos. Barton	Farmington	George Wren	"
		John A. Emobs	"	Union Coal Co.	Mt. Pulaski
		Farmington Coal Co.	"	Bryson C. & C. Co.	Murphyshoro
		C. M. Maplewood & Co.	"	Samus Bros.	Murrayville
		Elisha Webster	"	Canman & Morris Bros.	Nashville
		John Williams	Fiatt	F. W. Riley	Neponset
		W. Channellsworth	Fosterburg	J. Dupont	New Burnside
		Hill Bros.	"	"	"

## LEAD AND ZINC

## IRON

## STONE, GRANITE, MARBLE AND ONYX

## ILLINOIS

## COAL BITUMINOUS

## ILLINOIS

## COAL BITUMINOUS

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## COAL BITUMINOUS

## ILLINOIS

## COAL BITUMINOUS

NAME	POSTOFFICE
A. Cogdill	New Castle
J. P. Carlson	New Windsor
City Coal Co.	Niantle
Chas. Drawyer	Norris
Chas. Cowling	North Alton
J. Pierce & Co.	"
Consumers Coal Co.	O'Fallon
Joseph Taylor	"
Geo. Clifford	Oneida
Owen Conley	"
S. B. Burnett	Opdyke
W. R. Servier	"
F. Engleke	Orchard Mines
F. Lowery	"
John W. Powell	"
D. B. Roberts	"
Wheeler Bros.	"
Janus Green	Oseola
W. H. Elliott	Otto
A. Leonard	"
M. H. Smith	"
Boldamer Bros.	Pekin
Grant & Son	"
Jesse Mack	"
Wm. Arnold	Peoria
John Morley	"
Edward Brost	"
O. Brost	"
Daniel Driscoll	"
Edwards Coal Co.	"
John Glen	"
Mrs. John Lench	"
Masterston & Keeffe	"
A. W. Moffatt	"
Henry Mohr	"
Mrs. K. Mohr	"
Nowell Coal Co.	"
Peoria Coal & Mining Co.	"
Reidley Bros.	"
Adam Shoel	"
Vickery Bros.	"
Barnard Coal & Transp.	"
Portation Co.	Percy
Little Muddy Coal & Mining Co.	"
Cubans & Oxford	Petersburg
A. E. Estell & Co.	"
Levi Holmer	"
Wm. Rice	"
B. Burkhead	Phiphot
John Quiney	Pleasant View
Pontiac Coal Co.	Pontiac
R. J. Hoy	Prairie City
Lukins & Cavanaugh	Prairie Creek
Ed. Boden	Pre-conption
Webb & Evely	Preston
Geo. Heathcock	Princeton
Andrew Walton	"
Brookhouse & Parker	Putnam
Bulbs Porter	Ray
John Ziegler & Co.	Rapids City
A. Lloyd & Son	Rentleher
J. W. Moser	"
Rentleher Coal Co.	"
Springfield and Titon Co.	Ridgely
Grant & Brown	Rio
Walton & Kay	Rock Island
Jas. Bigley	Roodhouse
Richard Carrollton	"
John Gralle	"
Sam Isreal	"
Paul. Bird	Roseville
Thos. Lee	"
John Little	"
J. V. White	"
Bates & Reicholt	Rushville
Rushville Coal Co.	"
James Patterson	St. David
Taylor Williams	"
Wm. Plummer	St. John
J. L. Middleton	Salem
Ortler & Marcker	Saxton
McLeary & Pendergrast	Seneca
Platt Coal Co.	"
A. J. Lane	Seville
Rowlesville Coal Co.	Shawestown
Peter Duncan	Sheldahl
Joseph Fleming	"
Kelly & Co.	Shelbyville
C. J. Kurtz & Co.	"
Shippan Coal Co.	Shipman
Smithboro Coal & Mining Co.	Smithboro
John Currier	South America
Harris & Malsinger	"
Phillip Speare	"
Bryant Thompson	"
Geo. Kenr	Spirklund
B. Lanning	"
Cyrus Wright	"
D. B. Boyd	Sparta
Geo. F. Gerbaek	"
R. H. Rasborough	"

NAME	POSTOFFICE
Central Cooperative Coal Co.	Springfield
Capital Cooperative Coal Co.	"
Julius Smith	Steeleville
M. Baldwin & Son	Streator
E. B. Dawson	"
Marshall & Simpkins	"
C. A. Mauer	"
Nelson & Westerlund	"
Pleasant Hill Coal Co.	"
River Bank Coal Co.	"
Sylvester Kilias	"
J. D. Bankert	Sumnum
John A. Van Winkle	Swan Creek
Joseph Wilson	"
C. J. Pickering	Table Grove
Oscar Brass	Tonlon
Barbour & Souts	Tamara
E. C. Cuhl	"
Fergus Whalen	Tennessee
H. C. Swanson	"
G. H. May	Tunnel Hill
J. E. Morgan	Vandercook
H. C. Mackley	Villison
James E. Parks	"
James Dusenbury	Watauga
Bangston Claus	"
Jonas Frons	"
Pefer Knight	"
Wesley Coal Co.	Wesley
Kiekapoo Coal Co.	Westville
Whitehall Coal & Tile Co.	Whitehall
Thos. Wyatt	"
H. McCallie	Winchester
James Higler	Wyoming
Richard Howarth	"
John Price	"
Robinson Bros.	"
Stephenson & Watson	"
Joseph Swanson	"
Hiram Thurston	"
George Watson	"
Thomas Lee Jr.	Youngstown

**COLD AND SILVER**

Amazon Gold Mining Co.	Chicago
107 Manhattan Bldg.	"
Inter-State Gold, Silver & Copper Mining Co.	"
15 Dearborn St.	"
Palmer Lake Mining Co.	"
234 Home Insurance Bldg.	"
Taylor Placer Mining & Milling Co.	"
Chamber Commerce	"
Utah Mining Co.	"
116 La Salle St.	"

**IRON**

West Duluth Furnace Co.	Chicago
Room 17, 16 La Salle St.	"
St. Louis Ore & Steel Co.	Murphyshoro
Hopkins Louden	Rosecliar

**LEAD AND ZINC**

Chicago Lead & Zinc Co.	Chicago
114 Chamber of Commerce Bldg.	"
Columbian Lead & Zinc Co.	"
134 Dearborn St.	"
Monarch Lead & Zinc Co.	"
77 Commercial National Bank Bldg.	"
Oswego Lead & Zinc Co.	"
104 1 City Bldg.	"
Robbins Lead & Zinc Co.	"
B. 15 Monroe St.	"
Bladesville Mining & Milling Co.	East St. Louis
C. J. Clauson	Galena
Mathiessen Hegeler Zinc Co.	La Salle
Wenona Zinc Co.	Wenona

**MANGANESE**

International Manganese Co.	Chicago
Chamber Commerce	"

**SALT**

Holliday Salt Co.	St. Johns
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**STONE, GRANITE, MARBLE AND ONYX.**

NAME	POSTOFFICE
Mat. Wagner	Aurora
Vermillion Sandstone Co.	Danville
Kankakee Stone Co.	Kankakee
C. V. Chandler	Maromh
Henry & Walter Cronton	Pleasantview
Robert Leaman	Rockville
Western Plaster Works	South Chicago

**INDIANA**

**COAL BITUMINOUS**

H. S. Chandler	Alfordsville
Muffs. Fuel Supply Co.	Anderson
Crawford Co.	Asherville
N. Harris	"
C. Helton	"
Zelzer & Sengler Co.	"
Indian Creek Coal Co.	Bicknell
Michael Legree	Bitluzer
Dugger & Neal Coal Co.	Bloomfield
Summit Coal Co.	"
DeForest, Belzert & Dadds	Boonville
Robt. Gough	"
W. H. Stone	"
Central Iron & Steel Co.	Brazill
Davis Coal & Mining Co.	"
Hoosier Coal Mining Co.	"
Rock Run Coal Co.	"
Sherburn and Mining Co.	"
Watson & Little Coal & Mining Co.	"
Weaver Coal & Mining Co.	"
Ziller Coal & Mining Co.	"
Buckeye Tunnel Coal Co.	Cannelburg
American Tunnel Coal Co.	Cannelburg
Jas. Clark	"
Geo. Hurlingale	"
Benj. Simpson	Carbon
James Riedlin	Carbondale
Ed. Tomas	"
Dynton Coal & Coke Co.	Cass
Helton & Engleton	Centre Point
T. B. Hall	Chandler
Carler & Reid	Clay City
J. W. Cooper	"
B. Griffith	"
Harrison Coal Co.	"
Morrice and Mining Co.	"
New Kentucky Coal & Mining Co.	Clinton
B. H. Whitcomb	"
Casby Bros.	Coal City
Perrie Berto	Coal Creek
M. Cox	"
Thos. Jones	Dale
Wm. Alkey	"
Delphi Mineral Mining Co.	Delphi
M. Atkinson & Son	Edwardsville
Thomas W. Faith	Epsom
Wm. Hardy	"
Casler & Lockwood	"
Ohio Valley Coal & Mining Co.	"
New Pittsburg Coal Co.	Farmersburg
Francisco Coal & Mining Co.	Francisco
Woodruff & Franklyn Bros.	Grant
John W. Vandy	Hamers
Sherman Kellams	Jasper
Reese Bros.	"
Schafer & Scott	Kirkheval
Joseph Robinson	Kingsville
T.ley Bros.	Lodi
Mecca Mining Co.	Mecca Mills
W. M. Hall-Id.	Mineral City
Wilson Coal Co.	Montgomery
Wm. Robertson	Newburg
H. W. Alexander	Petersburg
J. B. Boyer	"
Bradfield & Son	"
Joe Clendenen	"
James Jennie	"
T. B. Posey & Co.	"
C. V. Shanley	"
E. F. Smith	"
A. Kay	Pimento
Tom Myers	Radesville
Radesville Coal Co.	"
J. C. Sterling	"
Abel Stoy	"
James Stulle	"
Rockport Gas & Mineral Co.	Rockport
Parke County Coal Co.	Rosedale
Lifton Coal Co.	Shelburn
Jack Gamman	Shoals
Ph. Gamman	"
Johnson & Chenoweth	"

NAME	POSTOFFICE	NAME	POSTOFFICE	NAME	POSTOFFICE
Tom Alexander	Stamton	Ellettsville Stone Co.	Ellettsville	John Wilson	Charlton
J. P. Anderson	"	F. J. Scholtz	Evansville	Chisholm Coal Co.	Chisholm
Eli Amman	"	Ludtke & Filian	Fort Riley	Thistle Coal Co.	Cincinnati
John Bailey	"	C. H. Muhler & Son	Fort Wayne	Pleasant Valley Coal Co.	Coalfield
Joe Barker	"	Theo. Donovan	Holtton	Collins & Bros.	Coalville
Geo. Beyer	"	Jennie Davis	Huntington	James Martin	"
James Batt	"	Thos. Daniels	Huron	W. W. Allen	Colfax
Will Cooper	"	S. M. Patton	Hymera	J. L. Atwell	Confidence
John Cook	"	J. A. Spears	Indianapolis	B. Davis	"
Paul Derfelo	"	Goldard & Co.	"	J. Hayhurst	"
David Edlar	"	G. Rutenbach	"	Fred Carl	Cory
Cra Hains	"	Eckert Bros.	Jasper	John Cook	County Line
Jos. Hatter	"	S. Haskins	Laurel	Amos Taylor	"
C. H. Howard	"	James Ash	Lebanon	Martin Fisher	Della
James Hutchison	"	Eureka Onyx Co.	Liberty	Hickman & Chandler	"
Geo. Keeler	"	Hampton Stevens	Logansport	R. L. Danah	Jenniss
G. J. Kitzing	"	Hollingsworth & Keetner	"	Des Moines Coal & Min-	"
Geo. Lehner	"	Lux & Lux	Logansport	ing Co.	Des Moines
Carl Lintner	"	Gambra & Kline	Mineral City	Polk Co. Coal & Mining Co.	"
John Meakin	"	John Chitt	"	Rose Hill Coal & Mining	"
Phil Miller	"	Hastler Bros.	Montpelier	Union Coal & Mining Co.	"
E. Mryick	"	Wm. Twibill & Son	Murray	T. J. Banks	Draper
T. O'Connor	"	F. W. Carter	Mooresville	E. E. Edwards	"
Frank Parker	"	Levi Swartz	New Albany	Robt. Marshall	"
J. Rauback	"	F. E. Dishman	New Holland	Busche & Bro.	East Florida
Washington Roberts	"	A. T. Osborne	New Point	W. P. Chilton	Eddyville
Leonard Schild	"	Big Four Stone Co.	New Windsor	Gideon Dotts	"
Chas. Stewart	"	J. E. Hollensbe	North Vernon	W. B. Glothlin	"
H. Stitzel	"	S. Harris	Putnamville	O. H. Vance	"
H. Strop	"	Hicks & Holmes	Raglesville	Thos. Dlat	Eldon
Lester Trout	"	James Lee	St. Paul	J. B. Fite	"
James Wallace	"	E. H. Evans	Smithville	E. Elenwood	Eureka
Chas. West	"	W. H. Riggins	Spencer	James Hartshorn	"
Chas. Wheeler	"	W. Wadsworth	"	Robinson & Gough	"
Frank Willoughby	"	W. W. Lowe	"	B. F. Spurrier	"
Geo. Williams	"	J. L. Seamon	"	James Greenfield	Eveland
Boone & Manroe N. Gas	Summitville	Empire Stone Co.	"	Excelsior Coal Co.	Excelsior
P. Ehrlick & Co.	Turner	Howard & Deng	"	Thos. Russel	"
Walton & Co.	"	Keystone Quarry Co.	"	G. W. Butler	Fairfield
Rogers & Bros.	Washington	Oolite Quarry Co.	"	Ketcham Bros.	Farrington
Southern Indiana Mining Co.	"	Owen Oolite Stone Co.	"	Stoddard & Turner	"
White River Valley Coal Co.	"	Romona Oolite Stone Co.	"	Henry Richards	Ferry
Geo. H. Linsborger	West Union	Indiana Oolite Limestone Co.	Stinesville	W. C. Quigley	Florice
C. C. Crow	Watsion	T. H. Min. Paint Co.	Terre Haute	Soap Creek Coal Co.	Foster
Eli Holton	"	Terre Haute Stone Co.	Wabash	Dale & Goodwin	Fredrie
Thos. Hurst	"	T. W. Bridges	"	Atlas Coal Co.	Grand Junction
Logan Hurling	"	Louis Halderman	"	Bennett & Clair	Janestown
M. O. Thompson	"	Philip Hipsick	"	Felix Martin	"
C. W. Young	"	W. S. Lambert	Wayland	Robert Williams	"
Lee Mangers	Worthington	Theo. Hulman	West Baden	Carlson & Co.	Kalo
Gregory Shayer	"	H. E. Wells	Williamsport	Mills & Ezerado	"
Eli Stalpen	"	Henry Hericks	Zipp's	John Rivers	Kirkville
H. D. Watts	"	Jacob Bedinger jr.	"	Wm. Gamble	Knoxville

IRON

Rhodes & Campbell Co.	Indianapolis
Creek Creek Mining Co.	Rockfield
Comprise	Natural Gas Co.
Windor	"

LEAD AND ZINC

Carroll County Zinc Mining Co.	Logansport
Oakland Cy. & Coal Co.	Oakland City

STONE, GRANITE, MARBLE AND ONYX.

T. J. Alford	Alfordsville
A. Payne	Asherville
H. Rissell	"
J. Slack	"
L. Stealy	"
American Onyx Co.	Bedford
Chicago & Bloomington Stone Co.	"
Crim, Dugan & Co.	"
Dunn, Moore & Co.	"
Hoesler Stone Co.	"
Louisville & Bedford Stone Co.	"
D. Reed	"
Spider Creek Stone Co.	"
Tanyard Stone Co.	"
F. M. Dugger	Bloomfield
John Clearwater	Camden
Eigenmann & Hollerbach	"
F. Pantin & Co.	"
Chicago Indiana Brown Stone Co.	Carbon
Eureka Coal Mining Co.	"
Hilinois & Indiana Stone Co.	"
H. Brandenburg	Cayuga
Louis Chamberlain	Clay City
W. R. Muece	"
H. H. Black	Coffingsdale
Corydon Stone Co.	Corydon
Jas. Whitten	Dale

IOWA

COAL BITUMINOUS

J. Brewer	Albia
Ward King	"
Frank White	"
Bailey Bros.	Angus
Mike Feith	"
Keystone Coal & Mining Co.	"
Samuel States	Attica
Lewis Whitlatch	"
Joseph Moyle	Avery
Isaac Clark	Bayard
W. S. Williams	"
Moses Lewellyn	Beason
O. Mayors	Blakesburg
Clyde Coal & Mining Co.	Boonsboro
Clark & Flohrhard	"
Hill Garden	"
H. E. Hall	"
McBrien & Nelson	"
John Marshall & Son	"
E. Campbell	Brazil
Philly Coal Co.	"
Tipton Coal Co.	"
E. Erbesoe	Eriseoe
Jacob Amon	Carlton
J. Colen	"
Cullen, Reece & McKee	"
George Hardin	"
William Hill	"
John Wilds	"
J. Willes	"
W. W. Hoover	Carbonado
Deep Vein Coal Co.	Cedar Rapids
Centerville Coal Co.	Centerville
National Coal Co.	"
E. J. Richardson	"
Star Coal Co.	"
Standard Coal Co.	"
Walnut Block Coal Co.	"
James Hall	Charlton
Williamson & Bros	"
Bedfield & Hutchins	"
B. B. Parker	"
Knox Bros.	"
David Fry	"
J. W. Brown	"
Andy Conners	"
James Gilbert	"
L. Hinson	"
Joseph Mitchell	"
E. Richmond	"
Batey & Jones	Milledgeville
Ed. Mosby	"
J. J. Young	"
Consolidated Coal Co.	Muehlaeknock
James Newell	"
Brown & Bowers	Mystic
Henrietta Coal Co.	"
Loue Star Coal Co.	"
Mystic Block Coal Co.	"
Nathan Easter	Newmarket
Robert Evans	Now Sharon
Wm. Evans	"
R. Davidson	Newton
Alfred Lester	"
Henry Walker	"
Rock Island Block Coal Co.	"
J. G. Davis	Nanna
W. Hall	Olivet
Daniel Reiser	Oskaloosa
P. M. Whiteaker	Hamilton
Geo. Marshall	Otho
Otho Coal Co.	"
Baker & Adams	Ottumwa
Jacob Ream	"
Stivers Coal Co.	"
Higgins, Hoops & Morris	Panora
George Kambo	Packwood
Thos. Turnbull	"
Wm. Franklin	Pella
James Wilson	Pilot Mount
Chas. Knight	Plano
Polk City Coal & Mng. Co.	Polk City

NAME	POSTOFFICE
Lon Greenleaf	Prarie City
Chas. Cordis	Richland
Ripsey Coal Co.	Ripsey
Thos. Seever	Rose Hill
S. G. Houser	Seymour
Chas. Ham	Shilbaugh
Wm. Demmer	Summerset
Ed. Lord	"
Launsen & Bros.	"
H. T. Simmons	"
M. Kelly	Thornburg
Burnside & Conlonlongh	Thornburg
Nathan Wilcox	"
N. H. Nash	Walnut City
Chas. Blankequart	What Cheer
John Blatt	"
John Smith & Rowley	"

**GOLD AND SILVER**

Little Tyecon Mining Co.	Burlington
Columbus Mining Co.	Cedar Rapids
Tenta Haras Mining & Milling Co.	Cherokee
Maton Gold Mining Co.	Council Bluffs
Minnesota Consolidated Mining Co.	Davenport
E. T. Goldthorp	Dubuque
Iowa Mining Company	Ft. Madison
Merchants Gold Mining Co.	Keokuk

**CYPSUM**

Ft. Dodge Gypsum & Stucco Co.	Ft. Dodge
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**IRON**

Burlington Investment Co.	Burlington
Dubuque Ore Concep- trating Co.	Dubuque

**LEAD AND ZINC**

John Brunsell	Center Grove
Charles Ishorn	"
Daykin Bros.	"
James Leakey	"
Luther & Uelrich	"
Theodore Meyer	"
George Mollart	"
Chas. Olermott	"
J. Loftus	Burlington
E. C. J. Wheeler	Cedar Rapids
W. H. Bullford	Centre Grove
W. P. McGuire	Rosdield

**KANSAS**

**COAL BITUMINOUS**

Englevale Coal Mining & Developing Co.	Englevale
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**GOLD AND SILVER**

Goodland Mining & Mill- ing Co.	Goodland
Tower Lode Mining Co.	Kingman
Pittsburg Mexlean Min- ing Co.	Pittsburg
Comstock Mining Co.	Stockton

**LEAD AND ZINC**

Galeata Lead & Zinc Co.	Empire City
Banner Mining & Mill- ing Co.	Galeata
Hilinois Lead & Zinc Co.	"
Jenkins & Co.	"
Kansas Lead & Zinc Co.	"
P. C. Milliken	"
L. W. Moulder	"
Jane Murphy	"
Murphy & Murphy	"
Oviette & Co.	"
Page & Co.	"
E. S. Perry	"
Phillips & Co.	"
Moll Reed Paint & Min. Co.	"
R. Robinson	"
W. South	"
O. Sparkes	"
State Linc Mining Co.	"
Steele & Shumpe	"
J. T. Vest	"
E. C. Welpep	"
Windsor Mining Co.	"
Bogie Man Mining Co.	Kansas City

NAME	POSTOFFICE
New York Mining & Smelting Co.	Pittsburg
Idaho Mining Co.	Salina
Occidental Mining Co.	Wier City

**SALT**

Central Salt Works.	Hutchinson
Crystal Salt Works.	"
Diamond Salt Co.	"
New York Salt Co.	"
Pennsylvania Salt Co.	"
Queen City Salt Co.	"
Everside Salt Co.	"
Western Salt Co.	"
Crystal Rock Salt Co.	Kingman
Crystal Salt & Mining Co.	"
Moore Salt Co.	"
Pioneer Salt Works.	"
Rock Island Salt Works	"
Truesdell & Grimes Rock Salt Co.	Lyons
A. J. Bowen	Wellington
Wellington Salt & Min- ing Co.	"

**STONE, GRANITE, MARBLE AND ONYX**

N. E. Warren	Bunker Hill
L. E. Griffith	Kingman
Robert Gypsum & Ce- ment Co.	Salina
Peerless Cement Plaster Co.	"

**KENTUCKY**

**COAL BITUMINOUS**

Wm. Herrald	Aberdeen
M. Adams	Adams
J. R. Dean	"
T. L. Dooley	"
W. E. Dudley	"
W. S. Grubb	"
T. L. Moore	"
John Kliddle	"
John Spengler	"
Joshua Gellamy	Etnaville
D. Allen	Alphoretta
Hopkins Allen	"
A. Frisp	"
E. S. Dingus	"
James Dingus	"
Nancy Dingus	"
John Holbert	"
Geo. May	"
Jack May	"
Reph. Osborn	"
Thomas Osborn	"
A. M. Combs	Amble
Wm. Norton	Andrews
Sam. Casteel	Annville
G. W. Johnson	"
Kentuck Iron & Coal Manufacturing Co.	Ashland
Mrs. S. A. White	Baek Bone
Wm. Blevins	"
James Booth	"
James Clark	"
L. H. Clark	"
John Creech	"
John Gillum	"
John Griffith	"
Wm. Marshall	"
Peter Mays	"
James Porter	"
J. C. Porter	"
W. T. Rivers	"
John Steas	"
Silas Stophelton	"
Wm. Stophelton	"
D. F. Weld	"
J. L. Wheeler	"
E. W. Baker	Baker
Hen. Baker	"
W. D. Collins	"
Allen Hall	"
Ben Hall	"
Thos. Hall	"
Isaac Potter	"
Jas. Yount	"
W. B. Arms	Barnet's Creek

M. Witten	Barnet's Creek
Beattyville Coal Co.	Beattyville
Thos. J. Phillips	"
R. S. Elloth	Beayer
A. J. Hamilton	"
Andrew Mitchell	"
Joseph S. Bennett	Bela
R. A. Bennett	"
S. A. Bennett	"
R. M. Davis	"
J. S. Hudson	"
John B. Rowan	"
Jos. T. Wallace	"
Ed. Clayton	Beech Grove
A. A. Wilson	"
James Musick	Bee Spring
H. T. Reel	"
John E. Stone	"
Mac Howard	Bingham
P. M. Woodum	"
Henderson Boggs	Blaine
John H. Boggs	"
A. M. C. Burton	"
Wm. Edwards	"
H. C. Evans	"
H. H. Gambill	"
M. F. Gambill	"
A. C. Holbrook	"
John H. Holton	"
T. R. Moore	"
C. L. Osborn	"
N. T. Rao	"
M. M. Walter	"
J. Williams	"
Elias Canard	Bloomington
E. Lecker	Boop's Camp
Elijah Fields	"
Elias Meek	"
Jas. Meek	"
Marion Meek	"
G. W. Perry	"
James Ward	"
Sam Brandenburgh	Booneville
G. Campbell	"
E. C. Dull	"
Joel Flanery	"
A. B. Gilbert	"
Samuel Herndon	"
S. F. Hoeg	"
Judges S. Esne	"
Jefferson Jett	"
A. B. McGuire	"
Stephen McPherson	"
Geo. Martin	"
Chas. H. Minter	"
W. A. Minter	"
H. H. Moore	"
P. E. Moore	"
Joseph Reynolds	"
A. C. Roland	"
Martin Roland	"
G. B. Ross	"
L. C. Rose	"
J. W. Seale	"
J. M. Sebastian	"
Rich. Tolton	Boring
T. H. Jones	"
W. H. Jones	"
Alex. Proffit	"
H. Woodard	"
Wm. Townsend	Bowen
Oliver Bond	Buck Creek
W. B. Brandenberg	"
Lafayette Seeley	"
Harvey Fries	"
A. J. Amburgey	Buncombe
Wm. J. Amburgey	"
Andrew Combs	"
Samuel Combs	"
Wm. H. Day	"
Samuel Francis	"
Geo. W. Johnson	"
E. M. Anderson	Burning Springs
Jos. Hubbard Jr.	"
Jos. Hubbard sr.	"
Wesley Hensley	"
Washington Lewis	"
Mrs. Emily Morgan	"
John Murray	"
James M. Brock	Bush's Store
John B. Jones	"
S. W. Okey	"
Scuyler Patterson	"
J. C. Russell	"
John Vandeverter	"
E. C. Williams	"
Andrew Moore	Bussysville
Frank Bengo	Byron
Robt. Bengo	"
James Benton	Caney
James Carter	"
G. D. Castle	"
M. W. Ferguson	"

NAME	POSTOFFICE	NAME	POSTOFFICE	NAME	POSTOFFICE
J. Frisby	Canby	Wm. Deaton	"	Elias Moore	Eversole
John Haney	"	Gross & Co.	"	Green B. Reynolds	"
Lykins Dudley Co.	"	C. Johnston	"	Leander Reynolds	"
Ed. Lykins	"	P. Johnson	"	J. C. Rose	"
Isaac W. Lykins	"	Saml. Johnson	"	Lae Rose	"
James M. Lykins	"	Levi McIntosh	"	Robert Rose	"
Leburn Lykins	"	Jestis Riley	"	Zachary Taylor	"
Wm. Lykins	"	Granville Spicer	"	Sim Wilson	"
Herod Patrick	"	William Stroug	"	T. A. Barker	Ezel
John Patrick	"	Elliott Turner	"	Heath Bartley	"
Irwin Prater	"	Barey Turney	"	Howard Bartley	"
Luenda Prater	"	J. Clark	Cruseston	Wm. Kinsley	"
Samuel Rathfin	"	J. B. Cruse	"	Mack Mousley	"
Cambridge Siders	"	Thomas Riddle	"	J. F. Pieratt	"
J. C. Sebastian	"	J. Soblett	"	W. Pieratt	"
Fredal Watson	"	R. P. Davis	Daisy Dell	Jos. F. Bailey	Falcon
James Wheeler	"	Milton G. Bush	Dallas	T. E. Candill	"
Jas. S. Carroll	Caneyville	Jas. Berry	Danleyton	L. Cheek	"
Myles A. Taylor	"	James Callihan	"	Mrs. N. J. Collins	"
B. A. Bennett	Carpenter	Jonathan Callihan	"	I. Conley	"
C. Ham	"	John Davison	"	Rufus Kazer	"
Richard Mays	"	John Douglas	"	H. C. May	"
William Mays	"	Thomas Owsley	"	R. M. Prater	"
G. P. Rose	"	Harnon Payne	"	H. H. Evans	Fielden
John Runion	"	Mrs. Polly Stanley	"	R. S. Green	"
Thomas Seers	"	H. M. Rye	"	Daniel J. Griffith	"
Enoch Wilson	"	Henry Simmons	Darby	T. B. Hutchinson	"
N. Collins	Carson	W. J. Benson	Davenport	A. J. Johnson	"
Grant Hoyemont	"	F. Flowers	"	E. Johnson	"
H. D. Sexton	"	Mind McKinney	"	E. Keator	"
Wm. Cooper	Caseyville	James Pendley	"	Wm. Marshall	"
Jas. M. Lamb	"	J. D. Sharer	"	Henry Sparks	"
W. J. Allen	Cat Creek	Thomas Viles	"	J. N. Sparks	"
David Cron	"	W. Bishop	Davison	Ezekiel Wells	"
James McChristia	"	J. B. Amyx	Dayshoro	Joseph Wells	"
H. Willoughby	"	Ed. Little	"	Daniel Wheeler	Flat Gap
G. W. Brown	Cattlettsburg	Hollis Nickell	"	E. Brown	Galen
J. C. Hopkins	"	Harrison Walker	"	Hy. Brown	"
Williamson Mining & Manufacturing Co.	"	Wm. Walker	Debard	John Brown	"
Jas. Bassoms	Central City	Peter Ross	De Koven	Jeff Burchett	"
C. C. Mullenburg & Co.	"	A. M. Allen	Delaware	Hy. Canfill	"
Richmond County Coal & Iron Co.	"	Samuel Hicks	"	Wentroy Candill	"
Frank Whitehouse	"	W. H. Johnson	"	James M. Green	"
Perry Gray	Centretown	W. P. J. Blair	Denver	Elizabeth Herred	"
C. Kinsley	"	A. N. Evans	"	Brown L. Jones	"
Eliab Miller	"	E. W. Fairchild	"	Geo. H. Kimbler	"
B. N. Stroud	"	C. M. Patrick	"	H. B. Little	"
Thomas Williams	"	L. C. Patrick	"	Dr. P. M. Picklesimer	"
Thomas Rice	Chambers	A. C. Rice	"	Philip Picklesimer	"
Daniel Alkman	Chavies	B. F. Spradlin	"	G. W. Rice	"
May Berry	"	T. W. Carroll	Dickey's Mills	Thomas Rice	"
Daniel Davidson	"	G. W. Neville	"	James M. Staumbaugh	"
E. Davidson	"	Miles Potts	"	Samuel Turner	"
John Davidson	"	Hy. Boling	Dixon	Taylor Webb	"
A. Johnson	"	M. Grayson	"	P. C. Williams	"
Thos. Johnstone	"	Thos. Marks	Dory	Christopher McDaniel	Gatewood
Daniel Moore	"	Edw. Chestnut	"	Jesse S. Pegg	Gay's Creek
Ed. L. Napier	"	Wesley M. Hensley	"	John M. York	"
Samuel H. Steinhann	"	Gas. Laneford	"	Oscar Fuller	Gillmore
Wm. Dilbeck	Clay	Samuel B. Green	Earles	John Gibbs	"
Wm. D. Newcom	"	J. S. Lewis	"	Jo. W. Wilson	"
Jas. Thompson	"	J. M. Roark	"	Wm. Bayton	Gimlet
G. G. Mitchell	Cleopatra	Patrick Stovall	"	John Harper	"
C. C. Turner	"	P. H. Stovall	"	J. B. Kelley	"
Mat Amick	Coal Run	Thomas Summers	"	James McFarland	"
Silas Ebevinger	"	Wm. T. Underwood	"	Fred Mawk	"
A. J. Harris	"	Union Uzer	"	H. J. Mawk	"
Jas. Honaker	"	Joseph Lewis	Earlington	Julia Sparks	"
R. T. Marris	"	Robinson & Son	"	Jack Huddleson	Gishbon
W. D. Rathfin	"	W. & Jas. Collins	East Point	D. Conley	Goodline
M. C. Reynolds	"	Samuel Orler	"	Geo. A. Dingus	"
Thomas Reynolds	"	L. Goble	"	Wm. Dings	"
T. J. Reynolds	"	W. W. Green	"	Ben Hale	"
D. C. Steele	"	John S. Keller	"	Jackson H. Hale	"
Wm. Steele	"	H. J. Oxner	"	Hiram Johnson	"
W. R. Steele	"	John Richmond	"	B. B. Porter	"
M. D. Stone	"	Jas. Wells	"	Samuel Prater	"
James H. Stump	"	C. C. Fyfe	Eik Fork	Bryson Shepherd	"
Tobias Wagner	"	Chas. G. Christian	Elk Fork	Jake Shepherd	"
Jeob Waddington	"	Wright Bailey	Evarts	John E. Shepherd	"
W. B. Waddington	"	John Ball Jr.	"	Allen Stone	"
B. P. Ambrose	Conkling	J. H. Crech	"	Morgan Stone	"
H. Combs	"	Wm. Dixon	"	Byrd Boone	Grassy Creek
H. C. Fick	"	John G. Farley	"	James Cecil	"
S. W. Ledford	"	John W. Gilbert sr	"	Hiram Greer	"
Lewis Fairshulle	Coopersville	Wright Kelley Jr	"	James Greer	"
Jas. Martin	"	Woodward King Jr.	"	Saml. Haven	"
G. W. Miller	"	W. P. King	"	Frank Payton	"
Geo. C. Steele	Corbin	Camp Madden	"	Jas. Roe	"
Abner L. Lewis	Creesh	J. H. Middleton	"	R. C. Lewis & Bro.	Grayson
C. J. Lewis	"	N. J. Napier	"	Little sandy Coal & Sand	"
H. C. Lewis	"	Calvan Pace	"	Co.	"
Jonathan Lewis	"	James Short	"	Henry Moberly	Green Mount
J. A. Lewis	"	Lesnard Smith	"	Bradley Bros.	Greenville
J. J. Lewis	"	Hiram Turner	"	Wm. H. Gibbs	"
C. F. C. Nolen	"	James Turner	"	John T. Reynolds	"
Oryel Anderson	Crockettsville	John N. Turner	"	Thos. Devey	Gregory
Leander Bowling	"	J. W. Baker	Eversole	Jerry Massey	"
Elisha Clay	"	A. J. Combs	"	S. C. Allen	Gypsy
R. Combs	"	Farlon Combs	"	Simon Allen	"
Thos. Deaton	"	John Eversole	"	Wm. Allen	"
		Larkin Gibson	"	D. Brown	"
				Irwin Carpenter	"



NAME	POSTOFFICE	NAME	POSTOFFICE	NAME	POSTOFFICE
Saul, Carpenter	Gypsy	W. A. Dixon	Indian Bottom	James H. Powell	Laynesville
Geo. Green	"	Moses Iron	"	R. P. Robinson Jr	"
Geo. Howard	"	J. M. Whittaker	"	R. P. Robinson Sr	"
John E. Howard	"	Castle Bros.	Inez	J. J. Stratton	"
Joseph Johnson	"	Jackson Topley	"	Washington Stratton	"
James Owens	"	Lewis Dempsey	"	E. C. Blair	Leonard
Logan Salyer	"	J. M. Ward	"	Francis Clark	"
John E. Shephard	"	S. R. Searcy	Island	James M. Clark	"
Wm. Shephard	"	John Bremser	Island City	Jasper Holmes	"
Enoch Stone	"	Thos. H. Kidd	"	Bram Huff	"
Alie Wiseman	"	Dani. McCallum	"	Milton Huff	"
Fredlon Wiseman	"	Wm. Morris	"	Wm. Huff	"
Morgan Wiseman	"	Riley Shephard	"	John P. Kelley	"
Wiley Wiseman	"	E. V. Taylor	"	James McKnight	"
Wm. Stone	Habit	R. M. Barnes	Island Station	B. F. Mosby	"
A. J. Parton	Hager	Anderson Fannin	Isonville	Henry Schaggs	"
J. P. Simer	"	Collard Fraley	"	Chas. Short	"
D. S. Hale	Halesburg	Jas. Gibson	"	Hampton Short	"
L. B. Ashmore	Hawley Station	J. K. Colburn	"	Jacob Stemp	"
T. T. McKnight	"	J. M. Ison	"	John Beauchamp	Lewisport
Wm. Williams	"	Harry Lester	"	J. L. Gresham	"
G. W. Woodruff	"	E. Y. Ojiver	"	F. D. Lewis	"
DeWison Ashby	Hanson	James Peters	"	J. C. Pell	"
Azro Combs	"	Capt. Hendricks	Jackson	Thomas Priest	"
J. H. Masonup & Co.	"	J. Adams	Jeremiah	Wm. Richardson	"
E. Ellis	Harlan	Fanny Back	"	B. R. Hatcher	Lexington
Kelley Harris	"	James Back	"	Little Fork Coal & Land	"
J. W. Howard	"	Wm. Back	"	Co	"
Green Jones	"	Hiram Blair	"	J. D. Bags	Lichburg
D. De Pennington	"	David Candill	"	A. P. Cooper	"
Williams & Co.	Hartford	H. M. Cambill	"	H. Cooper	"
Thos. Davidson	Hawesville	John Candill	"	W. R. Howard	"
Duncan Lawson & Co.	"	Polley Candill	"	Jas. May	"
Stephen Latham	Haynesville	Ben D. Duck	"	Archibald Risner	"
John Reynolds	"	John D. Dixon	"	S. M. Thompson	Likewille
Joseph H. Anyx	Hazel Green	J. M. Scott	Joe	W. & B. Cooper	Lime Creek
John Brewer	"	Allen Hensly	Jonesburg	John F. Dyer	"
Wm. Brewer	"	Carter C. Howard	"	C. C. Whittaker	"
E. C. Caskey	"	Jim Metcalfe	"	B. C. Whittaker	Livemore
W. T. Caskey	"	John E. Smith	"	Wm. Jones	"
J. T. Day	"	Hy. Akman	Kings Creek	N. F. Nacey	"
John Daniel	"	R. T. Day	"	John Blanton	Lock
D. S. Gadsden	"	W. H. Day	"	Heins of W. M. F. Wilson	"
John Hampton	"	D. D. Fields	"	E. M. Lock	"
J. Miles Little	"	Stephen Hoag	"	Forster McKinney	Logansport
John McJulin	"	R. Jones	Kingston	David Asher	London
Amos Nickell	"	C. N. Huzlon	Knottsville	John Chestnut	"
H. Phillips	"	E. L. Long	"	Leland Chestnut	"
David B. Rose	"	John McDaniel	"	Stephen Chestnut	"
Jeff Rose	"	Pres. Montgomery	"	C. P. Lawson	Lot
John Rose Sr	"	Abi Shelton	"	James Lawson	"
John Rose	"	Avil Belcher	Knuckles	Dani. Petrey	"
Charley Sample	"	James Farnie	"	E. R. Rose	"
Jas. Stamper	"	W. C. Jones	"	F. M. Siler	"
Elizabeth Talbot	"	John & Geo. Knuckles	"	L. F. Siler	"
S. M. Tyler	"	& Co	"	Milton Siler	"
Jas. W. McArthur	Hebardsville	Hiram Neal	"	Perry Siler	"
Geo. Negley	"	John Slusher	"	H. C. Tye	"
Jas. H. Tillotson	"	Josh. Slusher	"	Rhoderic Murry	Lowmansville
P. Baker	Hilton	Phillip Slusher	"	Janev Bentley	McDowell
L. E. Caldwell	"	B. Slush	"	Jasper Bentley	"
R. J. Lewis	"	Charley Balbridge	Lackey	E. S. Frause	"
Timothy Pennington	"	M. Balbridge	"	John Hall	"
Burdine Saylor	"	Isaac Collins	"	O. Hall	"
Calvin Saylor	"	Nathan Estep	"	Wm. Hall	"
Jonathan Saylor	"	Reece Gearhart	"	R. C. Martin	"
James Slusher	"	Robt. Hays	"	Lackey Salsbury	"
Alexander Thelton	"	A. Martin	"	John F. Sizemore	"
James J. Thelton	"	John E. Martin	"	Greenville Stumbo	"
Robert Thelton	"	Joe Martin	"	Wm. B. Stumbo	"
J. A. Rowell	Henderson	W. J. Martin	"	E. C. Turner	"
Isaac Back	Hendricks	William Trepert	"	Morgan Turner	"
John W. Back	"	John Turner	"	Brown & Brown	Metlone
John M. Patrick	"	Jessie Wicker	"	P. Johnson	"
Wm. Risner	"	Wm. Reams	Langman	Porter Newell	"
Wm. Reed	High Knob	J. S. Gatlif	Laso	J. P. Whit & Son	"
J. M. Bailey	Hindman	Lee Loforce	"	W. H. Clark	McKee
W. E. Baker	"	H. C. Allen	Laurel Creek	J. N. Cotton	"
Elihu Blair	"	Jas. Barrett	"	W. S. Dickson	"
S. Bogas	"	John D. Oldiron	"	Scott Evans	"
Rachel Calhoun	"	Andy Hensby	"	Jacob Gilbard	"
W. C. Combs	"	Josh. Hubbard	"	W. S. McCarly	"
P. M. Duke	"	Joseph P. Moore	"	Cornelius Roberts	"
Green Dyer	"	Link Morgan	"	Lewis Sundlie	"
Joseph Everage	"	Arvey Akers	Laynesville	R. T. Jarvis	McNary
Wm. Gayheart	"	H. W. Cecil	"	John W. Black	McWhorter
Hiram Miller	"	J. G. Cecil	"	Geo. W. Brown	"
Logue Risner	"	James Clark	"	J. C. Caldwell	"
Andrew Singleton	"	Morgan Clark	"	S. W. Carrier	"
John Stacey	"	Robert Clark	"	John P. Young Sr	"
P. H. Tinger	"	A. L. Davidson	"	P. L. Young Sr	"
John A. Arnold	Horse Branch	S. P. Davidson	"	Madisonville Coal Co	Madisonville
Saml. Miller	Hull	Dr. S. M. Ferguson	"	S. Offet	"
Hy. Lewis	Hyden	W. D. Greer	"	Geo. W. Clements	Magan
John P. Lewis	"	Samuel Hill	"	Morris McCarly	"
Josh. Maggard	"	J. C. Homell	"	James Medall	"
Judge Mundy	"	Broadus Layne	"	John P. Milk II	"
Felix Rochester	"	Cros Layne	"	C. M. Ralph	"
Jas. S. Back	Indian Bottom	John L. Layne	"	Hy. Bay	Maggard
Lewis Back	"	J. N. Layne	"	Wilson Lewis	"
Wm. Back	"	Tandy M. Layne	"	D. M. Maggard	"
H. B. Branson	"	W. H. Layne	"	J. F. Maggard	"
A. J. Crase	"	S. G. Lott	"	D. W. Webb	"

## THE MINING DIRECTORY—SUPPLEMENT.

NAME	POSTOFFICE	NAME	POSTOFFICE	NAME	POSTOFFICE																																																																																																																																																																																																																																																																																																																																																
Milton Hensley	Mullin's Creek	B. L. Davis	Paintsville	Charles Simpson	Ready																																																																																																																																																																																																																																																																																																																																																
J. Benge	Manchester	Hy. T. Dixon	"	M. H. Ward	Red Fox																																																																																																																																																																																																																																																																																																																																																
S. B. Candill	"	J. Dixon	"	T. M. Breeding	John Hale																																																																																																																																																																																																																																																																																																																																																
D. Chadwell	"	James Elliott	"	A. J. Ferguson	Relief																																																																																																																																																																																																																																																																																																																																																
John Herd	"	Green Meek	"	J. M. Ferguson	"																																																																																																																																																																																																																																																																																																																																																
Percy Jarvis	"	Paintsville Mining Co.	"	Richard Ferguson	"																																																																																																																																																																																																																																																																																																																																																
John Lucas	"	G. E. Preston	"	W. R. Ferguson	"																																																																																																																																																																																																																																																																																																																																																
Granville Philpot	"	Samuel S. Preston	"	B. S. Hamilton	"																																																																																																																																																																																																																																																																																																																																																
John White	"	Thos. J. Preston	"	D. H. Hamilton	"																																																																																																																																																																																																																																																																																																																																																
Jude & P. White	"	W. W. Rule	"	Elliott Hill	"																																																																																																																																																																																																																																																																																																																																																
Martha White	"	Ed Stapleton	"	J. W. Hill	"																																																																																																																																																																																																																																																																																																																																																
John Wright	Maplestone	James Staubaugh	"	W. E. Hill	"																																																																																																																																																																																																																																																																																																																																																
Ed. Maples	Martha	Madison L. Sublett	"	Dorset Ison	"																																																																																																																																																																																																																																																																																																																																																
J. J. Gambill	"	Andrew J. Wiley	"	Hudson Keaton	"																																																																																																																																																																																																																																																																																																																																																
L. C. Gambill	"	G. H. Witten	"	F. Peophony	"																																																																																																																																																																																																																																																																																																																																																
D. W. Skaggs	Mattoon	T. P. Witten	"	G. W. Prior	"																																																																																																																																																																																																																																																																																																																																																
Barney & Hargrave	Mauldon	A. T. James	Faulter	David Smith st.	"																																																																																																																																																																																																																																																																																																																																																
J. E. Holcomb	"	James Caschier	Paradise	J. C. Todd	"																																																																																																																																																																																																																																																																																																																																																
John L. Montgomery	"	H. Cambill	"	Samuel James	Riceville																																																																																																																																																																																																																																																																																																																																																
J. Ward, M. D.	"	Green River Coal & Min- ing Co.	"	O. W. Atkins	Riddle																																																																																																																																																																																																																																																																																																																																																
A. P. Wilson	"	I. W. Zmith	"	Joseph Fyfe	"																																																																																																																																																																																																																																																																																																																																																
J. M. Caldwell	Marity	Pres. Smith	"	A. Ison	"																																																																																																																																																																																																																																																																																																																																																
W. S. Davis	"	Wm. H. Smith	"	Wm. F. Mason	"																																																																																																																																																																																																																																																																																																																																																
Geo. Fields	"	Washington Travel	Paruleysville	John Riddle	"																																																																																																																																																																																																																																																																																																																																																
W. R. Fisher	"	Elisha Beagas	Partridge	Meredith Skaggs	"																																																																																																																																																																																																																																																																																																																																																
G. M. Fuller	"	E. M. Brown	"	John Watson	Rochester																																																																																																																																																																																																																																																																																																																																																
H. H. McGinnies	"	J. M. Brown	"	Ben Harper	"																																																																																																																																																																																																																																																																																																																																																
J. F. Baugh	Mershon's Bouds	G. W. Candill	"	John Hollan	"																																																																																																																																																																																																																																																																																																																																																
A. Baker	Middle Fork	M. D. Collier	"	Gran Hunt	"																																																																																																																																																																																																																																																																																																																																																
James Baker	"	J. E. Day	"	D. Greatbow	"																																																																																																																																																																																																																																																																																																																																																
Wm. Carpenter	"	J. H. P. Day	"	Kinmonth Bros	"																																																																																																																																																																																																																																																																																																																																																
Tom Turner	"	James Latta	"	Thos. Miller	"																																																																																																																																																																																																																																																																																																																																																
Jake Tussey	"	Hy. Maggard	"	Wm. Haublin	Rockhold																																																																																																																																																																																																																																																																																																																																																
Bryson Mountain Coal & Coke Co.	Middleburg	Wm. B. Bennett	Patterson Creek	W. A. King	"																																																																																																																																																																																																																																																																																																																																																
Mingo Mt. Coal & Coke Co.	Middlesboro	Wiles E. Standhill	"	J. W. Perkins	"																																																																																																																																																																																																																																																																																																																																																
Reliance Coal & Coke Co.	"	L. B. Woods	"	J. K. Hollis	"																																																																																																																																																																																																																																																																																																																																																
John Brewer	Mize	W. M. Beatty	Pigeon Post	Ferry Stuart	"																																																																																																																																																																																																																																																																																																																																																
Lander Corsky	"	Luther Louis	"	Jesse Bowens	Rock House																																																																																																																																																																																																																																																																																																																																																
E. Debusk	"	W. M. Reid	"	John Bowens	"																																																																																																																																																																																																																																																																																																																																																
Solomon Hanev	"	C. T. Rowlands	"	Randolph Colburn	Rosedale																																																																																																																																																																																																																																																																																																																																																
Wm. Hensley	"	Col. John Dils	"	S. Baehrlin	"	W. T. Ingram	"	John M. Ferguson	"	N. E. Pennington	Rousseau	Boon Oldfield	"	R. M. Ferrell	"	W. S. Allen	"	John A. Oldfield	"	John M. Fielder	"	John W. Ferek	"	Joseph Oldfield	"	A. J. Hatcher	"	Louis Back	"	Cyrus Perry	"	P. A. Kline	"	Wallace Bayly	"	James Rose	"	R. H. Rathill	"	G. W. Clemens	"	Wm. Laur	"	John Carter Scott	"	Moses Lemus	"	Thos. Millsaps	"	John M. Sword	"	Wm. C. Smith	"	J. H. Baldwin	Moore's Creek	Wm. Sword st.	"	Reuben Lane-3	"	S. B. Davidson	"	H. C. Sowards	"	B. H. Mettman	"	James Ohalt	"	T. J. Sowards	"	G. W. Miller	"	Moses Helm	"	Richard Syak	"	John Newton	"	George Thomas	"	Thomas Thompson	"	James Roberts	"	J. H. Wade	"	Pine Hill Coal Co.	Pine Hill	James Roehars	"	Presley Whittaker	"	Daniel Howard	Pineville	James Robertson	"	Ben Moxton	Morgantown	Allen Blackburne	Pleasant	Henry Fuchser	"	Charles Williams	"	Wm. DeKang	"	Henry Williams	Rothwell	A. J. Gibson	"	J. J. McCoy	"	B. F. Day	"	S. Wm. Owens	"	W. T. Howlett	Pleasant Ridge	T. S. Perry	Rumsey	Floyd Williamson	Morton's Gap	Jan. Tharp	"	Mr. Baker	"	Gastine Hill	"	Amos Bennett	Pollyton	P. F. Richardson	St. Charles	Jessie Hill	"	Polley Pleasant	"	D. D. Woodruff	Salt Creek	M. Hill	Moseleyville	J. L. Powers	"	H. G. Pratt	"	A. J. Johnson	Mouth of Pond	John Polley	"	Parish Arnett	Saltersville	Hiram Johnson	"	M. A. Rose	Pouze	D. M. Atkinson	"	Josh. Rhodes	"	John Hibbard	"	Ben Candill	"	Wm. Siler	"	Samuel McClure	"	John B. Candill	"	James Smith	"	Wm. Mink	"	Geo. B. Gardner	"	E. C. Gray	"	S. Nicely	"	Hy. May	"	Strull & Childress	Nebo	J. J. Norton	Poor Fork	Jeff Treator	Sandy Hook	Ebzey Litterell	Nelson	Charley Blair	"	C. Adams	"	Ben F. Cantrell	Nortonville	Joseph B. Blair	"	W. H. Bowling	"	J. M. Cantrell	Oil Springs	Jas. H. Coldiron	"	L. C. Priedland	"	Y. M. Cantrell	Ophir	John C. Dixon	"	Wm. Weddington	Sassafras	Jesse Gilliam	"	Ben Eversole	"	Thos. Kelley	"	E. J. Hill	"	Just Jackson	"	Wm. Kelley	"	Jasper Wright	"	Jim McKnight	"	James Stacey	"	B. Abney	Orlando	John McKnight	"	Simon Stacey	"	B. Mullins	"	Joseph McKnight	"	Jeremial Smith Jr.	"	A. Proctor	"	S. W. Smith	Professorsburg	Manford Young	Saxton	Harrison Reams	"	T. J. Bingham	"	Drew Blains	"	Fred Bobbs	"	George Hatcher	"	Perry Bryant	"	A. R. Bruckes	"	John St. Curmille	"	A. J. Jones	"	R. C. Floupa	"	John St. Curmille	"	E. Smith	"	H. Herr	"	Gen. B. Conley	Providence	Joe Siler	"	M. P. Mattingly	"	Payne Coal & Coke Co.	Ready	T. S. Siler	Schree	Mise & Co.	"	B. D. Minton	"	John V. Hunter	Sellers	C. L. Nall	"	G. W. Montgomery	"	Alex Phipps	Shoals	J. H. Rind	Paintsville	"	"	Hy. S. Begley	Shoals	H. E. Conley	"	"	"	W. E. Bowling	"	Augustus Daniels	"	"	"	Noble Gay	"	Jos. Daniels	"	"	"	Peter Gross	Shrewsbury	"	"	"	"	Mat Edwards	Shrewsbury	"	"	"	"	Sherman Park	Sip	"	"	"	"	James Tenney	Skiltsville	"	"	"	"	T. Brown	"
W. T. Ingram	"	John M. Ferguson	"	N. E. Pennington	Rousseau	Boon Oldfield	"	R. M. Ferrell	"	W. S. Allen	"	John A. Oldfield	"	John M. Fielder	"	John W. Ferek	"	Joseph Oldfield	"	A. J. Hatcher	"	Louis Back	"	Cyrus Perry	"	P. A. Kline	"	Wallace Bayly	"	James Rose	"	R. H. Rathill	"	G. W. Clemens	"	Wm. Laur	"	John Carter Scott	"	Moses Lemus	"	Thos. Millsaps	"	John M. Sword	"	Wm. C. Smith	"	J. H. Baldwin	Moore's Creek	Wm. Sword st.	"	Reuben Lane-3	"	S. B. Davidson	"	H. C. Sowards	"	B. H. Mettman	"	James Ohalt	"	T. J. Sowards	"	G. W. Miller	"	Moses Helm	"	Richard Syak	"	John Newton	"	George Thomas	"	Thomas Thompson	"	James Roberts	"	J. H. Wade	"	Pine Hill Coal Co.	Pine Hill	James Roehars	"	Presley Whittaker	"	Daniel Howard	Pineville	James Robertson	"	Ben Moxton	Morgantown	Allen Blackburne	Pleasant	Henry Fuchser	"	Charles Williams	"	Wm. DeKang	"	Henry Williams	Rothwell	A. J. Gibson	"	J. J. McCoy	"	B. F. Day	"	S. Wm. Owens	"	W. T. Howlett	Pleasant Ridge	T. S. Perry	Rumsey	Floyd Williamson	Morton's Gap	Jan. Tharp	"	Mr. Baker	"	Gastine Hill	"	Amos Bennett	Pollyton	P. F. Richardson	St. Charles	Jessie Hill	"	Polley Pleasant	"	D. D. Woodruff	Salt Creek	M. Hill	Moseleyville	J. L. Powers	"	H. G. Pratt	"	A. J. Johnson	Mouth of Pond	John Polley	"	Parish Arnett	Saltersville	Hiram Johnson	"	M. A. Rose	Pouze	D. M. Atkinson	"	Josh. Rhodes	"	John Hibbard	"	Ben Candill	"	Wm. Siler	"	Samuel McClure	"	John B. Candill	"	James Smith	"	Wm. Mink	"	Geo. B. Gardner	"	E. C. Gray	"	S. Nicely	"	Hy. May	"	Strull & Childress	Nebo	J. J. Norton	Poor Fork	Jeff Treator	Sandy Hook	Ebzey Litterell	Nelson	Charley Blair	"	C. Adams	"	Ben F. Cantrell	Nortonville	Joseph B. Blair	"	W. H. Bowling	"	J. M. Cantrell	Oil Springs	Jas. H. Coldiron	"	L. C. Priedland	"	Y. M. Cantrell	Ophir	John C. Dixon	"	Wm. Weddington	Sassafras	Jesse Gilliam	"	Ben Eversole	"	Thos. Kelley	"	E. J. Hill	"	Just Jackson	"	Wm. Kelley	"	Jasper Wright	"	Jim McKnight	"	James Stacey	"	B. Abney	Orlando	John McKnight	"	Simon Stacey	"	B. Mullins	"	Joseph McKnight	"	Jeremial Smith Jr.	"	A. Proctor	"	S. W. Smith	Professorsburg	Manford Young	Saxton	Harrison Reams	"	T. J. Bingham	"	Drew Blains	"	Fred Bobbs	"	George Hatcher	"	Perry Bryant	"	A. R. Bruckes	"	John St. Curmille	"	A. J. Jones	"	R. C. Floupa	"	John St. Curmille	"	E. Smith	"	H. Herr	"	Gen. B. Conley	Providence	Joe Siler	"	M. P. Mattingly	"	Payne Coal & Coke Co.	Ready	T. S. Siler	Schree	Mise & Co.	"	B. D. Minton	"	John V. Hunter	Sellers	C. L. Nall	"	G. W. Montgomery	"	Alex Phipps	Shoals	J. H. Rind	Paintsville	"	"	Hy. S. Begley	Shoals	H. E. Conley	"	"	"	W. E. Bowling	"	Augustus Daniels	"	"	"	Noble Gay	"	Jos. Daniels	"	"	"	Peter Gross	Shrewsbury	"	"	"	"	Mat Edwards	Shrewsbury	"	"	"	"	Sherman Park	Sip	"	"	"	"	James Tenney	Skiltsville	"	"	"	"	T. Brown	"						
Boon Oldfield	"	R. M. Ferrell	"	W. S. Allen	"	John A. Oldfield	"	John M. Fielder	"	John W. Ferek	"	Joseph Oldfield	"	A. J. Hatcher	"	Louis Back	"	Cyrus Perry	"	P. A. Kline	"	Wallace Bayly	"	James Rose	"	R. H. Rathill	"	G. W. Clemens	"	Wm. Laur	"	John Carter Scott	"	Moses Lemus	"	Thos. Millsaps	"	John M. Sword	"	Wm. C. Smith	"	J. H. Baldwin	Moore's Creek	Wm. Sword st.	"	Reuben Lane-3	"	S. B. Davidson	"	H. C. Sowards	"	B. H. Mettman	"	James Ohalt	"	T. J. Sowards	"	G. W. Miller	"	Moses Helm	"	Richard Syak	"	John Newton	"	George Thomas	"	Thomas Thompson	"	James Roberts	"	J. H. Wade	"	Pine Hill Coal Co.	Pine Hill	James Roehars	"	Presley Whittaker	"	Daniel Howard	Pineville	James Robertson	"	Ben Moxton	Morgantown	Allen Blackburne	Pleasant	Henry Fuchser	"	Charles Williams	"	Wm. DeKang	"	Henry Williams	Rothwell	A. J. Gibson	"	J. J. McCoy	"	B. F. Day	"	S. Wm. Owens	"	W. T. Howlett	Pleasant Ridge	T. S. Perry	Rumsey	Floyd Williamson	Morton's Gap	Jan. Tharp	"	Mr. Baker	"	Gastine Hill	"	Amos Bennett	Pollyton	P. F. Richardson	St. Charles	Jessie Hill	"	Polley Pleasant	"	D. D. Woodruff	Salt Creek	M. Hill	Moseleyville	J. L. Powers	"	H. G. Pratt	"	A. J. Johnson	Mouth of Pond	John Polley	"	Parish Arnett	Saltersville	Hiram Johnson	"	M. A. Rose	Pouze	D. M. Atkinson	"	Josh. Rhodes	"	John Hibbard	"	Ben Candill	"	Wm. Siler	"	Samuel McClure	"	John B. Candill	"	James Smith	"	Wm. Mink	"	Geo. B. Gardner	"	E. C. Gray	"	S. Nicely	"	Hy. May	"	Strull & Childress	Nebo	J. J. Norton	Poor Fork	Jeff Treator	Sandy Hook	Ebzey Litterell	Nelson	Charley Blair	"	C. Adams	"	Ben F. Cantrell	Nortonville	Joseph B. Blair	"	W. H. Bowling	"	J. M. Cantrell	Oil Springs	Jas. H. Coldiron	"	L. C. Priedland	"	Y. M. Cantrell	Ophir	John C. Dixon	"	Wm. Weddington	Sassafras	Jesse Gilliam	"	Ben Eversole	"	Thos. Kelley	"	E. J. Hill	"	Just Jackson	"	Wm. Kelley	"	Jasper Wright	"	Jim McKnight	"	James Stacey	"	B. Abney	Orlando	John McKnight	"	Simon Stacey	"	B. Mullins	"	Joseph McKnight	"	Jeremial Smith Jr.	"	A. Proctor	"	S. W. Smith	Professorsburg	Manford Young	Saxton	Harrison Reams	"	T. J. Bingham	"	Drew Blains	"	Fred Bobbs	"	George Hatcher	"	Perry Bryant	"	A. R. Bruckes	"	John St. Curmille	"	A. J. Jones	"	R. C. Floupa	"	John St. Curmille	"	E. Smith	"	H. Herr	"	Gen. B. Conley	Providence	Joe Siler	"	M. P. Mattingly	"	Payne Coal & Coke Co.	Ready	T. S. Siler	Schree	Mise & Co.	"	B. D. Minton	"	John V. Hunter	Sellers	C. L. Nall	"	G. W. Montgomery	"	Alex Phipps	Shoals	J. H. Rind	Paintsville	"	"	Hy. S. Begley	Shoals	H. E. Conley	"	"	"	W. E. Bowling	"	Augustus Daniels	"	"	"	Noble Gay	"	Jos. Daniels	"	"	"	Peter Gross	Shrewsbury	"	"	"	"	Mat Edwards	Shrewsbury	"	"	"	"	Sherman Park	Sip	"	"	"	"	James Tenney	Skiltsville	"	"	"	"	T. Brown	"												
John A. Oldfield	"	John M. Fielder	"	John W. Ferek	"	Joseph Oldfield	"	A. J. Hatcher	"	Louis Back	"	Cyrus Perry	"	P. A. Kline	"	Wallace Bayly	"	James Rose	"	R. H. Rathill	"	G. W. Clemens	"	Wm. Laur	"	John Carter Scott	"	Moses Lemus	"	Thos. Millsaps	"	John M. Sword	"	Wm. C. Smith	"	J. H. Baldwin	Moore's Creek	Wm. Sword st.	"	Reuben Lane-3	"	S. B. Davidson	"	H. C. Sowards	"	B. H. Mettman	"	James Ohalt	"	T. J. Sowards	"	G. W. Miller	"	Moses Helm	"	Richard Syak	"	John Newton	"	George Thomas	"	Thomas Thompson	"	James Roberts	"	J. H. Wade	"	Pine Hill Coal Co.	Pine Hill	James Roehars	"	Presley Whittaker	"	Daniel Howard	Pineville	James Robertson	"	Ben Moxton	Morgantown	Allen Blackburne	Pleasant	Henry Fuchser	"	Charles Williams	"	Wm. DeKang	"	Henry Williams	Rothwell	A. J. Gibson	"	J. J. McCoy	"	B. F. Day	"	S. Wm. Owens	"	W. T. Howlett	Pleasant Ridge	T. S. Perry	Rumsey	Floyd Williamson	Morton's Gap	Jan. Tharp	"	Mr. Baker	"	Gastine Hill	"	Amos Bennett	Pollyton	P. F. Richardson	St. Charles	Jessie Hill	"	Polley Pleasant	"	D. D. Woodruff	Salt Creek	M. Hill	Moseleyville	J. L. Powers	"	H. G. Pratt	"	A. J. Johnson	Mouth of Pond	John Polley	"	Parish Arnett	Saltersville	Hiram Johnson	"	M. A. Rose	Pouze	D. M. Atkinson	"	Josh. Rhodes	"	John Hibbard	"	Ben Candill	"	Wm. Siler	"	Samuel McClure	"	John B. Candill	"	James Smith	"	Wm. Mink	"	Geo. B. Gardner	"	E. C. Gray	"	S. Nicely	"	Hy. May	"	Strull & Childress	Nebo	J. J. Norton	Poor Fork	Jeff Treator	Sandy Hook	Ebzey Litterell	Nelson	Charley Blair	"	C. Adams	"	Ben F. Cantrell	Nortonville	Joseph B. Blair	"	W. H. Bowling	"	J. M. Cantrell	Oil Springs	Jas. H. Coldiron	"	L. C. Priedland	"	Y. M. Cantrell	Ophir	John C. Dixon	"	Wm. Weddington	Sassafras	Jesse Gilliam	"	Ben Eversole	"	Thos. Kelley	"	E. J. Hill	"	Just Jackson	"	Wm. Kelley	"	Jasper Wright	"	Jim McKnight	"	James Stacey	"	B. Abney	Orlando	John McKnight	"	Simon Stacey	"	B. Mullins	"	Joseph McKnight	"	Jeremial Smith Jr.	"	A. Proctor	"	S. W. Smith	Professorsburg	Manford Young	Saxton	Harrison Reams	"	T. J. Bingham	"	Drew Blains	"	Fred Bobbs	"	George Hatcher	"	Perry Bryant	"	A. R. Bruckes	"	John St. Curmille	"	A. J. Jones	"	R. C. Floupa	"	John St. Curmille	"	E. Smith	"	H. Herr	"	Gen. B. Conley	Providence	Joe Siler	"	M. P. Mattingly	"	Payne Coal & Coke Co.	Ready	T. S. Siler	Schree	Mise & Co.	"	B. D. Minton	"	John V. Hunter	Sellers	C. L. Nall	"	G. W. Montgomery	"	Alex Phipps	Shoals	J. H. Rind	Paintsville	"	"	Hy. S. Begley	Shoals	H. E. Conley	"	"	"	W. E. Bowling	"	Augustus Daniels	"	"	"	Noble Gay	"	Jos. Daniels	"	"	"	Peter Gross	Shrewsbury	"	"	"	"	Mat Edwards	Shrewsbury	"	"	"	"	Sherman Park	Sip	"	"	"	"	James Tenney	Skiltsville	"	"	"	"	T. Brown	"																		
Joseph Oldfield	"	A. J. Hatcher	"	Louis Back	"	Cyrus Perry	"	P. A. Kline	"	Wallace Bayly	"	James Rose	"	R. H. Rathill	"	G. W. Clemens	"	Wm. Laur	"	John Carter Scott	"	Moses Lemus	"	Thos. Millsaps	"	John M. Sword	"	Wm. C. Smith	"	J. H. Baldwin	Moore's Creek	Wm. Sword st.	"	Reuben Lane-3	"	S. B. Davidson	"	H. C. Sowards	"	B. H. Mettman	"	James Ohalt	"	T. J. Sowards	"	G. W. Miller	"	Moses Helm	"	Richard Syak	"	John Newton	"	George Thomas	"	Thomas Thompson	"	James Roberts	"	J. H. Wade	"	Pine Hill Coal Co.	Pine Hill	James Roehars	"	Presley Whittaker	"	Daniel Howard	Pineville	James Robertson	"	Ben Moxton	Morgantown	Allen Blackburne	Pleasant	Henry Fuchser	"	Charles Williams	"	Wm. DeKang	"	Henry Williams	Rothwell	A. J. Gibson	"	J. J. McCoy	"	B. F. Day	"	S. Wm. Owens	"	W. T. Howlett	Pleasant Ridge	T. S. Perry	Rumsey	Floyd Williamson	Morton's Gap	Jan. Tharp	"	Mr. Baker	"	Gastine Hill	"	Amos Bennett	Pollyton	P. F. Richardson	St. Charles	Jessie Hill	"	Polley Pleasant	"	D. D. Woodruff	Salt Creek	M. Hill	Moseleyville	J. L. Powers	"	H. G. Pratt	"	A. J. Johnson	Mouth of Pond	John Polley	"	Parish Arnett	Saltersville	Hiram Johnson	"	M. A. Rose	Pouze	D. M. Atkinson	"	Josh. Rhodes	"	John Hibbard	"	Ben Candill	"	Wm. Siler	"	Samuel McClure	"	John B. Candill	"	James Smith	"	Wm. Mink	"	Geo. B. Gardner	"	E. C. Gray	"	S. Nicely	"	Hy. May	"	Strull & Childress	Nebo	J. J. Norton	Poor Fork	Jeff Treator	Sandy Hook	Ebzey Litterell	Nelson	Charley Blair	"	C. Adams	"	Ben F. Cantrell	Nortonville	Joseph B. Blair	"	W. H. Bowling	"	J. M. Cantrell	Oil Springs	Jas. H. Coldiron	"	L. C. Priedland	"	Y. M. Cantrell	Ophir	John C. Dixon	"	Wm. Weddington	Sassafras	Jesse Gilliam	"	Ben Eversole	"	Thos. Kelley	"	E. J. Hill	"	Just Jackson	"	Wm. Kelley	"	Jasper Wright	"	Jim McKnight	"	James Stacey	"	B. Abney	Orlando	John McKnight	"	Simon Stacey	"	B. Mullins	"	Joseph McKnight	"	Jeremial Smith Jr.	"	A. Proctor	"	S. W. Smith	Professorsburg	Manford Young	Saxton	Harrison Reams	"	T. J. Bingham	"	Drew Blains	"	Fred Bobbs	"	George Hatcher	"	Perry Bryant	"	A. R. Bruckes	"	John St. Curmille	"	A. J. Jones	"	R. C. Floupa	"	John St. Curmille	"	E. Smith	"	H. Herr	"	Gen. B. Conley	Providence	Joe Siler	"	M. P. Mattingly	"	Payne Coal & Coke Co.	Ready	T. S. Siler	Schree	Mise & Co.	"	B. D. Minton	"	John V. Hunter	Sellers	C. L. Nall	"	G. W. Montgomery	"	Alex Phipps	Shoals	J. H. Rind	Paintsville	"	"	Hy. S. Begley	Shoals	H. E. Conley	"	"	"	W. E. Bowling	"	Augustus Daniels	"	"	"	Noble Gay	"	Jos. Daniels	"	"	"	Peter Gross	Shrewsbury	"	"	"	"	Mat Edwards	Shrewsbury	"	"	"	"	Sherman Park	Sip	"	"	"	"	James Tenney	Skiltsville	"	"	"	"	T. Brown	"																								
Cyrus Perry	"	P. A. Kline	"	Wallace Bayly	"	James Rose	"	R. H. Rathill	"	G. W. Clemens	"	Wm. Laur	"	John Carter Scott	"	Moses Lemus	"	Thos. Millsaps	"	John M. Sword	"	Wm. C. Smith	"	J. H. Baldwin	Moore's Creek	Wm. Sword st.	"	Reuben Lane-3	"	S. B. Davidson	"	H. C. Sowards	"	B. H. Mettman	"	James Ohalt	"	T. J. Sowards	"	G. W. Miller	"	Moses Helm	"	Richard Syak	"	John Newton	"	George Thomas	"	Thomas Thompson	"	James Roberts	"	J. H. Wade	"	Pine Hill Coal Co.	Pine Hill	James Roehars	"	Presley Whittaker	"	Daniel Howard	Pineville	James Robertson	"	Ben Moxton	Morgantown	Allen Blackburne	Pleasant	Henry Fuchser	"	Charles Williams	"	Wm. DeKang	"	Henry Williams	Rothwell	A. J. Gibson	"	J. J. McCoy	"	B. F. Day	"	S. Wm. Owens	"	W. T. Howlett	Pleasant Ridge	T. S. Perry	Rumsey	Floyd Williamson	Morton's Gap	Jan. Tharp	"	Mr. Baker	"	Gastine Hill	"	Amos Bennett	Pollyton	P. F. Richardson	St. Charles	Jessie Hill	"	Polley Pleasant	"	D. D. Woodruff	Salt Creek	M. Hill	Moseleyville	J. L. Powers	"	H. G. Pratt	"	A. J. Johnson	Mouth of Pond	John Polley	"	Parish Arnett	Saltersville	Hiram Johnson	"	M. A. Rose	Pouze	D. M. Atkinson	"	Josh. Rhodes	"	John Hibbard	"	Ben Candill	"	Wm. Siler	"	Samuel McClure	"	John B. Candill	"	James Smith	"	Wm. Mink	"	Geo. B. Gardner	"	E. C. Gray	"	S. Nicely	"	Hy. May	"	Strull & Childress	Nebo	J. J. Norton	Poor Fork	Jeff Treator	Sandy Hook	Ebzey Litterell	Nelson	Charley Blair	"	C. Adams	"	Ben F. Cantrell	Nortonville	Joseph B. Blair	"	W. H. Bowling	"	J. M. Cantrell	Oil Springs	Jas. H. Coldiron	"	L. C. Priedland	"	Y. M. Cantrell	Ophir	John C. Dixon	"	Wm. Weddington	Sassafras	Jesse Gilliam	"	Ben Eversole	"	Thos. Kelley	"	E. J. Hill	"	Just Jackson	"	Wm. Kelley	"	Jasper Wright	"	Jim McKnight	"	James Stacey	"	B. Abney	Orlando	John McKnight	"	Simon Stacey	"	B. Mullins	"	Joseph McKnight	"	Jeremial Smith Jr.	"	A. Proctor	"	S. W. Smith	Professorsburg	Manford Young	Saxton	Harrison Reams	"	T. J. Bingham	"	Drew Blains	"	Fred Bobbs	"	George Hatcher	"	Perry Bryant	"	A. R. Bruckes	"	John St. Curmille	"	A. J. Jones	"	R. C. Floupa	"	John St. Curmille	"	E. Smith	"	H. Herr	"	Gen. B. Conley	Providence	Joe Siler	"	M. P. Mattingly	"	Payne Coal & Coke Co.	Ready	T. S. Siler	Schree	Mise & Co.	"	B. D. Minton	"	John V. Hunter	Sellers	C. L. Nall	"	G. W. Montgomery	"	Alex Phipps	Shoals	J. H. Rind	Paintsville	"	"	Hy. S. Begley	Shoals	H. E. Conley	"	"	"	W. E. Bowling	"	Augustus Daniels	"	"	"	Noble Gay	"	Jos. Daniels	"	"	"	Peter Gross	Shrewsbury	"	"	"	"	Mat Edwards	Shrewsbury	"	"	"	"	Sherman Park	Sip	"	"	"	"	James Tenney	Skiltsville	"	"	"	"	T. Brown	"																														
James Rose	"	R. H. Rathill	"	G. W. Clemens	"	Wm. Laur	"	John Carter Scott	"	Moses Lemus	"	Thos. Millsaps	"	John M. Sword	"	Wm. C. Smith	"	J. H. Baldwin	Moore's Creek	Wm. Sword st.	"	Reuben Lane-3	"	S. B. Davidson	"	H. C. Sowards	"	B. H. Mettman	"	James Ohalt	"	T. J. Sowards	"	G. W. Miller	"	Moses Helm	"	Richard Syak	"	John Newton	"	George Thomas	"	Thomas Thompson	"	James Roberts	"	J. H. Wade	"	Pine Hill Coal Co.	Pine Hill	James Roehars	"	Presley Whittaker	"	Daniel Howard	Pineville	James Robertson	"	Ben Moxton	Morgantown	Allen Blackburne	Pleasant	Henry Fuchser	"	Charles Williams	"	Wm. DeKang	"	Henry Williams	Rothwell	A. J. Gibson	"	J. J. McCoy	"	B. F. Day	"	S. Wm. Owens	"	W. T. Howlett	Pleasant Ridge	T. S. Perry	Rumsey	Floyd Williamson	Morton's Gap	Jan. Tharp	"	Mr. Baker	"	Gastine Hill	"	Amos Bennett	Pollyton	P. F. Richardson	St. Charles	Jessie Hill	"	Polley Pleasant	"	D. D. Woodruff	Salt Creek	M. Hill	Moseleyville	J. L. Powers	"	H. G. Pratt	"	A. J. Johnson	Mouth of Pond	John Polley	"	Parish Arnett	Saltersville	Hiram Johnson	"	M. A. Rose	Pouze	D. M. Atkinson	"	Josh. Rhodes	"	John Hibbard	"	Ben Candill	"	Wm. Siler	"	Samuel McClure	"	John B. Candill	"	James Smith	"	Wm. Mink	"	Geo. B. Gardner	"	E. C. Gray	"	S. Nicely	"	Hy. May	"	Strull & Childress	Nebo	J. J. Norton	Poor Fork	Jeff Treator	Sandy Hook	Ebzey Litterell	Nelson	Charley Blair	"	C. Adams	"	Ben F. Cantrell	Nortonville	Joseph B. Blair	"	W. H. Bowling	"	J. M. Cantrell	Oil Springs	Jas. H. Coldiron	"	L. C. Priedland	"	Y. M. Cantrell	Ophir	John C. Dixon	"	Wm. Weddington	Sassafras	Jesse Gilliam	"	Ben Eversole	"	Thos. Kelley	"	E. J. Hill	"	Just Jackson	"	Wm. Kelley	"	Jasper Wright	"	Jim McKnight	"	James Stacey	"	B. Abney	Orlando	John McKnight	"	Simon Stacey	"	B. Mullins	"	Joseph McKnight	"	Jeremial Smith Jr.	"	A. Proctor	"	S. W. Smith	Professorsburg	Manford Young	Saxton	Harrison Reams	"	T. J. Bingham	"	Drew Blains	"	Fred Bobbs	"	George Hatcher	"	Perry Bryant	"	A. R. Bruckes	"	John St. Curmille	"	A. J. Jones	"	R. C. Floupa	"	John St. Curmille	"	E. Smith	"	H. Herr	"	Gen. B. Conley	Providence	Joe Siler	"	M. P. Mattingly	"	Payne Coal & Coke Co.	Ready	T. S. Siler	Schree	Mise & Co.	"	B. D. Minton	"	John V. Hunter	Sellers	C. L. Nall	"	G. W. Montgomery	"	Alex Phipps	Shoals	J. H. Rind	Paintsville	"	"	Hy. S. Begley	Shoals	H. E. Conley	"	"	"	W. E. Bowling	"	Augustus Daniels	"	"	"	Noble Gay	"	Jos. Daniels	"	"	"	Peter Gross	Shrewsbury	"	"	"	"	Mat Edwards	Shrewsbury	"	"	"	"	Sherman Park	Sip	"	"	"	"	James Tenney	Skiltsville	"	"	"	"	T. Brown	"																																				
Wm. Laur	"	John Carter Scott	"	Moses Lemus	"	Thos. Millsaps	"	John M. Sword	"	Wm. C. Smith	"	J. H. Baldwin	Moore's Creek	Wm. Sword st.	"	Reuben Lane-3	"	S. B. Davidson	"	H. C. Sowards	"	B. H. Mettman	"	James Ohalt	"	T. J. Sowards	"	G. W. Miller	"	Moses Helm	"	Richard Syak	"	John Newton	"	George Thomas	"	Thomas Thompson	"	James Roberts	"	J. H. Wade	"	Pine Hill Coal Co.	Pine Hill	James Roehars	"	Presley Whittaker	"	Daniel Howard	Pineville	James Robertson	"	Ben Moxton	Morgantown	Allen Blackburne	Pleasant	Henry Fuchser	"	Charles Williams	"	Wm. DeKang	"	Henry Williams	Rothwell	A. J. Gibson	"	J. J. McCoy	"	B. F. Day	"	S. Wm. Owens	"	W. T. Howlett	Pleasant Ridge	T. S. Perry	Rumsey	Floyd Williamson	Morton's Gap	Jan. Tharp	"	Mr. Baker	"	Gastine Hill	"	Amos Bennett	Pollyton	P. F. Richardson	St. Charles	Jessie Hill	"	Polley Pleasant	"	D. D. Woodruff	Salt Creek	M. Hill	Moseleyville	J. L. Powers	"	H. G. Pratt	"	A. J. Johnson	Mouth of Pond	John Polley	"	Parish Arnett	Saltersville	Hiram Johnson	"	M. A. Rose	Pouze	D. M. Atkinson	"	Josh. Rhodes	"	John Hibbard	"	Ben Candill	"	Wm. Siler	"	Samuel McClure	"	John B. Candill	"	James Smith	"	Wm. Mink	"	Geo. B. Gardner	"	E. C. Gray	"	S. Nicely	"	Hy. May	"	Strull & Childress	Nebo	J. J. Norton	Poor Fork	Jeff Treator	Sandy Hook	Ebzey Litterell	Nelson	Charley Blair	"	C. Adams	"	Ben F. Cantrell	Nortonville	Joseph B. Blair	"	W. H. Bowling	"	J. M. Cantrell	Oil Springs	Jas. H. Coldiron	"	L. C. Priedland	"	Y. M. Cantrell	Ophir	John C. Dixon	"	Wm. Weddington	Sassafras	Jesse Gilliam	"	Ben Eversole	"	Thos. Kelley	"	E. J. Hill	"	Just Jackson	"	Wm. Kelley	"	Jasper Wright	"	Jim McKnight	"	James Stacey	"	B. Abney	Orlando	John McKnight	"	Simon Stacey	"	B. Mullins	"	Joseph McKnight	"	Jeremial Smith Jr.	"	A. Proctor	"	S. W. Smith	Professorsburg	Manford Young	Saxton	Harrison Reams	"	T. J. Bingham	"	Drew Blains	"	Fred Bobbs	"	George Hatcher	"	Perry Bryant	"	A. R. Bruckes	"	John St. Curmille	"	A. J. Jones	"	R. C. Floupa	"	John St. Curmille	"	E. Smith	"	H. Herr	"	Gen. B. Conley	Providence	Joe Siler	"	M. P. Mattingly	"	Payne Coal & Coke Co.	Ready	T. S. Siler	Schree	Mise & Co.	"	B. D. Minton	"	John V. Hunter	Sellers	C. L. Nall	"	G. W. Montgomery	"	Alex Phipps	Shoals	J. H. Rind	Paintsville	"	"	Hy. S. Begley	Shoals	H. E. Conley	"	"	"	W. E. Bowling	"	Augustus Daniels	"	"	"	Noble Gay	"	Jos. Daniels	"	"	"	Peter Gross	Shrewsbury	"	"	"	"	Mat Edwards	Shrewsbury	"	"	"	"	Sherman Park	Sip	"	"	"	"	James Tenney	Skiltsville	"	"	"	"	T. Brown	"																																										
Thos. Millsaps	"	John M. Sword	"	Wm. C. Smith	"	J. H. Baldwin	Moore's Creek	Wm. Sword st.	"	Reuben Lane-3	"	S. B. Davidson	"	H. C. Sowards	"	B. H. Mettman	"	James Ohalt	"	T. J. Sowards	"	G. W. Miller	"	Moses Helm	"	Richard Syak	"	John Newton	"	George Thomas	"	Thomas Thompson	"	James Roberts	"	J. H. Wade	"	Pine Hill Coal Co.	Pine Hill	James Roehars	"	Presley Whittaker	"	Daniel Howard	Pineville	James Robertson	"	Ben Moxton	Morgantown	Allen Blackburne	Pleasant	Henry Fuchser	"	Charles Williams	"	Wm. DeKang	"	Henry Williams	Rothwell	A. J. Gibson	"	J. J. McCoy	"	B. F. Day	"	S. Wm. Owens	"	W. T. Howlett	Pleasant Ridge	T. S. Perry	Rumsey	Floyd Williamson	Morton's Gap	Jan. Tharp	"	Mr. Baker	"	Gastine Hill	"	Amos Bennett	Pollyton	P. F. Richardson	St. Charles	Jessie Hill	"	Polley Pleasant	"	D. D. Woodruff	Salt Creek	M. Hill	Moseleyville	J. L. Powers	"	H. G. Pratt	"	A. J. Johnson	Mouth of Pond	John Polley	"	Parish Arnett	Saltersville	Hiram Johnson	"	M. A. Rose	Pouze	D. M. Atkinson	"	Josh. Rhodes	"	John Hibbard	"	Ben Candill	"	Wm. Siler	"	Samuel McClure	"	John B. Candill	"	James Smith	"	Wm. Mink	"	Geo. B. Gardner	"	E. C. Gray	"	S. Nicely	"	Hy. May	"	Strull & Childress	Nebo	J. J. Norton	Poor Fork	Jeff Treator	Sandy Hook	Ebzey Litterell	Nelson	Charley Blair	"	C. Adams	"	Ben F. Cantrell	Nortonville	Joseph B. Blair	"	W. H. Bowling	"	J. M. Cantrell	Oil Springs	Jas. H. Coldiron	"	L. C. Priedland	"	Y. M. Cantrell	Ophir	John C. Dixon	"	Wm. Weddington	Sassafras	Jesse Gilliam	"	Ben Eversole	"	Thos. Kelley	"	E. J. Hill	"	Just Jackson	"	Wm. Kelley	"	Jasper Wright	"	Jim McKnight	"	James Stacey	"	B. Abney	Orlando	John McKnight	"	Simon Stacey	"	B. Mullins	"	Joseph McKnight	"	Jeremial Smith Jr.	"	A. Proctor	"	S. W. Smith	Professorsburg	Manford Young	Saxton	Harrison Reams	"	T. J. Bingham	"	Drew Blains	"	Fred Bobbs	"	George Hatcher	"	Perry Bryant	"	A. R. Bruckes	"	John St. Curmille	"	A. J. Jones	"	R. C. Floupa	"	John St. Curmille	"	E. Smith	"	H. Herr	"	Gen. B. Conley	Providence	Joe Siler	"	M. P. Mattingly	"	Payne Coal & Coke Co.	Ready	T. S. Siler	Schree	Mise & Co.	"	B. D. Minton	"	John V. Hunter	Sellers	C. L. Nall	"	G. W. Montgomery	"	Alex Phipps	Shoals	J. H. Rind	Paintsville	"	"	Hy. S. Begley	Shoals	H. E. Conley	"	"	"	W. E. Bowling	"	Augustus Daniels	"	"	"	Noble Gay	"	Jos. Daniels	"	"	"	Peter Gross	Shrewsbury	"	"	"	"	Mat Edwards	Shrewsbury	"	"	"	"	Sherman Park	Sip	"	"	"	"	James Tenney	Skiltsville	"	"	"	"	T. Brown	"																																																
J. H. Baldwin	Moore's Creek	Wm. Sword st.	"	Reuben Lane-3	"	S. B. Davidson	"	H. C. Sowards	"	B. H. Mettman	"	James Ohalt	"	T. J. Sowards	"	G. W. Miller	"	Moses Helm	"	Richard Syak	"	John Newton	"	George Thomas	"	Thomas Thompson	"	James Roberts	"	J. H. Wade	"	Pine Hill Coal Co.	Pine Hill	James Roehars	"	Presley Whittaker	"	Daniel Howard	Pineville	James Robertson	"	Ben Moxton	Morgantown	Allen Blackburne	Pleasant	Henry Fuchser	"	Charles Williams	"	Wm. DeKang	"	Henry Williams	Rothwell	A. J. Gibson	"	J. J. McCoy	"	B. F. Day	"	S. Wm. Owens	"	W. T. Howlett	Pleasant Ridge	T. S. Perry	Rumsey	Floyd Williamson	Morton's Gap	Jan. Tharp	"	Mr. Baker	"	Gastine Hill	"	Amos Bennett	Pollyton	P. F. Richardson	St. Charles	Jessie Hill	"	Polley Pleasant	"	D. D. Woodruff	Salt Creek	M. Hill	Moseleyville	J. L. Powers	"	H. G. Pratt	"	A. J. Johnson	Mouth of Pond	John Polley	"	Parish Arnett	Saltersville	Hiram Johnson	"	M. A. Rose	Pouze	D. M. Atkinson	"	Josh. Rhodes	"	John Hibbard	"	Ben Candill	"	Wm. Siler	"	Samuel McClure	"	John B. Candill	"	James Smith	"	Wm. Mink	"	Geo. B. Gardner	"	E. C. Gray	"	S. Nicely	"	Hy. May	"	Strull & Childress	Nebo	J. J. Norton	Poor Fork	Jeff Treator	Sandy Hook	Ebzey Litterell	Nelson	Charley Blair	"	C. Adams	"	Ben F. Cantrell	Nortonville	Joseph B. Blair	"	W. H. Bowling	"	J. M. Cantrell	Oil Springs	Jas. H. Coldiron	"	L. C. Priedland	"	Y. M. Cantrell	Ophir	John C. Dixon	"	Wm. Weddington	Sassafras	Jesse Gilliam	"	Ben Eversole	"	Thos. Kelley	"	E. J. Hill	"	Just Jackson	"	Wm. Kelley	"	Jasper Wright	"	Jim McKnight	"	James Stacey	"	B. Abney	Orlando	John McKnight	"	Simon Stacey	"	B. Mullins	"	Joseph McKnight	"	Jeremial Smith Jr.	"	A. Proctor	"	S. W. Smith	Professorsburg	Manford Young	Saxton	Harrison Reams	"	T. J. Bingham	"	Drew Blains	"	Fred Bobbs	"	George Hatcher	"	Perry Bryant	"	A. R. Bruckes	"	John St. Curmille	"	A. J. Jones	"	R. C. Floupa	"	John St. Curmille	"	E. Smith	"	H. Herr	"	Gen. B. Conley	Providence	Joe Siler	"	M. P. Mattingly	"	Payne Coal & Coke Co.	Ready	T. S. Siler	Schree	Mise & Co.	"	B. D. Minton	"	John V. Hunter	Sellers	C. L. Nall	"	G. W. Montgomery	"	Alex Phipps	Shoals	J. H. Rind	Paintsville	"	"	Hy. S. Begley	Shoals	H. E. Conley	"	"	"	W. E. Bowling	"	Augustus Daniels	"	"	"	Noble Gay	"	Jos. Daniels	"	"	"	Peter Gross	Shrewsbury	"	"	"	"	Mat Edwards	Shrewsbury	"	"	"	"	Sherman Park	Sip	"	"	"	"	James Tenney	Skiltsville	"	"	"	"	T. Brown	"																																																						
S. B. Davidson	"	H. C. Sowards	"	B. H. Mettman	"	James Ohalt	"	T. J. Sowards	"	G. W. Miller	"	Moses Helm	"	Richard Syak	"	John Newton	"	George Thomas	"	Thomas Thompson	"	James Roberts	"	J. H. Wade	"	Pine Hill Coal Co.	Pine Hill	James Roehars	"	Presley Whittaker	"	Daniel Howard	Pineville	James Robertson	"	Ben Moxton	Morgantown	Allen Blackburne	Pleasant	Henry Fuchser	"	Charles Williams	"	Wm. DeKang	"	Henry Williams	Rothwell	A. J. Gibson	"	J. J. McCoy	"	B. F. Day	"	S. Wm. Owens	"	W. T. Howlett	Pleasant Ridge	T. S. Perry	Rumsey	Floyd Williamson	Morton's Gap	Jan. Tharp	"	Mr. Baker	"	Gastine Hill	"	Amos Bennett	Pollyton	P. F. Richardson	St. Charles	Jessie Hill	"	Polley Pleasant	"	D. D. Woodruff	Salt Creek	M. Hill	Moseleyville	J. L. Powers	"	H. G. Pratt	"	A. J. Johnson	Mouth of Pond	John Polley	"	Parish Arnett	Saltersville	Hiram Johnson	"	M. A. Rose	Pouze	D. M. Atkinson	"	Josh. Rhodes	"	John Hibbard	"	Ben Candill	"	Wm. Siler	"	Samuel McClure	"	John B. Candill	"	James Smith	"	Wm. Mink	"	Geo. B. Gardner	"	E. C. Gray	"	S. Nicely	"	Hy. May	"	Strull & Childress	Nebo	J. J. Norton	Poor Fork	Jeff Treator	Sandy Hook	Ebzey Litterell	Nelson	Charley Blair	"	C. Adams	"	Ben F. Cantrell	Nortonville	Joseph B. Blair	"	W. H. Bowling	"	J. M. Cantrell	Oil Springs	Jas. H. Coldiron	"	L. C. Priedland	"	Y. M. Cantrell	Ophir	John C. Dixon	"	Wm. Weddington	Sassafras	Jesse Gilliam	"	Ben Eversole	"	Thos. Kelley	"	E. J. Hill	"	Just Jackson	"	Wm. Kelley	"	Jasper Wright	"	Jim McKnight	"	James Stacey	"	B. Abney	Orlando	John McKnight	"	Simon Stacey	"	B. Mullins	"	Joseph McKnight	"	Jeremial Smith Jr.	"	A. Proctor	"	S. W. Smith	Professorsburg	Manford Young	Saxton	Harrison Reams	"	T. J. Bingham	"	Drew Blains	"	Fred Bobbs	"	George Hatcher	"	Perry Bryant	"	A. R. Bruckes	"	John St. Curmille	"	A. J. Jones	"	R. C. Floupa	"	John St. Curmille	"	E. Smith	"	H. Herr	"	Gen. B. Conley	Providence	Joe Siler	"	M. P. Mattingly	"	Payne Coal & Coke Co.	Ready	T. S. Siler	Schree	Mise & Co.	"	B. D. Minton	"	John V. Hunter	Sellers	C. L. Nall	"	G. W. Montgomery	"	Alex Phipps	Shoals	J. H. Rind	Paintsville	"	"	Hy. S. Begley	Shoals	H. E. Conley	"	"	"	W. E. Bowling	"	Augustus Daniels	"	"	"	Noble Gay	"	Jos. Daniels	"	"	"	Peter Gross	Shrewsbury	"	"	"	"	Mat Edwards	Shrewsbury	"	"	"	"	Sherman Park	Sip	"	"	"	"	James Tenney	Skiltsville	"	"	"	"	T. Brown	"																																																												
James Ohalt	"	T. J. Sowards	"	G. W. Miller	"	Moses Helm	"	Richard Syak	"	John Newton	"	George Thomas	"	Thomas Thompson	"	James Roberts	"	J. H. Wade	"	Pine Hill Coal Co.	Pine Hill	James Roehars	"	Presley Whittaker	"	Daniel Howard	Pineville	James Robertson	"	Ben Moxton	Morgantown	Allen Blackburne	Pleasant	Henry Fuchser	"	Charles Williams	"	Wm. DeKang	"	Henry Williams	Rothwell	A. J. Gibson	"	J. J. McCoy	"	B. F. Day	"	S. Wm. Owens	"	W. T. Howlett	Pleasant Ridge	T. S. Perry	Rumsey	Floyd Williamson	Morton's Gap	Jan. Tharp	"	Mr. Baker	"	Gastine Hill	"	Amos Bennett	Pollyton	P. F. Richardson	St. Charles	Jessie Hill	"	Polley Pleasant	"	D. D. Woodruff	Salt Creek	M. Hill	Moseleyville	J. L. Powers	"	H. G. Pratt	"	A. J. Johnson	Mouth of Pond	John Polley	"	Parish Arnett	Saltersville	Hiram Johnson	"	M. A. Rose	Pouze	D. M. Atkinson	"	Josh. Rhodes	"	John Hibbard	"	Ben Candill	"	Wm. Siler	"	Samuel McClure	"	John B. Candill	"	James Smith	"	Wm. Mink	"	Geo. B. Gardner	"	E. C. Gray	"	S. Nicely	"	Hy. May	"	Strull & Childress	Nebo	J. J. Norton	Poor Fork	Jeff Treator	Sandy Hook	Ebzey Litterell	Nelson	Charley Blair	"	C. Adams	"	Ben F. Cantrell	Nortonville	Joseph B. Blair	"	W. H. Bowling	"	J. M. Cantrell	Oil Springs	Jas. H. Coldiron	"	L. C. Priedland	"	Y. M. Cantrell	Ophir	John C. Dixon	"	Wm. Weddington	Sassafras	Jesse Gilliam	"	Ben Eversole	"	Thos. Kelley	"	E. J. Hill	"	Just Jackson	"	Wm. Kelley	"	Jasper Wright	"	Jim McKnight	"	James Stacey	"	B. Abney	Orlando	John McKnight	"	Simon Stacey	"	B. Mullins	"	Joseph McKnight	"	Jeremial Smith Jr.	"	A. Proctor	"	S. W. Smith	Professorsburg	Manford Young	Saxton	Harrison Reams	"	T. J. Bingham	"	Drew Blains	"	Fred Bobbs	"	George Hatcher	"	Perry Bryant	"	A. R. Bruckes	"	John St. Curmille	"	A. J. Jones	"	R. C. Floupa	"	John St. Curmille	"	E. Smith	"	H. Herr	"	Gen. B. Conley	Providence	Joe Siler	"	M. P. Mattingly	"	Payne Coal & Coke Co.	Ready	T. S. Siler	Schree	Mise & Co.	"	B. D. Minton	"	John V. Hunter	Sellers	C. L. Nall	"	G. W. Montgomery	"	Alex Phipps	Shoals	J. H. Rind	Paintsville	"	"	Hy. S. Begley	Shoals	H. E. Conley	"	"	"	W. E. Bowling	"	Augustus Daniels	"	"	"	Noble Gay	"	Jos. Daniels	"	"	"	Peter Gross	Shrewsbury	"	"	"	"	Mat Edwards	Shrewsbury	"	"	"	"	Sherman Park	Sip	"	"	"	"	James Tenney	Skiltsville	"	"	"	"	T. Brown	"																																																																		
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George Thomas	"	Thomas Thompson	"	James Roberts	"	J. H. Wade	"	Pine Hill Coal Co.	Pine Hill	James Roehars	"	Presley Whittaker	"	Daniel Howard	Pineville	James Robertson	"	Ben Moxton	Morgantown	Allen Blackburne	Pleasant	Henry Fuchser	"	Charles Williams	"	Wm. DeKang	"	Henry Williams	Rothwell	A. J. Gibson	"	J. J. McCoy	"	B. F. Day	"	S. Wm. Owens	"	W. T. Howlett	Pleasant Ridge	T. S. Perry	Rumsey	Floyd Williamson	Morton's Gap	Jan. Tharp	"	Mr. Baker	"	Gastine Hill	"	Amos Bennett	Pollyton	P. F. Richardson	St. Charles	Jessie Hill	"	Polley Pleasant	"	D. D. Woodruff	Salt Creek	M. Hill	Moseleyville	J. L. Powers	"	H. G. Pratt	"	A. J. Johnson	Mouth of Pond	John Polley	"	Parish Arnett	Saltersville	Hiram Johnson	"	M. A. Rose	Pouze	D. M. Atkinson	"	Josh. Rhodes	"	John Hibbard	"	Ben Candill	"	Wm. Siler	"	Samuel McClure	"	John B. Candill	"	James Smith	"	Wm. Mink	"	Geo. B. Gardner	"	E. C. Gray	"	S. Nicely	"	Hy. May	"	Strull & Childress	Nebo	J. J. Norton	Poor Fork	Jeff Treator	Sandy Hook	Ebzey Litterell	Nelson	Charley Blair	"	C. Adams	"	Ben F. Cantrell	Nortonville	Joseph B. Blair	"	W. H. Bowling	"	J. M. Cantrell	Oil Springs	Jas. H. Coldiron	"	L. C. Priedland	"	Y. M. Cantrell	Ophir	John C. Dixon	"	Wm. Weddington	Sassafras	Jesse Gilliam	"	Ben Eversole	"	Thos. Kelley	"	E. J. Hill	"	Just Jackson	"	Wm. Kelley	"	Jasper Wright	"	Jim McKnight	"	James Stacey	"	B. Abney	Orlando	John McKnight	"	Simon Stacey	"	B. Mullins	"	Joseph McKnight	"	Jeremial Smith Jr.	"	A. Proctor	"	S. W. Smith	Professorsburg	Manford Young	Saxton	Harrison Reams	"	T. J. Bingham	"	Drew Blains	"	Fred Bobbs	"	George Hatcher	"	Perry Bryant	"	A. R. Bruckes	"	John St. Curmille	"	A. J. Jones	"	R. C. Floupa	"	John St. Curmille	"	E. Smith	"	H. Herr	"	Gen. B. Conley	Providence	Joe Siler	"	M. P. Mattingly	"	Payne Coal & Coke Co.	Ready	T. S. Siler	Schree	Mise & Co.	"	B. D. Minton	"	John V. Hunter	Sellers	C. L. Nall	"	G. W. Montgomery	"	Alex Phipps	Shoals	J. H. Rind	Paintsville	"	"	Hy. S. Begley	Shoals	H. E. Conley	"	"	"	W. E. Bowling	"	Augustus Daniels	"	"	"	Noble Gay	"	Jos. Daniels	"	"	"	Peter Gross	Shrewsbury	"	"	"	"	Mat Edwards	Shrewsbury	"	"	"	"	Sherman Park	Sip	"	"	"	"	James Tenney	Skiltsville	"	"	"	"	T. Brown	"																																																																														
J. H. Wade	"	Pine Hill Coal Co.	Pine Hill	James Roehars	"	Presley Whittaker	"	Daniel Howard	Pineville	James Robertson	"	Ben Moxton	Morgantown	Allen Blackburne	Pleasant	Henry Fuchser	"	Charles Williams	"	Wm. DeKang	"	Henry Williams	Rothwell	A. J. Gibson	"	J. J. McCoy	"	B. F. Day	"	S. Wm. Owens	"	W. T. Howlett	Pleasant Ridge	T. S. Perry	Rumsey	Floyd Williamson	Morton's Gap	Jan. Tharp	"	Mr. Baker	"	Gastine Hill	"	Amos Bennett	Pollyton	P. F. Richardson	St. Charles	Jessie Hill	"	Polley Pleasant	"	D. D. Woodruff	Salt Creek	M. Hill	Moseleyville	J. L. Powers	"	H. G. Pratt	"	A. J. Johnson	Mouth of Pond	John Polley	"	Parish Arnett	Saltersville	Hiram Johnson	"	M. A. Rose	Pouze	D. M. Atkinson	"	Josh. Rhodes	"	John Hibbard	"	Ben Candill	"	Wm. Siler	"	Samuel McClure	"	John B. Candill	"	James Smith	"	Wm. Mink	"	Geo. B. Gardner	"	E. C. Gray	"	S. Nicely	"	Hy. May	"	Strull & Childress	Nebo	J. J. Norton	Poor Fork	Jeff Treator	Sandy Hook	Ebzey Litterell	Nelson	Charley Blair	"	C. Adams	"	Ben F. Cantrell	Nortonville	Joseph B. Blair	"	W. H. Bowling	"	J. M. Cantrell	Oil Springs	Jas. H. Coldiron	"	L. C. Priedland	"	Y. M. Cantrell	Ophir	John C. Dixon	"	Wm. Weddington	Sassafras	Jesse Gilliam	"	Ben Eversole	"	Thos. Kelley	"	E. J. Hill	"	Just Jackson	"	Wm. Kelley	"	Jasper Wright	"	Jim McKnight	"	James Stacey	"	B. Abney	Orlando	John McKnight	"	Simon Stacey	"	B. Mullins	"	Joseph McKnight	"	Jeremial Smith Jr.	"	A. Proctor	"	S. W. Smith	Professorsburg	Manford Young	Saxton	Harrison Reams	"	T. J. Bingham	"	Drew Blains	"	Fred Bobbs	"	George Hatcher	"	Perry Bryant	"	A. R. Bruckes	"	John St. Curmille	"	A. J. Jones	"	R. C. Floupa	"	John St. Curmille	"	E. Smith	"	H. Herr	"	Gen. B. Conley	Providence	Joe Siler	"	M. P. Mattingly	"	Payne Coal & Coke Co.	Ready	T. S. Siler	Schree	Mise & Co.	"	B. D. Minton	"	John V. Hunter	Sellers	C. L. Nall	"	G. W. Montgomery	"	Alex Phipps	Shoals	J. H. Rind	Paintsville	"	"	Hy. S. Begley	Shoals	H. E. Conley	"	"	"	W. E. Bowling	"	Augustus Daniels	"	"	"	Noble Gay	"	Jos. Daniels	"	"	"	Peter Gross	Shrewsbury	"	"	"	"	Mat Edwards	Shrewsbury	"	"	"	"	Sherman Park	Sip	"	"	"	"	James Tenney	Skiltsville	"	"	"	"	T. Brown	"																																																																																				
Presley Whittaker	"	Daniel Howard	Pineville	James Robertson	"	Ben Moxton	Morgantown	Allen Blackburne	Pleasant	Henry Fuchser	"	Charles Williams	"	Wm. DeKang	"	Henry Williams	Rothwell	A. J. Gibson	"	J. J. McCoy	"	B. F. Day	"	S. Wm. Owens	"	W. T. Howlett	Pleasant Ridge	T. S. Perry	Rumsey	Floyd Williamson	Morton's Gap	Jan. Tharp	"	Mr. Baker	"	Gastine Hill	"	Amos Bennett	Pollyton	P. F. Richardson	St. Charles	Jessie Hill	"	Polley Pleasant	"	D. D. Woodruff	Salt Creek	M. Hill	Moseleyville	J. L. Powers	"	H. G. Pratt	"	A. J. Johnson	Mouth of Pond	John Polley	"	Parish Arnett	Saltersville	Hiram Johnson	"	M. A. Rose	Pouze	D. M. Atkinson	"	Josh. Rhodes	"	John Hibbard	"	Ben Candill	"	Wm. Siler	"	Samuel McClure	"	John B. Candill	"	James Smith	"	Wm. Mink	"	Geo. B. Gardner	"	E. C. Gray	"	S. Nicely	"	Hy. May	"	Strull & Childress	Nebo	J. J. Norton	Poor Fork	Jeff Treator	Sandy Hook	Ebzey Litterell	Nelson	Charley Blair	"	C. Adams	"	Ben F. Cantrell	Nortonville	Joseph B. Blair	"	W. H. Bowling	"	J. M. Cantrell	Oil Springs	Jas. H. Coldiron	"	L. C. Priedland	"	Y. M. Cantrell	Ophir	John C. Dixon	"	Wm. Weddington	Sassafras	Jesse Gilliam	"	Ben Eversole	"	Thos. Kelley	"	E. J. Hill	"	Just Jackson	"	Wm. Kelley	"	Jasper Wright	"	Jim McKnight	"	James Stacey	"	B. Abney	Orlando	John McKnight	"	Simon Stacey	"	B. Mullins	"	Joseph McKnight	"	Jeremial Smith Jr.	"	A. Proctor	"	S. W. Smith	Professorsburg	Manford Young	Saxton	Harrison Reams	"	T. J. Bingham	"	Drew Blains	"	Fred Bobbs	"	George Hatcher	"	Perry Bryant	"	A. R. Bruckes	"	John St. Curmille	"	A. J. Jones	"	R. C. Floupa	"	John St. Curmille	"	E. Smith	"	H. Herr	"	Gen. B. Conley	Providence	Joe Siler	"	M. P. Mattingly	"	Payne Coal & Coke Co.	Ready	T. S. Siler	Schree	Mise & Co.	"	B. D. Minton	"	John V. Hunter	Sellers	C. L. Nall	"	G. W. Montgomery	"	Alex Phipps	Shoals	J. H. Rind	Paintsville	"	"	Hy. S. Begley	Shoals	H. E. Conley	"	"	"	W. E. Bowling	"	Augustus Daniels	"	"	"	Noble Gay	"	Jos. Daniels	"	"	"	Peter Gross	Shrewsbury	"	"	"	"	Mat Edwards	Shrewsbury	"	"	"	"	Sherman Park	Sip	"	"	"	"	James Tenney	Skiltsville	"	"	"	"	T. Brown	"																																																																																										
Ben Moxton	Morgantown	Allen Blackburne	Pleasant	Henry Fuchser	"	Charles Williams	"	Wm. DeKang	"	Henry Williams	Rothwell	A. J. Gibson	"	J. J. McCoy	"	B. F. Day	"	S. Wm. Owens	"	W. T. Howlett	Pleasant Ridge	T. S. Perry	Rumsey	Floyd Williamson	Morton's Gap	Jan. Tharp	"	Mr. Baker	"	Gastine Hill	"	Amos Bennett	Pollyton	P. F. Richardson	St. Charles	Jessie Hill	"	Polley Pleasant	"	D. D. Woodruff	Salt Creek	M. Hill	Moseleyville	J. L. Powers	"	H. G. Pratt	"	A. J. Johnson	Mouth of Pond	John Polley	"	Parish Arnett	Saltersville	Hiram Johnson	"	M. A. Rose	Pouze	D. M. Atkinson	"	Josh. Rhodes	"	John Hibbard	"	Ben Candill	"	Wm. Siler	"	Samuel McClure	"	John B. Candill	"	James Smith	"	Wm. Mink	"	Geo. B. Gardner	"	E. C. Gray	"	S. Nicely	"	Hy. May	"	Strull & Childress	Nebo	J. J. Norton	Poor Fork	Jeff Treator	Sandy Hook	Ebzey Litterell	Nelson	Charley Blair	"	C. Adams	"	Ben F. Cantrell	Nortonville	Joseph B. Blair	"	W. H. Bowling	"	J. M. Cantrell	Oil Springs	Jas. H. Coldiron	"	L. C. Priedland	"	Y. M. Cantrell	Ophir	John C. Dixon	"	Wm. Weddington	Sassafras	Jesse Gilliam	"	Ben Eversole	"	Thos. Kelley	"	E. J. Hill	"	Just Jackson	"	Wm. Kelley	"	Jasper Wright	"	Jim McKnight	"	James Stacey	"	B. Abney	Orlando	John McKnight	"	Simon Stacey	"	B. Mullins	"	Joseph McKnight	"	Jeremial Smith Jr.	"	A. Proctor	"	S. W. Smith	Professorsburg	Manford Young	Saxton	Harrison Reams	"	T. J. Bingham	"	Drew Blains	"	Fred Bobbs	"	George Hatcher	"	Perry Bryant	"	A. R. Bruckes	"	John St. Curmille	"	A. J. Jones	"	R. C. Floupa	"	John St. Curmille	"	E. Smith	"	H. Herr	"	Gen. B. Conley	Providence	Joe Siler	"	M. P. Mattingly	"	Payne Coal & Coke Co.	Ready	T. S. Siler	Schree	Mise & Co.	"	B. D. Minton	"	John V. Hunter	Sellers	C. L. Nall	"	G. W. Montgomery	"	Alex Phipps	Shoals	J. H. Rind	Paintsville	"	"	Hy. S. Begley	Shoals	H. E. Conley	"	"	"	W. E. Bowling	"	Augustus Daniels	"	"	"	Noble Gay	"	Jos. Daniels	"	"	"	Peter Gross	Shrewsbury	"	"	"	"	Mat Edwards	Shrewsbury	"	"	"	"	Sherman Park	Sip	"	"	"	"	James Tenney	Skiltsville	"	"	"	"	T. Brown	"																																																																																																
Charles Williams	"	Wm. DeKang	"	Henry Williams	Rothwell	A. J. Gibson	"	J. J. McCoy	"	B. F. Day	"	S. Wm. Owens	"	W. T. Howlett	Pleasant Ridge	T. S. Perry	Rumsey	Floyd Williamson	Morton's Gap	Jan. Tharp	"	Mr. Baker	"	Gastine Hill	"	Amos Bennett	Pollyton	P. F. Richardson	St. Charles	Jessie Hill	"	Polley Pleasant	"	D. D. Woodruff	Salt Creek	M. Hill	Moseleyville	J. L. Powers	"	H. G. Pratt	"	A. J. Johnson	Mouth of Pond	John Polley	"	Parish Arnett	Saltersville	Hiram Johnson	"	M. A. Rose	Pouze	D. M. Atkinson	"	Josh. Rhodes	"	John Hibbard	"	Ben Candill	"	Wm. Siler	"	Samuel McClure	"	John B. Candill	"	James Smith	"	Wm. Mink	"	Geo. B. Gardner	"	E. C. Gray	"	S. Nicely	"	Hy. May	"	Strull & Childress	Nebo	J. J. Norton	Poor Fork	Jeff Treator	Sandy Hook	Ebzey Litterell	Nelson	Charley Blair	"	C. Adams	"	Ben F. Cantrell	Nortonville	Joseph B. Blair	"	W. H. Bowling	"	J. M. Cantrell	Oil Springs	Jas. H. Coldiron	"	L. C. Priedland	"	Y. M. Cantrell	Ophir	John C. Dixon	"	Wm. Weddington	Sassafras	Jesse Gilliam	"	Ben Eversole	"	Thos. Kelley	"	E. J. Hill	"	Just Jackson	"	Wm. Kelley	"	Jasper Wright	"	Jim McKnight	"	James Stacey	"	B. Abney	Orlando	John McKnight	"	Simon Stacey	"	B. Mullins	"	Joseph McKnight	"	Jeremial Smith Jr.	"	A. Proctor	"	S. W. Smith	Professorsburg	Manford Young	Saxton	Harrison Reams	"	T. J. Bingham	"	Drew Blains	"	Fred Bobbs	"	George Hatcher	"	Perry Bryant	"	A. R. Bruckes	"	John St. Curmille	"	A. J. Jones	"	R. C. Floupa	"	John St. Curmille	"	E. Smith	"	H. Herr	"	Gen. B. Conley	Providence	Joe Siler	"	M. P. Mattingly	"	Payne Coal & Coke Co.	Ready	T. S. Siler	Schree	Mise & Co.	"	B. D. Minton	"	John V. Hunter	Sellers	C. L. Nall	"	G. W. Montgomery	"	Alex Phipps	Shoals	J. H. Rind	Paintsville	"	"	Hy. S. Begley	Shoals	H. E. Conley	"	"	"	W. E. Bowling	"	Augustus Daniels	"	"	"	Noble Gay	"	Jos. Daniels	"	"	"	Peter Gross	Shrewsbury	"	"	"	"	Mat Edwards	Shrewsbury	"	"	"	"	Sherman Park	Sip	"	"	"	"	James Tenney	Skiltsville	"	"	"	"	T. Brown	"																																																																																																						
A. J. Gibson	"	J. J. McCoy	"	B. F. Day	"	S. Wm. Owens	"	W. T. Howlett	Pleasant Ridge	T. S. Perry	Rumsey	Floyd Williamson	Morton's Gap	Jan. Tharp	"	Mr. Baker	"	Gastine Hill	"	Amos Bennett	Pollyton	P. F. Richardson	St. Charles	Jessie Hill	"	Polley Pleasant	"	D. D. Woodruff	Salt Creek	M. Hill	Moseleyville	J. L. Powers	"	H. G. Pratt	"	A. J. Johnson	Mouth of Pond	John Polley	"	Parish Arnett	Saltersville	Hiram Johnson	"	M. A. Rose	Pouze	D. M. Atkinson	"	Josh. Rhodes	"	John Hibbard	"	Ben Candill	"	Wm. Siler	"	Samuel McClure	"	John B. Candill	"	James Smith	"	Wm. Mink	"	Geo. B. Gardner	"	E. C. Gray	"	S. Nicely	"	Hy. May	"	Strull & Childress	Nebo	J. J. Norton	Poor Fork	Jeff Treator	Sandy Hook	Ebzey Litterell	Nelson	Charley Blair	"	C. Adams	"	Ben F. Cantrell	Nortonville	Joseph B. Blair	"	W. H. Bowling	"	J. M. Cantrell	Oil Springs	Jas. H. Coldiron	"	L. C. Priedland	"	Y. M. Cantrell	Ophir	John C. Dixon	"	Wm. Weddington	Sassafras	Jesse Gilliam	"	Ben Eversole	"	Thos. Kelley	"	E. J. Hill	"	Just Jackson	"	Wm. Kelley	"	Jasper Wright	"	Jim McKnight	"	James Stacey	"	B. Abney	Orlando	John McKnight	"	Simon Stacey	"	B. Mullins	"	Joseph McKnight	"	Jeremial Smith Jr.	"	A. Proctor	"	S. W. Smith	Professorsburg	Manford Young	Saxton	Harrison Reams	"	T. J. Bingham	"	Drew Blains	"	Fred Bobbs	"	George Hatcher	"	Perry Bryant	"	A. R. Bruckes	"	John St. Curmille	"	A. J. Jones	"	R. C. Floupa	"	John St. Curmille	"	E. Smith	"	H. Herr	"	Gen. B. Conley	Providence	Joe Siler	"	M. P. Mattingly	"	Payne Coal & Coke Co.	Ready	T. S. Siler	Schree	Mise & Co.	"	B. D. Minton	"	John V. Hunter	Sellers	C. L. Nall	"	G. W. Montgomery	"	Alex Phipps	Shoals	J. H. Rind	Paintsville	"	"	Hy. S. Begley	Shoals	H. E. Conley	"	"	"	W. E. Bowling	"	Augustus Daniels	"	"	"	Noble Gay	"	Jos. Daniels	"	"	"	Peter Gross	Shrewsbury	"	"	"	"	Mat Edwards	Shrewsbury	"	"	"	"	Sherman Park	Sip	"	"	"	"	James Tenney	Skiltsville	"	"	"	"	T. Brown	"																																																																																																												
S. Wm. Owens	"	W. T. Howlett	Pleasant Ridge	T. S. Perry	Rumsey	Floyd Williamson	Morton's Gap	Jan. Tharp	"	Mr. Baker	"	Gastine Hill	"	Amos Bennett	Pollyton	P. F. Richardson	St. Charles	Jessie Hill	"	Polley Pleasant	"	D. D. Woodruff	Salt Creek	M. Hill	Moseleyville	J. L. Powers	"	H. G. Pratt	"	A. J. Johnson	Mouth of Pond	John Polley	"	Parish Arnett	Saltersville	Hiram Johnson	"	M. A. Rose	Pouze	D. M. Atkinson	"	Josh. Rhodes	"	John Hibbard	"	Ben Candill	"	Wm. Siler	"	Samuel McClure	"	John B. Candill	"	James Smith	"	Wm. Mink	"	Geo. B. Gardner	"	E. C. Gray	"	S. Nicely	"	Hy. May	"	Strull & Childress	Nebo	J. J. Norton	Poor Fork	Jeff Treator	Sandy Hook	Ebzey Litterell	Nelson	Charley Blair	"	C. Adams	"	Ben F. Cantrell	Nortonville	Joseph B. Blair	"	W. H. Bowling	"	J. M. Cantrell	Oil Springs	Jas. H. Coldiron	"	L. C. Priedland	"	Y. M. Cantrell	Ophir	John C. Dixon	"	Wm. Weddington	Sassafras	Jesse Gilliam	"	Ben Eversole	"	Thos. Kelley	"	E. J. Hill	"	Just Jackson	"	Wm. Kelley	"	Jasper Wright	"	Jim McKnight	"	James Stacey	"	B. Abney	Orlando	John McKnight	"	Simon Stacey	"	B. Mullins	"	Joseph McKnight	"	Jeremial Smith Jr.	"	A. Proctor	"	S. W. Smith	Professorsburg	Manford Young	Saxton	Harrison Reams	"	T. J. Bingham	"	Drew Blains	"	Fred Bobbs	"	George Hatcher	"	Perry Bryant	"	A. R. Bruckes	"	John St. Curmille	"	A. J. Jones	"	R. C. Floupa	"	John St. Curmille	"	E. Smith	"	H. Herr	"	Gen. B. Conley	Providence	Joe Siler	"	M. P. Mattingly	"	Payne Coal & Coke Co.	Ready	T. S. Siler	Schree	Mise & Co.	"	B. D. Minton	"	John V. Hunter	Sellers	C. L. Nall	"	G. W. Montgomery	"	Alex Phipps	Shoals	J. H. Rind	Paintsville	"	"	Hy. S. Begley	Shoals	H. E. Conley	"	"	"	W. E. Bowling	"	Augustus Daniels	"	"	"	Noble Gay	"	Jos. Daniels	"	"	"	Peter Gross	Shrewsbury	"	"	"	"	Mat Edwards	Shrewsbury	"	"	"	"	Sherman Park	Sip	"	"	"	"	James Tenney	Skiltsville	"	"	"	"	T. Brown	"																																																																																																																		
Floyd Williamson	Morton's Gap	Jan. Tharp	"	Mr. Baker	"	Gastine Hill	"	Amos Bennett	Pollyton	P. F. Richardson	St. Charles	Jessie Hill	"	Polley Pleasant	"	D. D. Woodruff	Salt Creek	M. Hill	Moseleyville	J. L. Powers	"	H. G. Pratt	"	A. J. Johnson	Mouth of Pond	John Polley	"	Parish Arnett	Saltersville	Hiram Johnson	"	M. A. Rose	Pouze	D. M. Atkinson	"	Josh. Rhodes	"	John Hibbard	"	Ben Candill	"	Wm. Siler	"	Samuel McClure	"	John B. Candill	"	James Smith	"	Wm. Mink	"	Geo. B. Gardner	"	E. C. Gray	"	S. Nicely	"	Hy. May	"	Strull & Childress	Nebo	J. J. Norton	Poor Fork	Jeff Treator	Sandy Hook	Ebzey Litterell	Nelson	Charley Blair	"	C. Adams	"	Ben F. Cantrell	Nortonville	Joseph B. Blair	"	W. H. Bowling	"	J. M. Cantrell	Oil Springs	Jas. H. Coldiron	"	L. C. Priedland	"	Y. M. Cantrell	Ophir	John C. Dixon	"	Wm. Weddington	Sassafras	Jesse Gilliam	"	Ben Eversole	"	Thos. Kelley	"	E. J. Hill	"	Just Jackson	"	Wm. Kelley	"	Jasper Wright	"	Jim McKnight	"	James Stacey	"	B. Abney	Orlando	John McKnight	"	Simon Stacey	"	B. Mullins	"	Joseph McKnight	"	Jeremial Smith Jr.	"	A. Proctor	"	S. W. Smith	Professorsburg	Manford Young	Saxton	Harrison Reams	"	T. J. Bingham	"	Drew Blains	"	Fred Bobbs	"	George Hatcher	"	Perry Bryant	"	A. R. Bruckes	"	John St. Curmille	"	A. J. Jones	"	R. C. Floupa	"	John St. Curmille	"	E. Smith	"	H. Herr	"	Gen. B. Conley	Providence	Joe Siler	"	M. P. Mattingly	"	Payne Coal & Coke Co.	Ready	T. S. Siler	Schree	Mise & Co.	"	B. D. Minton	"	John V. Hunter	Sellers	C. L. Nall	"	G. W. Montgomery	"	Alex Phipps	Shoals	J. H. Rind	Paintsville	"	"	Hy. S. Begley	Shoals	H. E. Conley	"	"	"	W. E. Bowling	"	Augustus Daniels	"	"	"	Noble Gay	"	Jos. Daniels	"	"	"	Peter Gross	Shrewsbury	"	"	"	"	Mat Edwards	Shrewsbury	"	"	"	"	Sherman Park	Sip	"	"	"	"	James Tenney	Skiltsville	"	"	"	"	T. Brown	"																																																																																																																								
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Jessie Hill	"	Polley Pleasant	"	D. D. Woodruff	Salt Creek	M. Hill	Moseleyville	J. L. Powers	"	H. G. Pratt	"	A. J. Johnson	Mouth of Pond	John Polley	"	Parish Arnett	Saltersville	Hiram Johnson	"	M. A. Rose	Pouze	D. M. Atkinson	"	Josh. Rhodes	"	John Hibbard	"	Ben Candill	"	Wm. Siler	"	Samuel McClure	"	John B. Candill	"	James Smith	"	Wm. Mink	"	Geo. B. Gardner	"	E. C. Gray	"	S. Nicely	"	Hy. May	"	Strull & Childress	Nebo	J. J. Norton	Poor Fork	Jeff Treator	Sandy Hook	Ebzey Litterell	Nelson	Charley Blair	"	C. Adams	"	Ben F. Cantrell	Nortonville	Joseph B. Blair	"	W. H. Bowling	"	J. M. Cantrell	Oil Springs	Jas. H. Coldiron	"	L. C. Priedland	"	Y. M. Cantrell	Ophir	John C. Dixon	"	Wm. Weddington	Sassafras	Jesse Gilliam	"	Ben Eversole	"	Thos. Kelley	"	E. J. Hill	"	Just Jackson	"	Wm. Kelley	"	Jasper Wright	"	Jim McKnight	"	James Stacey	"	B. Abney	Orlando	John McKnight	"	Simon Stacey	"	B. Mullins	"	Joseph McKnight	"	Jeremial Smith Jr.	"	A. Proctor	"	S. W. Smith	Professorsburg	Manford Young	Saxton	Harrison Reams	"	T. J. Bingham	"	Drew Blains	"	Fred Bobbs	"	George Hatcher	"	Perry Bryant	"	A. R. Bruckes	"	John St. Curmille	"	A. J. Jones	"	R. C. Floupa	"	John St. Curmille	"	E. Smith	"	H. Herr	"	Gen. B. Conley	Providence	Joe Siler	"	M. P. Mattingly	"	Payne Coal & Coke Co.	Ready	T. S. Siler	Schree	Mise & Co.	"	B. D. Minton	"	John V. Hunter	Sellers	C. L. Nall	"	G. W. Montgomery	"	Alex Phipps	Shoals	J. H. Rind	Paintsville	"	"	Hy. S. Begley	Shoals	H. E. Conley	"	"	"	W. E. Bowling	"	Augustus Daniels	"	"	"	Noble Gay	"	Jos. Daniels	"	"	"	Peter Gross	Shrewsbury	"	"	"	"	Mat Edwards	Shrewsbury	"	"	"	"	Sherman Park	Sip	"	"	"	"	James Tenney	Skiltsville	"	"	"	"	T. Brown	"																																																																																																																																				
M. Hill	Moseleyville	J. L. Powers	"	H. G. Pratt	"	A. J. Johnson	Mouth of Pond	John Polley	"	Parish Arnett	Saltersville	Hiram Johnson	"	M. A. Rose	Pouze	D. M. Atkinson	"	Josh. Rhodes	"	John Hibbard	"	Ben Candill	"	Wm. Siler	"	Samuel McClure	"	John B. Candill	"	James Smith	"	Wm. Mink	"	Geo. B. Gardner	"	E. C. Gray	"	S. Nicely	"	Hy. May	"	Strull & Childress	Nebo	J. J. Norton	Poor Fork	Jeff Treator	Sandy Hook	Ebzey Litterell	Nelson	Charley Blair	"	C. Adams	"	Ben F. Cantrell	Nortonville	Joseph B. Blair	"	W. H. Bowling	"	J. M. Cantrell	Oil Springs	Jas. H. Coldiron	"	L. C. Priedland	"	Y. M. Cantrell	Ophir	John C. Dixon	"	Wm. Weddington	Sassafras	Jesse Gilliam	"	Ben Eversole	"	Thos. Kelley	"	E. J. Hill	"	Just Jackson	"	Wm. Kelley	"	Jasper Wright	"	Jim McKnight	"	James Stacey	"	B. Abney	Orlando	John McKnight	"	Simon Stacey	"	B. Mullins	"	Joseph McKnight	"	Jeremial Smith Jr.	"	A. Proctor	"	S. W. Smith	Professorsburg	Manford Young	Saxton	Harrison Reams	"	T. J. Bingham	"	Drew Blains	"	Fred Bobbs	"	George Hatcher	"	Perry Bryant	"	A. R. Bruckes	"	John St. Curmille	"	A. J. Jones	"	R. C. Floupa	"	John St. Curmille	"	E. Smith	"	H. Herr	"	Gen. B. Conley	Providence	Joe Siler	"	M. P. Mattingly	"	Payne Coal & Coke Co.	Ready	T. S. Siler	Schree	Mise & Co.	"	B. D. Minton	"	John V. Hunter	Sellers	C. L. Nall	"	G. W. Montgomery	"	Alex Phipps	Shoals	J. H. Rind	Paintsville	"	"	Hy. S. Begley	Shoals	H. E. Conley	"	"	"	W. E. Bowling	"	Augustus Daniels	"	"	"	Noble Gay	"	Jos. Daniels	"	"	"	Peter Gross	Shrewsbury	"	"	"	"	Mat Edwards	Shrewsbury	"	"	"	"	Sherman Park	Sip	"	"	"	"	James Tenney	Skiltsville	"	"	"	"	T. Brown	"																																																																																																																																										
A. J. Johnson	Mouth of Pond	John Polley	"	Parish Arnett	Saltersville	Hiram Johnson	"	M. A. Rose	Pouze	D. M. Atkinson	"	Josh. Rhodes	"	John Hibbard	"	Ben Candill	"	Wm. Siler	"	Samuel McClure	"	John B. Candill	"	James Smith	"	Wm. Mink	"	Geo. B. Gardner	"	E. C. Gray	"	S. Nicely	"	Hy. May	"	Strull & Childress	Nebo	J. J. Norton	Poor Fork	Jeff Treator	Sandy Hook	Ebzey Litterell	Nelson	Charley Blair	"	C. Adams	"	Ben F. Cantrell	Nortonville	Joseph B. Blair	"	W. H. Bowling	"	J. M. Cantrell	Oil Springs	Jas. H. Coldiron	"	L. C. Priedland	"	Y. M. Cantrell	Ophir	John C. Dixon	"	Wm. Weddington	Sassafras	Jesse Gilliam	"	Ben Eversole	"	Thos. Kelley	"	E. J. Hill	"	Just Jackson	"	Wm. Kelley	"	Jasper Wright	"	Jim McKnight	"	James Stacey	"	B. Abney	Orlando	John McKnight	"	Simon Stacey	"	B. Mullins	"	Joseph McKnight	"	Jeremial Smith Jr.	"	A. Proctor	"	S. W. Smith	Professorsburg	Manford Young	Saxton	Harrison Reams	"	T. J. Bingham	"	Drew Blains	"	Fred Bobbs	"	George Hatcher	"	Perry Bryant	"	A. R. Bruckes	"	John St. Curmille	"	A. J. Jones	"	R. C. Floupa	"	John St. Curmille	"	E. Smith	"	H. Herr	"	Gen. B. Conley	Providence	Joe Siler	"	M. P. Mattingly	"	Payne Coal & Coke Co.	Ready	T. S. Siler	Schree	Mise & Co.	"	B. D. Minton	"	John V. Hunter	Sellers	C. L. Nall	"	G. W. Montgomery	"	Alex Phipps	Shoals	J. H. Rind	Paintsville	"	"	Hy. S. Begley	Shoals	H. E. Conley	"	"	"	W. E. Bowling	"	Augustus Daniels	"	"	"	Noble Gay	"	Jos. Daniels	"	"	"	Peter Gross	Shrewsbury	"	"	"	"	Mat Edwards	Shrewsbury	"	"	"	"	Sherman Park	Sip	"	"	"	"	James Tenney	Skiltsville	"	"	"	"	T. Brown	"																																																																																																																																																
Hiram Johnson	"	M. A. Rose	Pouze	D. M. Atkinson	"	Josh. Rhodes	"	John Hibbard	"	Ben Candill	"	Wm. Siler	"	Samuel McClure	"	John B. Candill	"	James Smith	"	Wm. Mink	"	Geo. B. Gardner	"	E. C. Gray	"	S. Nicely	"	Hy. May	"	Strull & Childress	Nebo	J. J. Norton	Poor Fork	Jeff Treator	Sandy Hook	Ebzey Litterell	Nelson	Charley Blair	"	C. Adams	"	Ben F. Cantrell	Nortonville	Joseph B. Blair	"	W. H. Bowling	"	J. M. Cantrell	Oil Springs	Jas. H. Coldiron	"	L. C. Priedland	"	Y. M. Cantrell	Ophir	John C. Dixon	"	Wm. Weddington	Sassafras	Jesse Gilliam	"	Ben Eversole	"	Thos. Kelley	"	E. J. Hill	"	Just Jackson	"	Wm. Kelley	"	Jasper Wright	"	Jim McKnight	"	James Stacey	"	B. Abney	Orlando	John McKnight	"	Simon Stacey	"	B. Mullins	"	Joseph McKnight	"	Jeremial Smith Jr.	"	A. Proctor	"	S. W. Smith	Professorsburg	Manford Young	Saxton	Harrison Reams	"	T. J. Bingham	"	Drew Blains	"	Fred Bobbs	"	George Hatcher	"	Perry Bryant	"	A. R. Bruckes	"	John St. Curmille	"	A. J. Jones	"	R. C. Floupa	"	John St. Curmille	"	E. Smith	"	H. Herr	"	Gen. B. Conley	Providence	Joe Siler	"	M. P. Mattingly	"	Payne Coal & Coke Co.	Ready	T. S. Siler	Schree	Mise & Co.	"	B. D. Minton	"	John V. Hunter	Sellers	C. L. Nall	"	G. W. Montgomery	"	Alex Phipps	Shoals	J. H. Rind	Paintsville	"	"	Hy. S. Begley	Shoals	H. E. Conley	"	"	"	W. E. Bowling	"	Augustus Daniels	"	"	"	Noble Gay	"	Jos. Daniels	"	"	"	Peter Gross	Shrewsbury	"	"	"	"	Mat Edwards	Shrewsbury	"	"	"	"	Sherman Park	Sip	"	"	"	"	James Tenney	Skiltsville	"	"	"	"	T. Brown	"																																																																																																																																																						
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Wm. Siler	"	Samuel McClure	"	John B. Candill	"	James Smith	"	Wm. Mink	"	Geo. B. Gardner	"	E. C. Gray	"	S. Nicely	"	Hy. May	"	Strull & Childress	Nebo	J. J. Norton	Poor Fork	Jeff Treator	Sandy Hook	Ebzey Litterell	Nelson	Charley Blair	"	C. Adams	"	Ben F. Cantrell	Nortonville	Joseph B. Blair	"	W. H. Bowling	"	J. M. Cantrell	Oil Springs	Jas. H. Coldiron	"	L. C. Priedland	"	Y. M. Cantrell	Ophir	John C. Dixon	"	Wm. Weddington	Sassafras	Jesse Gilliam	"	Ben Eversole	"	Thos. Kelley	"	E. J. Hill	"	Just Jackson	"	Wm. Kelley	"	Jasper Wright	"	Jim McKnight	"	James Stacey	"	B. Abney	Orlando	John McKnight	"	Simon Stacey	"	B. Mullins	"	Joseph McKnight	"	Jeremial Smith Jr.	"	A. Proctor	"	S. W. Smith	Professorsburg	Manford Young	Saxton	Harrison Reams	"	T. J. Bingham	"	Drew Blains	"	Fred Bobbs	"	George Hatcher	"	Perry Bryant	"	A. R. Bruckes	"	John St. Curmille	"	A. J. Jones	"	R. C. Floupa	"	John St. Curmille	"	E. Smith	"	H. Herr	"	Gen. B. Conley	Providence	Joe Siler	"	M. P. Mattingly	"	Payne Coal & Coke Co.	Ready	T. S. Siler	Schree	Mise & Co.	"	B. D. Minton	"	John V. Hunter	Sellers	C. L. Nall	"	G. W. Montgomery	"	Alex Phipps	Shoals	J. H. Rind	Paintsville	"	"	Hy. S. Begley	Shoals	H. E. Conley	"	"	"	W. E. Bowling	"	Augustus Daniels	"	"	"	Noble Gay	"	Jos. Daniels	"	"	"	Peter Gross	Shrewsbury	"	"	"	"	Mat Edwards	Shrewsbury	"	"	"	"	Sherman Park	Sip	"	"	"	"	James Tenney	Skiltsville	"	"	"	"	T. Brown	"																																																																																																																																																																		
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E. C. Gray	"	S. Nicely	"	Hy. May	"	Strull & Childress	Nebo	J. J. Norton	Poor Fork	Jeff Treator	Sandy Hook	Ebzey Litterell	Nelson	Charley Blair	"	C. Adams	"	Ben F. Cantrell	Nortonville	Joseph B. Blair	"	W. H. Bowling	"	J. M. Cantrell	Oil Springs	Jas. H. Coldiron	"	L. C. Priedland	"	Y. M. Cantrell	Ophir	John C. Dixon	"	Wm. Weddington	Sassafras	Jesse Gilliam	"	Ben Eversole	"	Thos. Kelley	"	E. J. Hill	"	Just Jackson	"	Wm. Kelley	"	Jasper Wright	"	Jim McKnight	"	James Stacey	"	B. Abney	Orlando	John McKnight	"	Simon Stacey	"	B. Mullins	"	Joseph McKnight	"	Jeremial Smith Jr.	"	A. Proctor	"	S. W. Smith	Professorsburg	Manford Young	Saxton	Harrison Reams	"	T. J. Bingham	"	Drew Blains	"	Fred Bobbs	"	George Hatcher	"	Perry Bryant	"	A. R. Bruckes	"	John St. Curmille	"	A. J. Jones	"	R. C. Floupa	"	John St. Curmille	"	E. Smith	"	H. Herr	"	Gen. B. Conley	Providence	Joe Siler	"	M. P. Mattingly	"	Payne Coal & Coke Co.	Ready	T. S. Siler	Schree	Mise & Co.	"	B. D. Minton	"	John V. Hunter	Sellers	C. L. Nall	"	G. W. Montgomery	"	Alex Phipps	Shoals	J. H. Rind	Paintsville	"	"	Hy. S. Begley	Shoals	H. E. Conley	"	"	"	W. E. Bowling	"	Augustus Daniels	"	"	"	Noble Gay	"	Jos. Daniels	"	"	"	Peter Gross	Shrewsbury	"	"	"	"	Mat Edwards	Shrewsbury	"	"	"	"	Sherman Park	Sip	"	"	"	"	James Tenney	Skiltsville	"	"	"	"	T. Brown	"																																																																																																																																																																														
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Ebzey Litterell	Nelson	Charley Blair	"	C. Adams	"	Ben F. Cantrell	Nortonville	Joseph B. Blair	"	W. H. Bowling	"	J. M. Cantrell	Oil Springs	Jas. H. Coldiron	"	L. C. Priedland	"	Y. M. Cantrell	Ophir	John C. Dixon	"	Wm. Weddington	Sassafras	Jesse Gilliam	"	Ben Eversole	"	Thos. Kelley	"	E. J. Hill	"	Just Jackson	"	Wm. Kelley	"	Jasper Wright	"	Jim McKnight	"	James Stacey	"	B. Abney	Orlando	John McKnight	"	Simon Stacey	"	B. Mullins	"	Joseph McKnight	"	Jeremial Smith Jr.	"	A. Proctor	"	S. W. Smith	Professorsburg	Manford Young	Saxton	Harrison Reams	"	T. J. Bingham	"	Drew Blains	"	Fred Bobbs	"	George Hatcher	"	Perry Bryant	"	A. R. Bruckes	"	John St. Curmille	"	A. J. Jones	"	R. C. Floupa	"	John St. Curmille	"	E. Smith	"	H. Herr	"	Gen. B. Conley	Providence	Joe Siler	"	M. P. Mattingly	"	Payne Coal & Coke Co.	Ready	T. S. Siler	Schree	Mise & Co.	"	B. D. Minton	"	John V. Hunter	Sellers	C. L. Nall	"	G. W. Montgomery	"	Alex Phipps	Shoals	J. H. Rind	Paintsville	"	"	Hy. S. Begley	Shoals	H. E. Conley	"	"	"	W. E. Bowling	"	Augustus Daniels	"	"	"	Noble Gay	"	Jos. Daniels	"	"	"	Peter Gross	Shrewsbury	"	"	"	"	Mat Edwards	Shrewsbury	"	"	"	"	Sherman Park	Sip	"	"	"	"	James Tenney	Skiltsville	"	"	"	"	T. Brown	"																																																																																																																																																																																										
Ben F. Cantrell	Nortonville	Joseph B. Blair	"	W. H. Bowling	"	J. M. Cantrell	Oil Springs	Jas. H. Coldiron	"	L. C. Priedland	"	Y. M. Cantrell	Ophir	John C. Dixon	"	Wm. Weddington	Sassafras	Jesse Gilliam	"	Ben Eversole	"	Thos. Kelley	"	E. J. Hill	"	Just Jackson	"	Wm. Kelley	"	Jasper Wright	"	Jim McKnight	"	James Stacey	"	B. Abney	Orlando	John McKnight	"	Simon Stacey	"	B. Mullins	"	Joseph McKnight	"	Jeremial Smith Jr.	"	A. Proctor	"	S. W. Smith	Professorsburg	Manford Young	Saxton	Harrison Reams	"	T. J. Bingham	"	Drew Blains	"	Fred Bobbs	"	George Hatcher	"	Perry Bryant	"	A. R. Bruckes	"	John St. Curmille	"	A. J. Jones	"	R. C. Floupa	"	John St. Curmille	"	E. Smith	"	H. Herr	"	Gen. B. Conley	Providence	Joe Siler	"	M. P. Mattingly	"	Payne Coal & Coke Co.	Ready	T. S. Siler	Schree	Mise & Co.	"	B. D. Minton	"	John V. Hunter	Sellers	C. L. Nall	"	G. W. Montgomery	"	Alex Phipps	Shoals	J. H. Rind	Paintsville	"	"	Hy. S. Begley	Shoals	H. E. Conley	"	"	"	W. E. Bowling	"	Augustus Daniels	"	"	"	Noble Gay	"	Jos. Daniels	"	"	"	Peter Gross	Shrewsbury	"	"	"	"	Mat Edwards	Shrewsbury	"	"	"	"	Sherman Park	Sip	"	"	"	"	James Tenney	Skiltsville	"	"	"	"	T. Brown	"																																																																																																																																																																																																
J. M. Cantrell	Oil Springs	Jas. H. Coldiron	"	L. C. Priedland	"	Y. M. Cantrell	Ophir	John C. Dixon	"	Wm. Weddington	Sassafras	Jesse Gilliam	"	Ben Eversole	"	Thos. Kelley	"	E. J. Hill	"	Just Jackson	"	Wm. Kelley	"	Jasper Wright	"	Jim McKnight	"	James Stacey	"	B. Abney	Orlando	John McKnight	"	Simon Stacey	"	B. Mullins	"	Joseph McKnight	"	Jeremial Smith Jr.	"	A. Proctor	"	S. W. Smith	Professorsburg	Manford Young	Saxton	Harrison Reams	"	T. J. Bingham	"	Drew Blains	"	Fred Bobbs	"	George Hatcher	"	Perry Bryant	"	A. R. Bruckes	"	John St. Curmille	"	A. J. Jones	"	R. C. Floupa	"	John St. Curmille	"	E. Smith	"	H. Herr	"	Gen. B. Conley	Providence	Joe Siler	"	M. P. Mattingly	"	Payne Coal & Coke Co.	Ready	T. S. Siler	Schree	Mise & Co.	"	B. D. Minton	"	John V. Hunter	Sellers	C. L. Nall	"	G. W. Montgomery	"	Alex Phipps	Shoals	J. H. Rind	Paintsville	"	"	Hy. S. Begley	Shoals	H. E. Conley	"	"	"	W. E. Bowling	"	Augustus Daniels	"	"	"	Noble Gay	"	Jos. Daniels	"	"	"	Peter Gross	Shrewsbury	"	"	"	"	Mat Edwards	Shrewsbury	"	"	"	"	Sherman Park	Sip	"	"	"	"	James Tenney	Skiltsville	"	"	"	"	T. Brown	"																																																																																																																																																																																																						
Y. M. Cantrell	Ophir	John C. Dixon	"	Wm. Weddington	Sassafras	Jesse Gilliam	"	Ben Eversole	"	Thos. Kelley	"	E. J. Hill	"	Just Jackson	"	Wm. Kelley	"	Jasper Wright	"	Jim McKnight	"	James Stacey	"	B. Abney	Orlando	John McKnight	"	Simon Stacey	"	B. Mullins	"	Joseph McKnight	"	Jeremial Smith Jr.	"	A. Proctor	"	S. W. Smith	Professorsburg	Manford Young	Saxton	Harrison Reams	"	T. J. Bingham	"	Drew Blains	"	Fred Bobbs	"	George Hatcher	"	Perry Bryant	"	A. R. Bruckes	"	John St. Curmille	"	A. J. Jones	"	R. C. Floupa	"	John St. Curmille	"	E. Smith	"	H. Herr	"	Gen. B. Conley	Providence	Joe Siler	"	M. P. Mattingly	"	Payne Coal & Coke Co.	Ready	T. S. Siler	Schree	Mise & Co.	"	B. D. Minton	"	John V. Hunter	Sellers	C. L. Nall	"	G. W. Montgomery	"	Alex Phipps	Shoals	J. H. Rind	Paintsville	"	"	Hy. S. Begley	Shoals	H. E. Conley	"	"	"	W. E. Bowling	"	Augustus Daniels	"	"	"	Noble Gay	"	Jos. Daniels	"	"	"	Peter Gross	Shrewsbury	"	"	"	"	Mat Edwards	Shrewsbury	"	"	"	"	Sherman Park	Sip	"	"	"	"	James Tenney	Skiltsville	"	"	"	"	T. Brown	"																																																																																																																																																																																																												
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E. J. Hill	"	Just Jackson	"	Wm. Kelley	"	Jasper Wright	"	Jim McKnight	"	James Stacey	"	B. Abney	Orlando	John McKnight	"	Simon Stacey	"	B. Mullins	"	Joseph McKnight	"	Jeremial Smith Jr.	"	A. Proctor	"	S. W. Smith	Professorsburg	Manford Young	Saxton	Harrison Reams	"	T. J. Bingham	"	Drew Blains	"	Fred Bobbs	"	George Hatcher	"	Perry Bryant	"	A. R. Bruckes	"	John St. Curmille	"	A. J. Jones	"	R. C. Floupa	"	John St. Curmille	"	E. Smith	"	H. Herr	"	Gen. B. Conley	Providence	Joe Siler	"	M. P. Mattingly	"	Payne Coal & Coke Co.	Ready	T. S. Siler	Schree	Mise & Co.	"	B. D. Minton	"	John V. Hunter	Sellers	C. L. Nall	"	G. W. Montgomery	"	Alex Phipps	Shoals	J. H. Rind	Paintsville	"	"	Hy. S. Begley	Shoals	H. E. Conley	"	"	"	W. E. Bowling	"	Augustus Daniels	"	"	"	Noble Gay	"	Jos. Daniels	"	"	"	Peter Gross	Shrewsbury	"	"	"	"	Mat Edwards	Shrewsbury	"	"	"	"	Sherman Park	Sip	"	"	"	"	James Tenney	Skiltsville	"	"	"	"	T. Brown	"																																																																																																																																																																																																																								
Jasper Wright	"	Jim McKnight	"	James Stacey	"	B. Abney	Orlando	John McKnight	"	Simon Stacey	"	B. Mullins	"	Joseph McKnight	"	Jeremial Smith Jr.	"	A. Proctor	"	S. W. Smith	Professorsburg	Manford Young	Saxton	Harrison Reams	"	T. J. Bingham	"	Drew Blains	"	Fred Bobbs	"	George Hatcher	"	Perry Bryant	"	A. R. Bruckes	"	John St. Curmille	"	A. J. Jones	"	R. C. Floupa	"	John St. Curmille	"	E. Smith	"	H. Herr	"	Gen. B. Conley	Providence	Joe Siler	"	M. P. Mattingly	"	Payne Coal & Coke Co.	Ready	T. S. Siler	Schree	Mise & Co.	"	B. D. Minton	"	John V. Hunter	Sellers	C. L. Nall	"	G. W. Montgomery	"	Alex Phipps	Shoals	J. H. Rind	Paintsville	"	"	Hy. S. Begley	Shoals	H. E. Conley	"	"	"	W. E. Bowling	"	Augustus Daniels	"	"	"	Noble Gay	"	Jos. Daniels	"	"	"	Peter Gross	Shrewsbury	"	"	"	"	Mat Edwards	Shrewsbury	"	"	"	"	Sherman Park	Sip	"	"	"	"	James Tenney	Skiltsville	"	"	"	"	T. Brown	"																																																																																																																																																																																																																														
B. Abney	Orlando	John McKnight	"	Simon Stacey	"	B. Mullins	"	Joseph McKnight	"	Jeremial Smith Jr.	"	A. Proctor	"	S. W. Smith	Professorsburg	Manford Young	Saxton	Harrison Reams	"	T. J. Bingham	"	Drew Blains	"	Fred Bobbs	"	George Hatcher	"	Perry Bryant	"	A. R. Bruckes	"	John St. Curmille	"	A. J. Jones	"	R. C. Floupa	"	John St. Curmille	"	E. Smith	"	H. Herr	"	Gen. B. Conley	Providence	Joe Siler	"	M. P. Mattingly	"	Payne Coal & Coke Co.	Ready	T. S. Siler	Schree	Mise & Co.	"	B. D. Minton	"	John V. Hunter	Sellers	C. L. Nall	"	G. W. Montgomery	"	Alex Phipps	Shoals	J. H. Rind	Paintsville	"	"	Hy. S. Begley	Shoals	H. E. Conley	"	"	"	W. E. Bowling	"	Augustus Daniels	"	"	"	Noble Gay	"	Jos. Daniels	"	"	"	Peter Gross	Shrewsbury	"	"	"	"	Mat Edwards	Shrewsbury	"	"	"	"	Sherman Park	Sip	"	"	"	"	James Tenney	Skiltsville	"	"	"	"	T. Brown	"																																																																																																																																																																																																																																				
B. Mullins	"	Joseph McKnight	"	Jeremial Smith Jr.	"	A. Proctor	"	S. W. Smith	Professorsburg	Manford Young	Saxton	Harrison Reams	"	T. J. Bingham	"	Drew Blains	"	Fred Bobbs	"	George Hatcher	"	Perry Bryant	"	A. R. Bruckes	"	John St. Curmille	"	A. J. Jones	"	R. C. Floupa	"	John St. Curmille	"	E. Smith	"	H. Herr	"	Gen. B. Conley	Providence	Joe Siler	"	M. P. Mattingly	"	Payne Coal & Coke Co.	Ready	T. S. Siler	Schree	Mise & Co.	"	B. D. Minton	"	John V. Hunter	Sellers	C. L. Nall	"	G. W. Montgomery	"	Alex Phipps	Shoals	J. H. Rind	Paintsville	"	"	Hy. S. Begley	Shoals	H. E. Conley	"	"	"	W. E. Bowling	"	Augustus Daniels	"	"	"	Noble Gay	"	Jos. Daniels	"	"	"	Peter Gross	Shrewsbury	"	"	"	"	Mat Edwards	Shrewsbury	"	"	"	"	Sherman Park	Sip	"	"	"	"	James Tenney	Skiltsville	"	"	"	"	T. Brown	"																																																																																																																																																																																																																																										
A. Proctor	"	S. W. Smith	Professorsburg	Manford Young	Saxton	Harrison Reams	"	T. J. Bingham	"	Drew Blains	"	Fred Bobbs	"	George Hatcher	"	Perry Bryant	"	A. R. Bruckes	"	John St. Curmille	"	A. J. Jones	"	R. C. Floupa	"	John St. Curmille	"	E. Smith	"	H. Herr	"	Gen. B. Conley	Providence	Joe Siler	"	M. P. Mattingly	"	Payne Coal & Coke Co.	Ready	T. S. Siler	Schree	Mise & Co.	"	B. D. Minton	"	John V. Hunter	Sellers	C. L. Nall	"	G. W. Montgomery	"	Alex Phipps	Shoals	J. H. Rind	Paintsville	"	"	Hy. S. Begley	Shoals	H. E. Conley	"	"	"	W. E. Bowling	"	Augustus Daniels	"	"	"	Noble Gay	"	Jos. Daniels	"	"	"	Peter Gross	Shrewsbury	"	"	"	"	Mat Edwards	Shrewsbury	"	"	"	"	Sherman Park	Sip	"	"	"	"	James Tenney	Skiltsville	"	"	"	"	T. Brown	"																																																																																																																																																																																																																																																
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M. P. Mattingly	"	Payne Coal & Coke Co.	Ready	T. S. Siler	Schree	Mise & Co.	"	B. D. Minton	"	John V. Hunter	Sellers	C. L. Nall	"	G. W. Montgomery	"	Alex Phipps	Shoals	J. H. Rind	Paintsville	"	"	Hy. S. Begley	Shoals	H. E. Conley	"	"	"	W. E. Bowling	"	Augustus Daniels	"	"	"	Noble Gay	"	Jos. Daniels	"	"	"	Peter Gross	Shrewsbury	"	"	"	"	Mat Edwards	Shrewsbury	"	"	"	"	Sherman Park	Sip	"	"	"	"	James Tenney	Skiltsville	"	"	"	"	T. Brown	"																																																																																																																																																																																																																																																																																				
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NAME		POSTOFFICE	NAME		POSTOFFICE	PHOSPHATE	
NAME		POSTOFFICE	NAME	POSTOFFICE	NAME	POSTOFFICE	NAME
Mrs. T. Draper	Skilesville	Wm. Butcher	Ward City	Great Southern Phosphate Co.	Covington	STONE, GRANITE, MARBLE AND ONYX	
M. A. Summers	Stoughtonville	David Daniels	..	Harshorn Phosphate & Mining Co.	..	James Farrell	Covington
R. H. Cates	..	Geo. W. Daniels	..	Southern Florida Phosphate Co.	..	Mineral Plaster Co.	..
David H. Nelson	Slusher's Mill	Jos. Davis	..	..	..	Virginia Brown Stone Co.	..
James Brock	..	W. P. Davis	..	..	..	American Bituminous Rock Co.	Louisville
John Brock	..	Geo. W. Estep	..	..	..	Blatz & Krebs	..
N. J. Brock	..	J. W. Friley	..	..	..	Dark Hollow Quarry Co.	..
Hy. Bullins	..	Ab. Gibbes	..	..	..	Belknap & Duncay	..
Mat. Haskins	..	Bartley	..	..	..	John Diebold & Son	..
C. C. Knuckles	..	Samuel Spears	..	..	..	Davis Quarry Co.	Middlesboro
Franklin Nappier	..	J. M. Walter	..	..	..	Stony Fork Quarry Co.	..
Olivier Smith	..	W. H. Walter	..	..	..	Wagoner & Beaman	..
Joshua Taylor	..	Greene Ward	..	..	..	Kentucky Stone & Lumber Co.	Stone City
T. J. Davis	South	J. E. Ward	..	..	..	James Slate Mining Co.	Whiteside
H. R. Jones	..	S. W. Ward	..	..	..	..	..
Doek Mosser	..	Wm. J. Ward	..	..	..	..	..
Squire Combs	South Fork	J. G. Wells	..	..	..	..	..
J. C. Wilson	..	A. A. Wells	..	..	..	..	..
Frank Baxley	Spring Grove	Jas. A. Barbel	Warfield	..	..	..	..
Wm. Stone	..	L. Brower	..	..	..	..	..
A. T. Skimmer	Springburg	Moses Parsley	..	..	..	..	..
A. H. Spain	Steubenville	Samuel Star	..	..	..	..	..
V. S. Brewer	Sturgeon	Thos. Webb sr.	..	..	..	..	..
John Strong	..	J. E. Ferguson	..	..	..	..	..
Laura Tackett	..	A. J. Pomington	..	..	..	..	..
W. A. Whicker	..	James Dobson	West	..	..	..	..
Jas. E. Wilson	..	Harvey Gregsby	..	..	..	..	..
Morgan Allen	Swampton	James M. Gregsby	West Liberty	..	..	..	..
Rose Allen	..	J. W. Cuskey	..	..	..	..	..
Bank Brown	..	Amos Davis	..	..	..	..	..
Geo. Carpenter	..	Boone Lacey	..	..	..	..	..
Dial Cole	..	Joel S. Sartin	..	..	..	..	..
Hendley Fletcher	..	H. G. Spradlin	..	..	..	..	..
Meredith Fletcher	..	J. W. Stoen	..	..	..	..	..
Frank Gardner	..	Henry Warnack & Co.	..	..	..	..	..
B. F. Gillett	..	E. B. Wells	West Louisville	..	..	..	..
Lark Howard	..	J. L. Beaver	..	..	..	..	..
John Jackson	..	Thos. Herrald	..	..	..	..	..
Charles Lovely	..	J. M. Sims	White Oak	..	..	..	..
Jackson Marshall	..	M. A. Brown	..	..	..	..	..
Saml. Montgomery	..	Wm. Lacey	White Plains	..	..	..	..
Jasper Owens	..	J. W. Stanley	White Post	..	..	..	..
Eliah Patrick	..	J. P. Alley	..	..	..	..	..
F. M. Patrick	..	Peter S. Alley	..	..	..	..	..
Meredith Risner	..	Thos. Alley	..	..	..	..	..
Abner Risner	..	James Dickins	..	..	..	..	..
John Salyer	..	S. Doskins	..	..	..	..	..
R. E. Salyer	Tanksley	James Duncan	..	..	..	..	..
R. T. Allen	..	M. A. Duncan	..	..	..	..	..
Caleb Dezzari	..	John B. Goff	..	..	..	..	..
John S. Hatton	..	Wm. A. Harris	..	..	..	..	..
Lewis Hatton	..	A. B. Hatfield	..	..	..	..	..
John Howenshell	..	O. B. M. Lowe	..	..	..	..	..
James Hanks	Taulbee	J. McCoy	..	..	..	..	..
James S. Coppe	..	Wayne Scott	..	..	..	..	..
A. C. Copp	..	Ben Taylor	..	..	..	..	..
Elijah Spencer	..	Geo. W. Taylor	Whiteburg	..	..	..	..
Thomas Strong	..	Moses Adams	..	..	..	..	..
James P. Taulbee	..	D. Holcomb	..	..	..	..	..
Silas Taulbee	..	W. M. Jenkins	..	..	..	..	..
S. S. Taulbee	..	J. S. Thompson	Whiteville	..	..	..	..
J. R. Wilson	..	J. A. Bartlett	..	..	..	..	..
Samuel Cartwright	Townsville	M. W. Hamilton	..	..	..	..	..
Wesley Bohner	Traveler's Rest	G. W. Millen	..	..	..	..	..
Levi Allen	Treadway	J. G. Arnett	Whittakerville	..	..	..	..
Peter Cambrel	..	Wiley Galett	..	..	..	..	..
Isane Hornsby	..	Jasper Owens	Wilbur	..	..	..	..
Mary Hornsby	..	Marion Patrick	..	..	..	..	..
John Samples	..	P. T. Burgess	..	..	..	..	..
James Treadway	..	James O'Bryan	..	..	..	..	..
John M. Treadway	..	M. F. Sweetnam	..	..	..	..	..
Robert Treadway	..	G. V. Travis	..	..	..	..	..
C. Lee Beady	Triskler	Michael Richardson	Williamsburg	..	..	..	..
S. W. Cardon	..	John Siler	..	..	..	..	..
R. E. Eskridge	..	R. A. Steel	Woodbine	..	..	..	..
Josiah Marlow	..	J. A. Barton	..	..	..	..	..
Joseph H. Mason	..	Myin Barton	..	..	..	..	..
C. S. Moyley	..	J. A. Butler	..	..	..	..	..
J. W. Petty	..	H. L. Taylor	..	..	..	..	..
C. Hadenmeyer	..	James France	Woodbury	..	..	..	..
Thomas Spears	..	G. W. Terry	..	..	..	..	..
R. G. Whittinghill	..	J. Hughes	Wright	..	..	..	..
G. Reynolds	Tyner	A. Potter	..	..	..	..	..
James St. John	..	W. M. Potter	..	..	..	..	..
James Dobson	West	Wm. Warrick	..	..	..	..	..
Woolley Campbell	Viper	J. W. Wright	..	..	..	..	..
Wm. C. Andell	..	Montaville Brown	..	..	..	..	..
Ell Hall	..	Green Creason	..	..	..	..	..
F. W. Hall	..	Robert Alsop	..	..	..	..	..
John M. Pratt	..	Joseph Sutton	..	..	..	..	..
Jackson Blanton	Wallins Creek	G. Bunyon	Zebulon	..	..	..	..
Jas. Blanton	..	R. T. Cecil	..	..	..	..	..
Joseph Blanton	..	G. Charles	..	..	..	..	..
James Bolton	..	H. G. Charles	..	..	..	..	..
Barry Howard	..	J. A. Maynard Jr	..	..	..	..	..
Larkin Howard	..	Wm. Thompson	..	..	..	..	..
Paley Howard	..	..	..	..	..	..	..
A. Wilson Lewis	..	..	..	..	..	..	..
L. Orshorn	..	..	..	..	..	..	..
John A. Saylor	..	..	..	..	..	..	..
Mark Saylor	..	..	..	..	..	..	..
S. W. Saylor	..	..	..	..	..	..	..
Geo. Arrowwood	Ward City	..	..	..	..	..	..

LEAD AND ZINC

White Pine Zinc Co.      Louisville

MAINE

COAL BITUMINOUS

Long Island Coal Supply Co.      Portland  
 Portland & Kennebec Coal Mining Co.      Portland  
 Sea Bay Coal Co.      Saco

COPPER

Copper King Mining Co.      Bangor

GOLD AND SILVER

Addie May Mining Co.      Portland  
 Bullion King Mining Co.      Portland  
 Old Provincial Gold Mining Co.      ..  
 Red Lion Gold Mining & Milling Co.      Saco  
 Alba Mining Co.      Sullivan  
 Abner Abbott      ..  
 Crabtree & Harvey      ..  
 Dumber Bros.      ..  
 Sullivan Granite Co.      ..  
 Sandy Taylor      ..  
 J. H. West      ..

IRON

Challenger Mining Co.      Portland

LEAD AND ZINC

Warren Zinc Co.      Saco

SALT

Dirigo Salt Co.      Beadfield

SLATE

Blanchard Slate Mining Co.      Bangor  
 H. A. Merrill      ..

STONE, GRANITE, MARBLE AND ONYX

Theodore Bennett      Alfred  
 Maine & New Hampshire Granite Co.      Auburn  
 H. S. Rolfe      Augusta  
 W. A. Wall & Son      ..  
 D. S. Young      ..  
 Jewell Granite Co.      Bangor  
 Monson Mining Co.      ..  
 Rodick Bros.      Bar Harbor  
 Adams Oak Hill Granite Co.      Belfast  
 C. J. Hall      ..  
 W. O. Sargent      ..  
 Belknap Granite Co.      Belknap  
 C. H. Andrews      Biddeford  
 C. H. Bragdon & Sons      ..  
 Day Bros.      ..  
 C. H. & A. A. Goodwin      ..  
 L. B. Howe & Co.      ..  
 J. B. Palmer      ..  
 G. W. Rose      ..  
 J. B. Smith      Blue Hill  
 Howard & Green      Brunswick  
 A. F. Woodslee      ..  
 Atherton & Sperry      East Blue Hill  
 Johnson & Long      ..  
 John Love      ..

NAME	POSTOFFICE
Campbell & Macomber	Ellsworth
H. Pierce	Frank
Mc. Waldo Granite Wks.	Green's Landing
Calvin Ames	"
Jos. Dufors & Co.	"
Herman Eaton	"
J. Goss Jr.	"
S. A. McDonald & Co.	"
Nelson & Shields	"
J. H. Robbins	"
T. Snow & Co.	"
H. M. Thayer	"
E. S. Thurlow & Co.	"
Alonzo Abbott	Hancock
Marston & Gilman	Jonesboro
Lewiston Monumental Works	Lewiston
D. Law Jr.	Lincou
R. R. Babbridge	Mount Desert
Blaisdell & Joy	"
W. J. Richardson	"
B. A. Parker	North Berwick
Ervant Bros.	North Jay
M. M. O'Connor	Norway
Maine A. L. M. & S. Co.	Portland
Maine Cent. E. R. Co.	"
Royal Fossil Flour Co.	"
F. P. Freeman	Pretty Marsh
A. L. Heagan	"
Thos. M. Eaton	Queens Landing
Eaton, Grant & Martin	"
Bodwell Granite Co.	Rockland
S. Almood	Saint Stephen
A. W. Grindell	Sargentville
J. L. Brown	Soud
A. A. Murphy	"
Cameron Silica Co.	So. Beddington
E. P. Gamage	So. Bristol
Emmons Lawton & Co.	So. Norridgewock
J. Taylor	"
Anderson & Conant	So. Thomaston
Brown & Wade	"
F. R. Drew & Sons	"
Geo. Green & Co.	"
P. Maloney & Co.	"
Merrick Sawyer	"
A. J. Barton	Vinal Haven
Black & Monroe	"
Brown	"
R. H. Williams	West Franklin
Crabtree & Havey	West Sullivan
C. H. Hodsdon & Son	Yarmouthville

## MARYLAND

## COAL BITUMINOUS

Jacob Folk	Accident
John Feik	"
Evans Mining, Milling & Smelting Co.	Baltimore
2003 E. Lexington st.	"
Pittman Coal Co.	"
S. S. Lee & Son	Burton
Potomac Coal Co.	"
John Shaw	"
James Smiley	"
H. Buttiger	Bittinger
S. J. Brennan	"
T. R. Hamilton	"
F. P. Lohr	"
H. E. Pattison	Bloomington
Rawlings & Pattison	Bloomington
Consolidation Coal Co.	Cumberland
Maryland Union Coal Co.	"
Andrew Friend	Friendsville
Capt. E. M. Friend	"
A. J. Teatze	"
Geo. M. Hansel	Frostburg
Bethens Bros.	"
V. Kemp	"
D. J. Brennan	Grantsville
Jonas J. Folk	"
Moses Kemp	"
D. Kintzinger	"
Louis Nachman	"
Isabella Ridgely	"
Chas. Warrick	"
Henry Yost	"
Thos. Cappett	Hoyes
John Croper	Lonaconing
Thaddeus Giottolty	McHenry
Mrs. Mary Miller	Mineral Spring
W. Wass & Son	"
Union Mining Co.	Mount Savage
Wm. Browning	Oakland
John Mecklin	"
Oakland Coal & Coke Co.	"
Taylor Shree	"
Edward D. Evans	Ocean

NAME	POSTOFFICE
John & James A. Ryan	Pekin
Wm. Williamson	"
Richard De Witt	Saug Run
John Riddler	Sunmyside
Piedmont Cumberland Coal Co.	Westernport

## COLD AND SILVER

Empress Josephine Mining Co.	Baltimore
209 St. Paul st.	"

## IRON

North Star Iron Co.	Baltimore
212 N. Chesnut st.	"
Geo. I. Donaldson	Beltsville
T. Cavanaugh	Hanoverville
F. Daigler	"
Wm. Daigler	"
Mark Foley	"
John Gordon	"
M. Latley	"
Michael Reynolds	"
J. J. Shipley	"
Henry Smith	"
Colenan Welch	"
B. McKey	Muirkirk
R. C. Martin	"
John Millbrook	"
Maryland Steel Co.	Sparrows Point

## STONE, GRANITE, MARBLE AND ONYX

Wm. Fenby	Avondale
James J. Atkinson	Baltimore
14 North st.	"
Bergman & Peddleford	"
Carribean Manganese Co.	"
Corinth Stone & Improvement Co. of West Virginia	"
J. C. Fayette & St. Paul	"
J. Curley	107 Park av.
Guilford & Waltersville Granite Co.	"
1416 N. Charles st.	"
J. Harris	1327 Park av.
Jones & Thorn	"
D. Leonard	320 Old Froderick road
George Anonson	Cabotin Furnace
Nickerson Fertilizer Co.	Easton
C. F. Kappanier	Ellicott City
Oliver & Peach	Granite
Samuel Woods	Hanoverville
William H. Chew	New Windsor
M. C. Pyle & son	Pylesville
William F. Miller	Sykesville
D. Hooper & Son	Wakefield
Wm. E. Gavey	Woodstock
Henry Churchill	Alford
J. Shaw & Son	Annerst
Wm. Hogan	Ashland
Penning Soap Stone Co.	Abol
Cape Ann Granite Co.	Bay View
Asa Hood	"
T. Fitzgibbon	Beverly
D. Leeman & Son	Beverly Farms
L. Watson	"
Atlanta Stone Co.	Boston
Fitzburg Railroad Co.	"
C. A. Green	178 Tremont st.
Meranus Onyx & Metal Co.	"
Meramec Onyx & Metal Co.	"
Wm. Sherman	Braggville
Timothy Keefe	Chester
H. M. Scott	Dunovers
Richard Delaney	Desham
B. H. Sears	East Dennis
Wm. Sears	"
John Frawley	Erving
Fall River Granite Co.	Fall River
J. B. Wilmut	"
F. A. Hale	Fitchburg
James Kane	"
F. A. McLaughlin & Co.	"
J. Lamb & Bro.	Florence
W. P. Latham	"
Smith & Daniels	Foxboro
J. C. Cloves	Frammingham
D. Russ & Co.	Gloster
A. B. Louiss	Goshen
C. W. Willcutt	"
C. M. Cummings	Graniteville
A. P. Downs	"
Saml. Fletcher	"
L. P. Palmer	"
Wm. Reed	"
H. D. Wright	"
Thos. Lahey	Haverhill
E. J. Prescott	Hulson
Daniel Cahill	Lanesville
W. R. Cheves	"
J. D. Conroy	"
H. Moorings	"
E. Sherburner	"
J. J. Verdon	"
Gros Bros.	Lee
W. D. Blanchard & Co.	Leominster
Kittredge & Leavitt	"
Sweet & Davis	Lowell
A. R. Holcham & Co.	Lynn
J. Heath	"
J. A. Ransdell	Lynnfield
N. White	Medford
G. Crofton	Milford
John Cuddahy	"
H. J. Rice	Milton
W. N. Flint Granite Co.	Monson
A. McDonald & Son	Mount Auburn
J. Bertram	New Bedford
J. McCarty	North Acton
North Acton Granite Co.	"
Saml. Fowler	Northbridge
Brown Bros.	North Chelmsford
C. W. Carkin	"
Marniel & Wilsted	"
P. A. Carkin	"
J. Lincoln	Peabody
H. A. Newhall	"
Bryant Lurvey & Co.	Pigeon Cove
J. Edmunds	"
Chas. Guider	"
S. E. Mayo	"
S. M. Morse	"
Pratt & Stewart	"
H. A. Storey	"
G. Unah & Co.	"

## MASSACHUSETTS

## COAL BITUMINOUS

White Cross Mining & Milling Co.	Boston
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## COPPER

Eastern Developing Co.	Boston
95 Milk st.	"
Saint Mary's Copper Co.	"
68 Devonshire st.	"

## COLD AND SILVER

Boston Gold Mining Co.	Boston
R. 34, 620 Atlantic av.	"
Lake Lake Mining Co.	"
27 Broad st.	"
J. H. Brown	"
Crystal Mills Mining Co.	Chester

## IRON

Edward D. Peters	Dorchester
Perival av.	"
Fall River & Colo. M. & S. Co.	Fall River
S. P. Butler	Lanesboro
Maxfield Mining Co.	S. Frammingham
Worcester Steel Works	Worcester

## LEAD AND ZINC

NAME	POSTOFFICE
Boston Zinc Mining Co.	Boston
Mason Bldg.	"

## MICA

Gold & Watson	Boston
J. Huse & Son	"
C. L. Randall & Co.	"

## SALT

Nonquit Salt Works	S. Dartmouth
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## SLATE

Anflaw Slate Trust	Boston
Monson Maine slate Co.	"
Monson Slate Quarries	"
113 Devonshire st.	"

## STONE, GRANITE, MARBLE AND ONYX

Henry Churchill	Alford
J. Shaw & Son	Annerst
Wm. Hogan	Ashland
Penning Soap Stone Co.	Abol
Cape Ann Granite Co.	Bay View
Asa Hood	"
T. Fitzgibbon	Beverly
D. Leeman & Son	Beverly Farms
L. Watson	"
Atlanta Stone Co.	Boston
Fitzburg Railroad Co.	"
C. A. Green	178 Tremont st.
Meranus Onyx & Metal Co.	"
Meramec Onyx & Metal Co.	"
Wm. Sherman	Braggville
Timothy Keefe	Chester
H. M. Scott	Dunovers
Richard Delaney	Desham
B. H. Sears	East Dennis
Wm. Sears	"
John Frawley	Erving
Fall River Granite Co.	Fall River
J. B. Wilmut	"
F. A. Hale	Fitchburg
James Kane	"
F. A. McLaughlin & Co.	"
J. Lamb & Bro.	Florence
W. P. Latham	"
Smith & Daniels	Foxboro
J. C. Cloves	Frammingham
D. Russ & Co.	Gloster
A. B. Louiss	Goshen
C. W. Willcutt	"
C. M. Cummings	Graniteville
A. P. Downs	"
Saml. Fletcher	"
L. P. Palmer	"
Wm. Reed	"
H. D. Wright	"
Thos. Lahey	Haverhill
E. J. Prescott	Hulson
Daniel Cahill	Lanesville
W. R. Cheves	"
J. D. Conroy	"
H. Moorings	"
E. Sherburner	"
J. J. Verdon	"
Gros Bros.	Lee
W. D. Blanchard & Co.	Leominster
Kittredge & Leavitt	"
Sweet & Davis	Lowell
A. R. Holcham & Co.	Lynn
J. Heath	"
J. A. Ransdell	Lynnfield
N. White	Medford
G. Crofton	Milford
John Cuddahy	"
H. J. Rice	Milton
W. N. Flint Granite Co.	Monson
A. McDonald & Son	Mount Auburn
J. Bertram	New Bedford
J. McCarty	North Acton
North Acton Granite Co.	"
Saml. Fowler	Northbridge
Brown Bros.	North Chelmsford
C. W. Carkin	"
Marniel & Wilsted	"
P. A. Carkin	"
J. Lincoln	Peabody
H. A. Newhall	"
Bryant Lurvey & Co.	Pigeon Cove
J. Edmunds	"
Chas. Guider	"
S. E. Mayo	"
S. M. Morse	"
Pratt & Stewart	"
H. A. Storey	"
G. Unah & Co.	"

NAME	POSTOFFICE
S. N. Waite & Son	Pigeon Cove
Churchhill & Hitebeck	Quincy
Friedrick & Field	"
Gleason Granite Co	"
C. Johnson & Bro.	"
McKrusie & Patterson	"
Swithin Bros.	"
Lansville Granite Co.	Rockport
J. H. Merrill & Son	Salem
J. Welch	"
J. Moyle	Sharon
Andrew Gilman	Shellarville Falls
A. Sherman	S. Dartmouth
Leis & Brown	S. Peabody
C. W. & G. W. Davis	"
Wright, Lyons & Co.	Springfield
Middlesex Marble Co	Stonham
W. Y. Woodbury	Webster
Christall Bros.	West Quincy
Miller & Luce	"
J. B. Reinbultor	"
78 Chapel st.	"
Routten Bros	"
M. Freedy	West Stockbridge
Capt. A. Crowell	West Vermont
J. S. Ballard	Wepesler
Evans & Co.	"
Fenice Chemical & Color Co	"
Norecross Bros.	"
Randall Co. Marble Co	"
Troy Granite Co.	"

**MICHIGAN**

**COAL BITUMINOUS**

Caruma Coal Co	Caruma
Hon. W. C. Mayburg	Detroit
74 Griswold st.	"
Grand Ledger Coal Co	Grand Ledger
Star Coal & Fire Clay Co	"
New Coal Mining Co	Jackson
Geo. Myers	Lacona
Black Diamond Coal Mines	Sandstone
Capt. Wm. W. Spaulding	Sault Ste. Marie

**COPPER**

Seneca Mining Co.	Albion
E. W. Hudson	Detroit
22 Walker Block	"
Edw. Bowler	"
Fort Junction av.	"
Garden City Copper Co.	Engle River
Meadow Mining Co	"
Jacob Houghton	Houghton
Huron Mining Co	"
Isle Royal Mining Co	"
Calumet & Hecla Mining Co	"
Huron Copper Co.	Lake Linden
Peninsula Copper Co.	Lake Superior
Lafayette Mining Co.	Ontonagon
James Mercer	"

**COLD AND SILVER**

Bread Hemp Mining Co	Detroit
David R. Pierre	"
210 Larned W.	"
Shipman Gold Mining & Manufacturing Co.	"
E. B. Wendell	"

**GRAPHITE**

Detroit Graphite Manufacturing Co.	Detroit
542 River st.	"

**GYPSUM**

Noble & Co.	Grand Rapids
Union Mills Plaster Co.	"

**IRON**

Gibson & Mitchell	Champion
Detroit Mining Co.	Detroit
10 Wilberell st.	"
Wm. J. Gray	"
31 Moffatt Bldg.	"
A. T. Bliss	E. Saginaw
Nelis & Stone	"
The Sheridan Mining Co.	Essenaba
N. Slaght	Greenville
Northern Land & Mining Co	"
Ruth Mining Co	Hancock
"	Iron Mountain

NAME	POSTOFFICE
E. Douglas Iron Mining Co	Ironwood
Barnum Iron Mining Co.	Ishpeming
Cleveland Iron Mining Co.	"
New York Iron Mining Co.	"
Saginaw Iron & Mining Co	"
Salisbury Iron Mining Co.	"
J. Peters	Manistee
Barassa Iron Co.	Marquette
Davis Mining Co.	"
Dexter Iron Mining Co.	"
Pitts. & L. A. Iron Mining Co.	"
Sampson Iron Co.	"
Waverly Mining Co.	Menominee
Foster Iron Exploring Co.	Metropolitan
Graveland Iron Mining Co	"
Metropolitan Mining Co.	"
Sturgeon River Iron Mining Co.	"
Green Creek Iron Co.	National Mine
The Platt Mining & Mfg. Co.	Negaunee
Cull Iron Mining Co.	Norway
Curry Iron Mining Co.	"
S. T. High	"
F. A. Johnson	"
Penn Iron Mining Co.	"
J. Perkins & Sons	"
J. John Sewell	"
Tamarack Mining Co.	Opechee
Ruth & Raeholm	Quinnesec
Riverside Iron Co.	Republic
Saginaw Iron Mining Co.	Saginaw
William Wills	Stoneyville
Crown Point Mining Co.	Wakelield
Pipe Option Mining Co.	"

**LEAD AND ZINC**

Oscoda Cons. Mining Co.	Opechee
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**SALT**

J. E. Potts Salt & Lumber Co.	An Sable
Butman & Rust	Bay City
E. C. Fitch	"
Folsom & Arnold	"
E. Hall	"
C. E. Lewis	"
McEwan Bros. & Co.	"
Miller & Lewis	"
Wm. Peter	"
Roblison Salt & Lumber Co.	"
E. Y. Williams & Co	"
Brown & Ryan	East Saginaw
E. O. & S. L. Eastman & Co.	"
Eaton, Potter & Co	"
Geberhard & Easterbrook	"
W. A. O'Donnell	"
Whitney & Batchelor	"
Whitford Electrical Co	"
Issen Brine Supply Co., Ltd	East Tawas
Reitz Salt & Lumber Co.	Manistee
State Lumber Co	"
J. A. Worsey	Marine City
Midland Salt & Lumber Co.	Midland
H. M. Lund & Sons Mining Co.	Oscoda
Oscoda Salt & Lumber Co.	"
R. C. Ogilvie	Port Hope
E. F. Gould	Saginaw
Mitchell & McClure	"
Saginaw Lumber & Salt Co.	"
W. F. Stevens	"
Stevens & La Due	"
Warner & Eastman	"
Wells Stone Co.	"
West Side Lumber Co	"
A. W. Wright Lumber Co.	"
Wylie Bros	"
Hine & Laderach	West Bay City

**STONE, GRANITE, MARBLE AND ONYX**

Alabaster Plaster Co.	Alabaster
Babbitt Stone Quarry	"
Stone Co.	Cassville
Detroit & Marquette	"
Brownstone Co.	Detroit
A. A. Parker	"
32 Champlain st.	"
R. J. Sinclair	"
35 Champlain st.	"

NAME	POSTOFFICE
H. R. Nense & Son	East Saginaw
Alabastine Co.	Grand Rapids
Grand River Quarries	"
F. Godfrey & Co.	"
Joseph Croze	Houghton
Bennett Sewer Pipe Co.	Jackson
Jackson Stone Co.	"
Excelsior Red Stone Co.	Lausling
Lake Superior Red Stone Co.	Marquette
Newport & Lake Superior Brownstone Co.	"
Wm. Patrick	Midland
Goodall Bros. Stone Co.	Muskogean
Keweenaw Red Stone Co.	Newtonville
S. B. Bond	Stony Point
P. Grouse	Wells
Wm. F. Atkinson	Williamston

**MINNESOTA**

**COAL BITUMINOUS**

Freeborn Consolidated Coal Mining Co.	Alden
Gray Jacket Mining Co.	Minneapolis
Lehigh Coal & Iron Co.	St. Paul

**GOLD AND SILVER**

Montana Precipitation Co.	Austin
Minnesota Lake Mount-ain G. & S. M. Co.	Benson
Duluth & Nova Scotia Mining Co.	Duluth
Higbee Wildcat Co.	"
Minerborn Mining Co.	"
Minnesota Mining Co.	"
Rahny Lake Mining & Improvement Co.	"
Silver City Mining Co.	"
Black Hawk Land & Mining Co.	Glencoe
Bon Harrison Gold & Silver Mining Co.	Granite Falls
Minnesota Valley Gold & Silver Mining Co.	"
Jordan Mining Co.	Jordan
Stillwater Mining Co.	Minneapolis
United States Mining & Milling Co.	"
Vermillion Range Mining & Smelting Co.	"
Washington Mining & Milling Co.	"
Minnesota Mining Co.	Monticello
Sauk River Mining Co.	Richmond
Chasey Creek Mining Co.	St. Paul
The Yellowstone Placer Co.	"
Lumberman's Mining Co.	Stillwater
Mineral Point Mining & Lumbering Co.	"
Avanache Mining Co.	Vernadale
Honey Gold & Silver Mining Co.	Wabasha
Wabasha Black Hood Mining Co.	"
Yonkers Consolidated Mining Co.	Winona

**IRON**

Hamilton Ore Co	Biwabie
Athens Iron Co.	Duluth
Albion Iron Co.	"
Boston Iron Co.	"
Bradley Iron Co.	"
Camden Iron Co.	"
Carnegie Mining Co.	"
Cleveland Iron Co.	"
Clyde Mining Co.	"
Columbia Iron Co.	"
Constock I. Mining Co.	"
Consolidated Vermillion Iron & Lumber Co.	"
Cosmopolitan Iron Co.	"
Dayton Iron Mining Co.	"
Detroit Iron Co.	"
Donald Grant Mining Co.	"
Duluth Iron Mining Co.	"
Duluth Iron Mining & Developing Co.	"
Duluth Mining Investment Co.	"
The Elk Iron Mining Co.	"
Elmora Land & Lumber Co.	"
Germania Mining Co.	"
Great Western Mining Co	"
Gun Flint Lake Iron Co.	"
Hartman Mallett I. & Land Co.	"

NAME	POSTOFFICE
Horton Mining Co.	Duluth
The International Development Co.	"
Iron King Mining Co.	"
Ironton Steel Co.	"
Kanawha Iron Co.	"
Kaokawana Iron Co.	"
Lambuth Iron Co.	"
Maltham Iron & Mining Co.	"
MerrittNickel Mining Co.	"
Mesaba Central Land & Exp. Co.	"
Mountain Iron Co.	"
Mountain Range Iron Co.	"
New England Iron Co.	"
New York Iron Co.	"
Northern Light Iron Co.	"
1717 Piedmont av.	"
North Superior Iron Mining Co.	"
Oliver Mining Co.	"
Poca Iron Co.	"
Rockleam Iron Co.	"
Rockhammer Commerce St. Putnam Iron Co.	"
Security Iron Co.	"
Sullivan Iron Co.	"
Twin City Iron Co.	"
Union Iron Mining Co.	"
Virginia Iron Co.	"
Vermillion & Grand Marais Iron Co.	"
Vermillion Range Iron Co.	"
Vulcan Iron Co.	"
Wahkiakum Iron Co.	"
Washington Iron Co.	"
Youngstown Iron Co.	"
Zenith Iron Mining Co.	"
Pacific Mining Co.	Fairbault
Albend Iron Co.	Mesabha
Canton Iron Co.	"
Charleston Iron Co.	"
Lincoln Iron Co.	"
Masskill Iron Co.	"
Mesaba Mountain Iron Co.	"
Nelson Lands Iron Co.	"
Putnam Iron Co.	"
Allegany Iron M. & M. Co.	Minneapolis
442 Boston Block	"
American Mining Co.	"
Anchor Iron & Smelting Co.	"
Ashland Iron & Steel Co.	"
Eagle Iron Co.	"
Henrietta Iron Co.	"
Kamistuzene Iron Co.	"
L. & S. Vermillion Range Co.	"
Minneapolis Iron Co.	"
Minnehaha Mining & Milling Co.	"
616 Guarant Loan Bldg.	"
Swan Lake Iron Mining Co.	"
Imperial Mountain Iron Co.	Northfield
C. Brinkerhoff	St. Paul
342 Cedar st.	"
Foley Mining Co.	"
Lucking Mining Co.	"
Pioneer Press Bldg.	"
Mayava Iron Co.	"
Minnesota Iron Co.	"
Nilma Iron Co.	"
Out Crop Iron Mining Co.	"
Jack-Pioneer Press Bldg.	"
Saint Paul & Duluth Mining Co.	"
Germania Lode Bldg.	"

## LEAD AND ZINC

Zumbro Lead & Mining Co.	Wabasha
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## STONE, GRANITE, MARBLE AND ONYX

Flag River Brown Stone Co.	Duluth
Lake Superior Brownstone Co.	"
Portage Red Sand Stone Co.	"
Putnam Iron Co.	"
A. M. Searns	"
Granite Falls Stone Quarry Co.	Granite Falls
Blue Stone Quarry Co.	Jasper

NAME	POSTOFFICE
Dakota & Minnesota Stone Co.	Jasper
Laverne Granite Co.	Laverne
F. Meyerding	Morgan
Carlson Bros. & Co.	St. Cloud
Northern Granite Co.	"
E. B. Robinson	"
Portland Stone Co.	St. Paul
St. Paul Granite Co.	"
T. P. Wilson	"
Cameron & Co.	Sauk Rapids

## MISSOURI

## ASPHALTUM

Gilson Asphaltum Co.	St. Louis
North American Asphaltum Co.	"
U. S. Asphaltum & Development Co.	"
Oriel Bldg.	"

## COAL BITUMINOUS

Mascott Coal Mining Co.	Amoret
J. A. Vance	"
R. Graham	Aultville
Ed. Green	Bellamy
John Lewis	Belout
Thomas J. Stanton	Bittinger
W. C. Burton	Bronaugh
L. H. Sages	"
Peter Smith	"
Clark Coal Co.	Brookfield
J. W. Morris	"
Black Diamond Coal Co.	Brownington
H. H. Stephens	"
John Thompson & Co.	"
Walter Jones	Brown's Station
J. M. Cooley	Cairo
Wm. O'Bryan & Co.	Carbon Centre
G. S. Hoss	"
Redifer & Edwards	Centralia
W. A. Cox	Chillicothe
B. F. Monday	Clinton
T. S. Gordon	Columbia
Geo. Lowery	"
Robert Krampf	Concordia
H. B. Hobbs	Deepwater
Hobbs & White	"
Kay Coal Co.	"
John Park	Dunksburg
J. S. Serany	"
G. W. Strickland	"
F. M. Elston & Co.	Elston
Albright Bros.	Foster
Ily. Etterman	"
J. G. McPeak	"
W. H. Mace	"
S. M. Talbot	"
R. L. Bishop & Co.	Fulton
R. Lamers	"
Slater & Co.	Georgeville
Warner Griswold	Guthrie
Robert Osborn	Hardin
J. B. Short	Harrisburg
A. A. Stalham	"
Geo. Bain & Co.	Higbee
Bonanza Coal Co.	Higgenville
Jackson & Taggart	"
E. B. Powell	"
Rocky Branch Coal Co.	"
John W. Tate	"
Farrar & Armstrong	Hume
Ben. Funk	"
G. S. Wood	"
Enreka Coal Mining Co.	Huntsville
Huntsville Coal & Mining Co.	"
Geo. W. Jones	"
Thos. Madden	"
Wm. E. Mitchell	"
Minthal Coal Mining Co.	"
H. L. Rutherford & Sons	"
Lee Daniels	Jerico
Anglo-American Cotton, Mining & Coal Mining Co.	Kansas City
Bolen Coal Co.	"
Farmer's Coal Co.	"
C. H. Hartman	"
Hartman & Gilbert	"
Missouri Coal and Construction Co.	"
Rocky Branch Coal Co.	"
Rusk Mining Co.	"
Southover Coal & Mining Co.	"
E. W. Price	Keytesville

NAME	POSTOFFICE
Geo. W. Day	Ladtonia
James D. Montague	"
M. Cole	Lamar
Thos. Gregory & Sons	"
Lafayette Coal Co.	Lexington
Andrew O'Malley	"
W. D. Rankin & Co.	"
P. G. Boulware & Co.	Liberal
C. J. Cameron	"
Davery Bros.	"
Philo Conk	"
H. C. Hatfield	"
Lavery Bros.	"
John Perkins	"
John G. Wilson	"
Central Coal Co.	Lithfield
Iowa & Missouri Coal & Mining Co.	Livingston
John Chinn	Lowry City
Geo. Bachelder	Macon
Macon Coal Co.	"
T. E. Wardell	"
M. Clark	Marathon
Wilburn Coal Co.	Marshall
C. H. Morgan	Minden Mines
S. F. Pike	"
South Western Coal Co.	"
J. B. Williams	Moberly
Joseph Murley	Montserrat
Murley, Fitch & Harder	"
A. H. Franks	Moundville
J. F. Gill	"
W. D. Robinson	"
Linn & Co.	Nevada
John McCorkendale	Norborne
Wm. Scrivens	"
H. T. Noble	North
F. M. Bidler	Oseola
M. H. Lucas	Pedro
C. G. Wate	Pittsburg
Benjamin Turley	Quatman
J. M. Wise Coal Co.	Red Hill
Enterprise Coal Co.	Renick
Carbon Center Coal Mining Co.	"
Rich Hill	"
S. W. Hopkins	"
Wm. F. Hudson	"
McComb Bros. & Co.	"
M. K. Martin	"
G. Spence	"
Sullivan & Cheney	"
Frank Williams	"
Woodson & Woodson	"
Joseph Pickingford Co.	Richmond
Atoka Coal & Mining Co.	St. Louis
Kansas & Texas Coal Co.	"
Madison Coal Co.	"
Osage Coal & Mining Co. of Missouri	"
S. B. Cohen	Sedalia
Jas. W. Gilmore	Sheldon
L. J. Rowe	"
W. N. Beard	Slater
John W. Tennil	"
J. Owen & Co.	Springfield
J. B. Nowinger	Stahl
D. A. Mayer & Bros	Sturgeon
Jack Riley	Sylvania
Eli Zook	"
J. W. Johnson	Taberville
R. B. Wilson	"
Grundy County Coal Co.	Trenton
G. E. DeGarmo	Unionville
Lane & Love	"
Anderson Manufacturing & Coal Mining Co.	"
Samuel F. Dutton	Vandalla
Owen Coal Co.	Virginia
G. M. Parks	Vista
E. S. Downing	Walker
Milton Every	"
J. H. Highower	"
Samuel Potter	"
J. D. Wright	"
T. A. Vaden	"
John B. Evans	Warrensburg
L. J. Wells	Waver
F. H. Gaton	Worldand
Hunt Bros.	"
D. L. Robinson	"
Springer & Gardner	"

## FIRE CLAY

Ark. Coal, Fire Clay & Manufacturing Co.	St. Louis
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## COLD AND SILVER

Angusta Mining Co.	St. Louis
304 N. Eighth st.	"
Nogard & Bonair	St. Louis
& Milling Co.	"
509 Olive st.	"

**LEAD AND ZINC**

NAME	POSTOFFICE
American Zinc Co.	Carthage
Spring City Mining Co.	Joplin
Rhodes Barren Mining Co.	Lamar
St. Charles Lead & Zinc Co.	St. Charles
Oliver Lead Co.	St. Louis
Sixth and Olive	"
Electric Lead & Zinc Co.	"
619 Chestnut St.	"
Jack Mining Co.	Webb City

**MINERAL PAINT**

Saline River Paint Co.	Kansas City
St. James Mining & Mineral Paint Co.	St. Louis

**PHOSPHATE**

Whitaker Phosphate Co.	Kansas City
716 Delaware St.	"

**SALT**

Solomon Solar Salt Co.	Kansas City
503 Delaware St.	"

**SLATE**

T. H. White	St. Louis
812 South Seventh St.	"

**STONE, GRANITE, MARBLE AND ONYX**

M. L. Hubble	Anaconda
B. F. Reeves	Bourbon
G. L. W. Smith	"
M. O. Taylor	Cedar Grove
A. Royers	Graniteville
Scheen Bros.	Ironton
Lopes & Sons	"
Casey Grimsshaw Marble Co.	Kansas City
George Dugan	"
La Motte Granite Co.	"
Lyons & O'Connell	Liberal
Wm. Carlisle	"
Mount, Marble & Mining Co.	Montgomery City
Otter Creek Granite Co.	Mo. Desert
N. Roberts	Quinn
Egyptian Marble Co.	St. Genevieve
J. W. Allen & Son	St. Louis
4407 S. Broadway	"
American Lithograph Stone Co.	"
304 N. Eighth St.	"
American Onyx Co.	"
Central Stone Co.	"
Hogan & Morgan	Steeleville
224 Harrison av.	"
Stifel & Ruckert	"
American Tripoli Co.	Seneca
W. H. Ferguson	Steeleville
W. A. Metcalf	"
Milne & Gordon	Seneca
O. P. Kerr	Webb City

**MONTANA**

**COAL BITUMINOUS**

Wm. Flanagan	Cascade
Belt Creek Coal Co.	Great Falls
J. A. Carrier	"
Sauk Dean	"
Gault Coal Co.	"
Cameron & Ripley	Luna
Jacobs & Co.	"
Robinson & Truax	"
Wm. Tasker	"
P. Saunders	Malden
A. Brobeck	Millegan
William Millegan	"
W. J. Salisbury	"
F. D. Taylor	New Chicago
H. M. Thomas	"
Bear Creek Coal Co.	Red Dodge

**COPPER**

Wm. Garety & Co.	Anaconda
Acquisition Mining Co.	Butte City
Anaconda Mining Co.	"
Boston & Montana Mining & Smelting Co.	"
Butte Copper Co.	"
Clear Grit Mining Co.	"
G. W. Daugherty & Co.	Corvallis

**NAME POSTOFFICE**

Blue Line Mining Co.	Elkhorn
Crow Chief Mining Co.	"
Geneva Mining Co.	"
Rising Sun Mining Co.	"
Geo. B. Conway	Glendale
Hecla Cons. Mining Co.	"
Boston & Montana Mining & Smelting Co.	Great Falls
John Shering	Heron
I. G. Simpson	Placer
L. Johnson	Sixteen
Nelson Murray	"
Geo. Robertson	"
Joe Smith	"
R. W. Cram	Whitehall
J. W. Gilkey	"
A. M. Hedden	"
J. O. Jordan	"
John Newman	"
J. E. Parish	"
J. D. Pratchett	"
Frank Shott	"

**COLD AND SILVER**

Gold Bar Mining Co.	Anaconda
Alto Eschels	"
Black P. Mining Co.	Barker
The Silver Gulch Mining Co.	"
Murray Placer Mining Co.	Bedford
Saul, Sherman Mining Co.	Billings
David Copperfield Gold & Silver Mining Co.	Boulder
Montana Bay State Mining Co.	"
J. W. Olinger	"
Bozeman & Butte Mining Co.	Bozeman
Theo. Schweitzer	"
Eagle Mining Co.	Butte
Heracles Mining Co.	"
Montana Hydraulic Mining Co.	"
Silver King Mining Co.	"
Cumberland Davel. & Improvement Co.	Castle
Etta Mining Co.	"
W. H. Metcalf	"
West Cumberland Co.	"
Blackston Mining Co.	Deer Lodge
W. F. Stanley	"
L. O. Flyrie	Dillon
D. Choven	Dulauque
Charles Bowers	Gardiner
Royal Gold Mining Co.	Gold Creek
Carbonate Chert Mining Co.	Great Falls
McKinley Mining Co.	"
Park Consolidated Mining Co.	"
Helena & Butte Co.	Helena
Hester A. Mining Co.	"
Olive Branch Mining Co.	"
Thomas Williams	"
White Rabbit Gold & Silver Mining Co.	Lowiston
Geo. W. Harter	"
Enterprise Mining & Smelting Co.	Livingston
Golden Star Mining & Milling Co.	"
Gold Quartz Milling & Mining Co.	"
P. W. McAdaw	Malden
Barrett & O'Donnell	Martina
Beck & Co.	"
Charles Dickson	"
Leo Fleisher	"
Kessler & Co.	"
McElizotte & Co.	"
Nine Mile Mining Co.	"
John O'Donnell	"
Voth & Co.	"
Last Gulch Placer Mining Co.	Missoula
St. James Consolidated Mining Co.	Neihart
Sau Martina Mining Co.	Plains
Ed Magone	Race Track
Iron Mountain Mining Co.	Superior
West Iron Mountain Co.	"
P. H. James	Washington Bar
Pitch Creek Mining Co.	White Sulphur Spgs.
Mina Consolidated Mining Co.	Wickes

**CYPSUM**

F. C. Potting	Canyon Ferry
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**IRON**

NAME	POSTOFFICE
John Hay & Co.	Anaconda
Atlantic Mining Co.	Clendenin
August Mining Co.	Elkhorn
E. Mollie Mining Co.	"
Montana Central Mining Co.	"
Missoula Iron Works	Missoula
Magnet Mining Co.	New Chicago
H. Berg	Townsend

**LEAD AND ZINC**

George Goss	Augusta
L. S. Goss	"
Phil A. Manly	"
Black Hawk Mining Co.	Clendenin
Dry Fork Mining Co.	"
P. H. Hughes	"
Prude of the West Mine	"
Pusher Mine	"
Silver Bell Mining Co.	"
Dillon Mining Co.	Dillon
Magnet Mining Co.	"
Polaris Mining Co.	"
J. E. Allen	Glendale
H. W. Brown	"
Avon Ferry	"
Thomas Dean	Townsend
J. P. Riley	"

**MICA**

Miehener & Son	Meadow Creek
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**STONE, GRANITE, MARBLE AND ONYX**

Thomas Joyce	Boulder
L. Barrett	Bozeman
J. D. Slemmons	Butte
Cap. E. H. Trorise	Canyon Ferry
Jos. Woodward	"
Farmer Mining Co.	Clendenin
H. C. Foster & Co.	"
Gibson & Co.	"
Lilly & Black	"
May & Edney Mining Co.	"
Paragon & Topland Mining Co.	"
Paris Gibson	Great Falls
Wm. Hordard	"
Montana Granite Co.	Helena
E. M. Jacobs	Lima
James Austin	Millegan
Duncan Robertson	"
T. E. Salisbury	"
T. G. Webber	"
Albert Blake	Placer
E. P. Durmen	"
H. S. Dyer	Townsend
G. G. Watt	"

**NEVADA**

**ANTIMONY**

W. W. Williams	Bernice
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**COPPER**

Wm. Randolph	Humboldt
J. McConnell	Mason Valley
W. K. Spragg	"
Yount, Hamilton & White	Manse
Edward Gillian	Sunnyside

**GOLD AND SILVER**

E. T. Grosby	Aurora
John P. Nohly	"
Ed. Bews & Co.	Aurora
G. Palfani	"
A. Tiffany	"
Austin Mining Co.	Austin
J. Danher	Belleville
L. Lamb	"
Frank Maguire	"
Thomas Perrell	"
P. Bartelle	Belmont
Cobbins & Hancock	"
Harrison Bros.	"
Jas. Lally	"
Geo. Nichol	"
Salvator Mining Co.	"
Stebbins & Darragh	"
Badger Mining Co.	Beowawe
Romney, Engstrom & Co.	"
Frank & Jundson	Bernice
Chas. Kaiser	"
Dani. Keeler	"
John Patch	Bullion
J. P. Raine	"

NAME	POSTOFFICE	NAME	POSTOFFICE	NAME	POSTOFFICE
Standing Elk Co	Bullion	J. J. Campbell	Fort Halleck	C. M. Negman	Manisa
George Williamson	"	F. J. Cowles & Co	"	Wm. & Yonit Bros	"
Candelaria Milling & Water Works Co	Candelaria	Arthur Dorsey	"	Frank Bradley	Midias
Fred Corkhill	"	H. G. Harkless	"	Jas. Coleman	"
John Corlett	"	Victor Metelkoff	"	E. Crane	"
Frank Gallagher	"	F. J. Potter	"	Barl Croce	"
A. Garrard	"	I. N. Sherwood Co	"	W. S. Gage & Co	"
Eugene Gerlach	"	A. W. Wilson	Gatena	M. Lemos	"
Julius Goldner	"	H. Driscoll	"	F. McGeary	"
Richard Greer	"	Mellander Bros	Gardenville	P. Merette	"
George Howard	"	Peter Anderson	"	M. Merten	"
Charles Hill	"	George Brown	"	J. Moraset	"
William Hill	"	H. C. Langberg	Genoa	A. Phillips	"
S. L. McNaughton	"	Monarch Mining Co	Geyser	W. B. Sheehan	"
John Nelson	"	Pay Day Mining Co	Gold Hill	E. Trubel	"
Charles Nelson	"	Imperial Mining Co	"	G. W. Veatch	"
Princess Mining Co	"	Kentucky Mining Co	Hamilton	T. Bray	Mill City
Joe Rayeroff	"	Silver Hill Mining Co	"	J. F. Clark	"
Oliver Roberts	"	Thomas Cornell	"	Peter Noddeck	"
E. Sanchez	"	Geo. C. Goulet	"	J. Phillips	"
W. H. Thomas	"	J. T. Crabtree	"	Chas. Wright	"
A. M. Ardory	Carson City	John Dieldholder	"	Chispa Mining Co	Montgomery
A. A. Bender	"	Arthur Jacobson	"	Montgomery Mining Co	"
Geo. C. Bryson Jr.	"	Louis Lani	"	Woodward Mining Co	"
A. Cohn	"	C. A. Mathewson	"	R. Glyvas	Morey
W. H. Corsler	"	Jerome B. Mathewson	"	J. T. Williams	"
Hoecker	"	John Navea	"	Ford Resamere	Mountain City
Wm. Henry Doane	"	David Ross	"	H. T. Freudenthal	"
Geo. F. Ford	"	Gust Simon	"	Columbus Harris	"
F. Golden	"	James Siff	"	John Huber	"
S. L. Lee	"	Confidence Silver Mining Co	Hawthorne	J. G. Johnson	"
A. Livingston	"	Esmeraldo Mining Co	"	John Johnson	"
M. A. Murphy	"	Fairmount Consolidated	"	John W. McDonald	"
A. C. Pratt	"	Silver Mining Co	"	R. R. McGinnis	"
Otto Shutz	"	S. A. Knaapp	"	Joseph Mining Co	"
E. G. Stevenson	"	Lanonta Consolidated	"	Max Schuen	"
H. M. Yerington	"	Gold Mining Co	"	J. Maney & Co	Oriental
J. Frazier	Cloverdale	R. J. Mining Co	"	M. L. Willis	"
Mr. McNeil mine operator	"	Familio Gold Mining Co	"	A. J. Millick	Osecola
Thomas Mitchell	"	E. A. Waddell	"	Osecola Gravel Mining Co	"
Chas. Bonnie	Gold Creek	Valley Mining & Milling Co	"	B. Bianchi	Palisade
Henry Peters	"	John Corlies	Hicks	George Buchanan	"
E. T. Harrington	Columbia	Ferguson Bros	Hiko	D. Debus	"
C. G. Reid	"	A. W. Greer	"	J. Flynn	"
A. P. Snelair	"	J. B. Gilbert	"	J. Haddow	"
James Davis	Columbus	J. C. Henderson	"	T. R. Jewell	"
James Morrison	"	David Irwin	"	Joe Lansley	"
Mountain Queen Mining & Milling Co	"	John Patocheer	"	A. E. Rand	"
W. W. Byron	Dayton	Lee Rontzang	"	D. Spoltersteg	"
Carson River Dredging Co	"	Joseph Sharp	"	Wm. Trembath	"
J. E. Dionny	"	W. H. Sharp	"	J. Walker	"
J. M. Douglass & Co	"	Willave & McDonald	Holbrook	Brown & Scott	Palmetto
H. W. Ely	"	A. C. Pratt & Co	"	Ferries & Gilbert	"
John Brooks & Co	"	O. C. West	"	Hull & Vodanich	"
Wm. Mathison	"	J. Balhnee	Humboldt	Claude Atchison	Panaca
T. P. Mack	"	L. A. Blakesly	"	Frank Atchison	"
Woodworth Mill Co	"	J. C. Clark	"	Lawson Atchison	"
Robt. McLaughlin	Deeth	G. W. Meacham	"	Joseph Conway	"
C. C. Truett	"	Gage & Co	Jone	A. E. Ellis	"
Mattie Watters	"	Wm. Cant	Lamoille	A. F. Voacham	"
Wm. Anderson	Downeyville	C. & A. Adams	"	W. A. Liston	"
W. T. Cox	"	Forlam & Co	"	W. R. McFadden	"
Bart Croce	"	C. Hargrove	"	D. A. Reeves	"
Henry Leboan	"	D. Ogilvie & Co	"	H. Rich	"
John Meyett	"	R. E. Skaggs & Co	"	George Syllbus	"
John Phillips	"	Pittsburg Cons. Gold Mines	Lewis	L. D. Watson	"
Gilbert Rayeroff	"	Pittsburg Gold Mining Co	"	Bell, Kenler & Reinhart	Paradise Valley
Welsh Bros	"	M. B. Record	"	N. Tover	"
James Hendra	Dun Glen	Antone Babcock	Lida	Ed Becker	Peayine
S. C. Thomas	"	Jos. Cahaly	"	Jacob Chom	"
John Ruser	Dyer	Tom Carter	"	Len Compton	"
Great Western Mining Co	Evangelville	Louis Tietjen	"	Pat Linard	"
T. D. Lexington	"	Upton Tracy	"	F. C. McNeil	"
Wm. Maguire	"	Silver Plume Cons. Silver Mining Co	Lincoln	Mart Pover	"
Walker & Trimble	Ely	Chas. Bell	Lovelock's	E. P. Beganan	Pine Grove
Ely Gold Mining & Milling Co	"	P. K. Reul	"	Ex-Gov. H. G. Blasdel	"
Sol Hill	"	James Blain	Luning	Otto Moses	"
R. A. Riepe	"	S. B. Hager	"	Norton & Kennedy	"
A. R. Watson	"	J. Hancock	"	Wheeler Mining Co	"
Aug. Critts	Empire City	Eli Johnson	"	E. R. Willis	"
H. R. Logan	"	Kenney & Co	"	Naucy Mining Co	Pittsburg
Joe Moore	"	A. Martlenis	"	Mayville Mill & Mining Co	"
E. Williams	"	Santa Fe Mining Co	Meternitt	Morning Star Mining Co	"
J. P. Woodbury	"	E. F. Madlney	"	Norrie Consolidated Gold Mining Co	"
Bowman Mining Co	Eureka	L. Rickerd	Mason Valley	A. H. Barnes	Reno
Eureka Cons. Mining Co	"	D. C. Clark	"	W. R. Chamberlain	"
Jackson Mining Co	"	D. Emerson	"	Jos. E. Chaney	"
Chas. Lane	"	P. Gallagher	"	Phoenix Mining & Milling Co	"
E. E. Phillips	"	J. O. Harra	"	Louis Stevenson	"
Prosper Mt. Mining Co	"	W. C. Ross	"	Wm. Thompson	"
Richmond Co. Mining Co	"	John Black	Manisa	Judge Wm. Webster	Reveille
Richmond Cons. Mining Co	"	Vount. Hamilton & White	"	Jos. Brantley	"
Chas. Rodden	"			Gile S. M. Co	Rioville
J. S. Stevens	"			Geo. A. Bonelli	"
Williamsburg Mining Co	"			J. P. Hansen	"
J. D. Able	Fort Halleck			All. Part	Ruby Hill
				Dunderberg Mining Co	"



NAME	POSTOFFICE
Richmond Mining Co.	Ruby Hill
Boyington & Chase	Rye Patch
Frank Dorman	"
T. M. Howell	"
Humboldt Queen C. & S.	"
M. Co.	"
Antone Kaufman	"
Reese Gold & Silver M.	"
Co.	"
St. Lazarus Gold M. & M. Co.	San Pedro
The Cleveland Quartz Mining Co.	Sierra City
Dayton Gold & Silver Mining Co.	Silver City
Great Republic Silver & Gold Mining Co.	"
Haywood Gold & Silver Mining Co.	"
Independent Gold & Silver Mining Co.	"
Overland Gold & Silver Mining Co.	"
New England Gold & Silver Mining Co.	Skelton
Thos. Bradley	Sodaville
A. L. Sanborn	"
Angus & Bolle	Spring City
J. M. Boncher	"
John Brannen	"
Mat. Beachers	"
R. E. Ireland	"
J. E. Lucas	"
O. F. Mealey	"
E. A. Merrill	"
W. B. Todhunter	"
John & Chas. Phelan	Sprucemont
C. M. Spruce	"
Wells Mining Co.	"
John French	Stollief
John Grohn	"
High Martin	"
Martin Kennedy	Sunnyside
J. Jordan	"
Edward Robinson	"
Wheatley Bros. & Co.	"
Great Western Mining Co.	Sweetwater
A. S. Kilpatrick	"
Mineral Chief M. & M. Co.	"
Monte Cristo Mining Co.	"
Edw. Moran	"
A. P. Sayre	"
Thos. C. Sharp	"
John Sheehan	"
Monitor & Eberhart	Taylor
New Eberhart Mining Co.	"
J. C. Verzan	"
Martin White	"
Wm. Arzyle	Tecoma
Chas. Christy	"
John Cooley	"
Fred Poppey	"
E. Munsee	"
Myers Bros.	"
Wm. Kiley	"
Sackdale Bros.	"
Belle Isle Mining Co.	Tusearora
Commonwealth M. Co.	"
Del Norte Mining Co.	"
Duane Mining Co.	"
Grand Prize Mining Co.	"
Navajo Mining Co.	"
North Belle Isle M. Co.	"
North Commonwealth Co.	"
W. Branching	Twin River
Chicago Mining Co.	"
Chas. Courade	"
John Coon	"
W. Crickshanks	"
J. C. Curly	"
John Foster	"
David Goodan	"
J. M. Gooding	"
John Gooding	"
Jacob Gooding	"
James Graham	"
John Holly	"
Jake Holly	"
Patk. Leonard	"
J. McLeod	"
A. E. Millott	"
J. Morasia	"
A. Pelera	"
Frank Ponano	"
John Ponano	"
S. Reuby	"
Wm. Rodgers	"
T. Tate	"
T. Timen	"
Jacob T. Fresh	"

NAME	POSTOFFICE
S. Verdugo	Twin River
F. Walbert	"
James Willson	"
S. S. Fairbanks	Tybo
Joshua Lucas	"
Ma Alta Mining Co.	"
Phil Maul	"
J. D. Page	"
S. J. Robinson	"
The Tybo Consolidated Mining Co.	"
Reyes Silver Mining Co.	Virginia City
Martin White Mining Co.	Ward
Ed. Harris	Washoe City
E. Robinson	White River
L. Sharp	"
F. Smith	"
Whitely Bros.	"
Beard & Mussey	White Rock
W. D. Fuller	"
Leach & Storff	"
Riddle Bros.	"
J. Chaut & Bro	Willow Creek
J. B. Crandall	"
S. B. Iyer	"
J. Everts	"
J. Geary	"
T. L. Hoppin	"
J. H. Jones	"
E. Jones	"
M. Leonard	"
K. R. McKenzie	"
R. McLeon	"
E. Mortimer	"
E. Pells	"
P. Roberti	"
P. P. Shapp	"
A. Showsbury	"
J. Wilson	"

**IRON**

Rig Creek Mining Co	Austin
C. L. Deady	Belmont
Jackson & Co.	"
Ed. Stone	Bernlee
Monk Wiggins	"
Manuel Abaris	Humboldt
John Sullivan	Lovelocks
J. Sutherland	"
Johann Tompton	Peavine

**LEAD AND ZINC**

James McMillen	Deeth
Thos. Cornell	Hamilton
Geo. C. Coulter	"
J. F. Crabtree	"
John Dieholder	"
Austin Jacobson	"
Ed. J. McEllin	"
Louis Lami	"
C. A. Mathewson	"
Jerome B. Mathewson	"
Alex. Muir	"
John Naves	"
Geo. F. Paul	"
Gust. Simon	"
David Ross	"
James Siri	"
Henry Steede	"
John Black	"
S. Clark	"
C. M. Neyman	"
J. B. Wilson	"
George Jones	Sunnyside

**SALT**

Nevada Salt & Borax Co.	Hollaville
Williamus Salt Marsh	Huntington
Thos. Van Dibble & Co.	Oriental
L. & M. Salt Works	Reno
Sands Springs Salt Co.	Stillwater

**STONE, GRANITE, MARBLE AND ONYX**

F. J. Bremerkampf	Eureka
J. McDonald	Montgomery
Magne Mining Co.	"
Alexander Wise	Winnemucca
Jas. Sey	Zelda

**NEW HAMPSHIRE.**

IRON	
Ruggles & Randall	Grafton
Lewis P. Brown	North Grotton
J. W. Burley	"

**MICA**

NAME	POSTOFFICE
W. A. Rice	Bristol
G. H. Randall	Grafton Center
D. L. Strain	"
E. K. Moulton	Lindbach
Enreka Mica Mining Co.	Nashua
J. S. Kime	North Grotton

**STONE, GRANITE, MARBLE AND ONYX**

F. J. Fuller	Amherst Station
F. R. French	Bedford
Bollins Bros.	Concord
W. H. French	"
J. S. Abbott	Dover
Wm. L. Elder	"
Hall & Empson	"
George & Longmaid	"
D. & C. P. Chesley	Durham
P. P. Pridle & Son	Farmington
R. L. Angier & Co.	Fitzwilliam
Dunn Bros.	"
J. E. Fisher	"
S. M. Hollandsbee	"
D. T. Hayden & Co.	"
H. C. White	"
Peter Dana	Franklin
Huntington & Sullivan	Haver
S. C. Leazar	Haverhill
F. S. Bodwell	Lebanon
F. H. Prent	"
Amoskeag Mfg. Co.	Manchester
F. S. Bodwell	"
M. F. Fitzgerald	"
Warren Harvey	"
Wm. G. Landrey	"
Waterman Smith	"
R. P. Stearns & Co.	"
Horgan Willey	"
L. M. Burns	Milford
J. E. Fields	"
G. F. Parker	"
N. Perlman	"
Estate of J. Sawyer	"
Lenny & Tetto	Nashua
F. Blasdell	North Conway
White Mountain Granite Co.	"
S. Hussey	Quincy
Rochester	"
W. H. Kimston & Son	Rumney
Troy Granite Co.	Troy
F. C. Houlston	West Concord
Carpenter Granite Wks	"
Crowley & Quinn	"
Gay Bros.	"
A. J. Holmes	"
John McGuire	"
H. F. Trussel & Son	"
Boston & Maine Railroad Co.	Wolfboro Jn.

**NEW JERSEY**

**ALUMINUM**

United States Aluminum Metal Co.	Roanont
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**COAL BITUMINOUS**

El Mora Coal Co.	Camden
Sonman Coal Co.	Jersey City

**COPPER**

Vanderhoff & Sayer.	Ogdensburg
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**GOLD AND SILVER**

North Carolina Smelting Co.	Newark
Providence Gold Mining Co.	Plainfield
El Valedista Mining Co.	Trenton

**IRON**

Champion Steel Ore Co.	Batzville
Early Ferru	"
New Jersey Mining Co.	"
Thomas Iron Co.	"
Wispsough Mining Co.	Denville
Crab Iron Co.	Dover
De Hart Mining Co.	"
Hibernia Mining Co.	"
Franklin Iron Co.	Franklin Furnace
Beldvere Mining Co.	Hazen
Beeth Mining Co.	Hibernia
Baker Mining Co.	Mines Hill
Ten Mile Mining Co.	Paterson
J. Auble	Peapack
Forge Hill Mining Co.	Plainfield

NAME	POSTOFFICE
Estate of J. Conper	Port Orain
Mt. Pleasant Mining Co.	"
Port Orain Tunnel Co.	"
Conper & Hewitt	Rhugwood
W. W. Marsh	Shooleys Mt.
Dickeson Mining Co.	Successinua
Crescent Oil & Mining Co.	Trenton
Midvale Mining Co.	Wamaque
Hicksner & Sons	Weldon
Hockshire Sons	Woodport
Albert Richards	"

**LEAD AND ZINC.**

Sterling Zinc & Iron Co.	Franklin Furnace
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**MINERAL PAINT**

W. K. Lyons	Bloomington
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**PHOSPHATE**

Traymore Phosphate	"
Rock Co.	Camden

**SLATE**

Jones & Williams	La Fayette
Owens & Rowland	"
Stanton & Jones	"
Mutton, Anthony & Co.	Newton

**STONE, GRANITE, MARBLE AND ONYX.**

M. R. Kinney	Andover
York & Bittenbender	Belvidere
J. S. Cregar	Callion
A. B. Flowerfield	"
Henry Hoffman	"
L. H. Pearson	Chester
J. P. Nevins	Dover
J. Vermer	"
D. J. Cook	Drakesville
J. H. Murphy	Flemington
Will Clark	Gouverneur
Bonny's Hook Stone Co.	Jersey City
Pemoseot Bay Granite Co.	"

Ausable Granite Works	Keeseeville
O. C. Simpson	McAfee Valley
Vernon Lime Co.	"
C. A. Lightfoot	Milburn
M. M. & J. F. Shanley	Newark
T. Nevins & Son	Orange
J. O. Romke	"
Van Wagner & Duff	Piermont
H. S. Seely	Scarsdale
Stewart Hartsburn	Short Hills
Estate of Allen Hugh	Stanhope
S. J. Sackett	Tarrytown
Gordon & Co.	Thurso

**NEW MEXICO**

**COAL BITUMINOUS**

Gallup Coal Co.	Albuquerque
Montezuma Mining Co.	Albiqui
San Pedro Coal & Coke Co.	Chalerge
Cerrillos Coal & Iron Co.	Cerrillos
Mr. Stephens	Farmington
J. M. Kinsler	Fort Stanton
John Lecher	"
Aztec Coal Co.	Gallup
Crown Point Coal Co.	"
Angel Coal Co.	Monero
J. A. Hunt	Raton
Sugarite Coal Co.	Stanhope
J. J. Baca	Socorro

**COPPER**

Broad & Craig	China
C. E. Summers & Bros.	"
John Bailey	Kelley
Benj. Bishop	"
James Blake	"
L. S. Church	"
Connelly Bros	"
J. M. Denny	"
Kern Foley	"
Joe Garner	"
W. A. Graham	"
James Metcfe	"
Mullen & Krewitz	"
C. M. Over	"
G. W. Rauer	"
David Scott	"
Peter Strozzl	"
Virginia Consolidated Mining Co.	Baton
San Pedro Copper Co.	San Pedro
Santa Fe Copper Co.	"

NAME	POSTOFFICE
Alison S. Copper Mining Co.	"
Southwestern C. & I. Co.	Santa Rita

**GOLD AND SILVER**

Hendall Mining Co.	Abiquiu
Pitoburg Mining Co.	"
Silver Salt Mining Co.	Albuquerque
W. P. Funnell	Alma
L. Lugin	"
Ohm N. Look	"
Uncle John Co.	"
Claude Mining & Milling Co.	Baldy
Bailey & McDonald	Garbise
J. H. Kestler	"
Steeple Rock Mining Co.	Cerrillos
M. B. Brown	"
San Pedro & Canon Del	"
San Anton Mining Co.	"
C. A. Whited	"
Danicon Archuleta	Cerro
Jose La Luz Atencio	"
Pedro A. Gomez	"
Vicente Gomez	"
Black Knight Mining Co.	Chloride
J. S. Brown	"
Ansley Crawford	"
Dogfish & Davisson	"
H. A. McGowan	"
W. Peterson	"
W. O. Thompson	"
A. O. Bailey	Columbus
Columbus Marble & Mining Co.	"
J. F. Hyland	"
Clark & Brown	Cooks
John H. Frye	"
Hudgens & Elliott	"
Onof & Overton	"
Shultz Bros.	"
Peter Spry	"
Teel & Poe Mining Co.	"
Steins Pass Mining & Reining Co.	Deming
Mormon Gold Mining Co.	East Las Vegas
J. W. Jones & Co.	Frisco
Moses Kestson & Co.	"
Berry & Sibold	Georgetown
J. H. Bragan	"
Bragan & Potter	"
Money Star Co.	"
F. L. Fraziers	Golden
John T. Kelly	"
J. B. Mayo	"
Geo. Morrison	"
Santa Fe Copper Co.	"
Frank White	"
Joe Billings	Gold Hill
Boner & Son	"
Clark, Sullivan & McKnight	"
Copper Bros. Mining & Milling Co.	"
D. R. Cunningham	"
Giddings Bros.	"
Geo. Hughes	"
E. J. Jax	"
R. B. Jones	"
Henry Keal	"
W. H. Kibler & Keeley	"
Miller & Zitt	"
H. C. Myers	"
Jas. Patterson	"
Major Pritchard	"
Henry Schroeder	"
Standard M. & M. Co.	"
James Sterling	"
Snyder Bros	"
E. E. & J. O. Toney	"
A. E. Walker	"
Win. Werney	"
White Tower M. & M. Co.	"
J. F. Williams	"
J. O. Williams	"
John E. Abbott	Hachita
American Mining Co.	"
S. Barwell	"
William Catin	"
B. Ferrin	"
John Gleason	"
W. A. Patton	"
Home-stake Mining Co.	Hermosa
G. C. Allen	Hillsboro
S. Alexander & Co.	"
Brooks & Clark	"
Copper King Mining Co.	"
Dickey & Larny	"
Hirsch & Roche	"
W. S. Hoveyell	"
J. W. Kennedy	"

NAME	POSTOFFICE
C. L. Larson	Hillsboro
P. W. Parker	"
G. O. Penant	"
W. C. Purple	"
Richmond M. & M. Co.	"
A. M. Story	"
J. M. Webster	"
Scribilo Ansuers	Juan Tafoya
Juan Ansuers	"
Mannel Ansuers	"
Guadalupe Barreiras	"
Molina Benesolado	"
Bitanen Bitoriana	"
Duiderio Borreras	"
Mannel Cassari	"
Cassin Enlapis	"
Malina Entepis	"
Grego Friolo	"
Justiniano Garelo	"
Sofronio Garelo	"
Silvestre Gavaldon	"
Morsotino Huteres	"
Malina Juan de Jesus	"
Mannel Samora Jose	"
Melchior Molina Jose	"
Baca Liberato	"
Baca Pedro	"
Camero Lisero	"
Ineserico Marques	"
Estoliano Marques	"
Jesus Marques	"
Juan Rey Marques	"
Benedicto Marques	"
Serendino Martinez	"
Ronald Mayo	"
Arnado Molina	"
Elias Molina	"
Jermin Molina	"
Jose Romolo Molina	"
Jose Moya Pedro	"
Molina Juan Bafare	"
Androcco Sanchez	"
Ramon Perna	"
Manuel Torrer	"
Fernin Torres	"
Molina Vidal	"
The Graphic Mine	Kelly
The Juanita Mine	"
The Kelly Mine	"
Patterson Bros	"
Mar Barber	Kingston
W. Boyle	"
Caledonia Mining Co.	"
S. S. Call	"
Frank Campbell	"
Constock Mining Co.	"
Cumberland Mining Co.	"
J. Brummond	"
Enterprise Mining Co.	"
Gray Eagle Mining Co.	"
Col. A. W. Harris	"
R. J. Hill	"
Ed. B. Hoos	"
Illinois Mining Co.	"
Iron King M. & S. Co.	"
A. Kinney	"
H. Raff	"
Templar Mining Co.	"
Virginia Mining Co.	"
E. Walters	"
R. Willis	"
Win. Cotton	"
G. A. Hamwell	Lake Valley
Tom Handel	"
Ike Knight	"
Jas. McKinna	"
A. D. Monroe	"
Maj. Morgan	"
J. H. Perkins	"
S. A. Schlenburger	"
Win. S. Standish & Finch	"
T. A. Tate	"
F. Wedgwood	"
J. L. Williams	"
C. Wexen	"
A. Wright	"
George Wright	"
J. E. Canera	Las Cruces
Inter-Republic Gold & Silver M. & M. Co.	"
L. Lapout	"
Schreuter Mining Co.	"
The Stephenson-Bennett	"
W. Cox, Mining Co.	"
Alpha Gold Mining Co.	Las Vegas
Free Coinage Mining Co.	"
Jacarilla Flacer Mining Co.	"
Whitehead Mining Co.	Littleton
W. C. Tonkin	Lordsburg
R. Foley	Magdalenburg
Olvis Bros	Orma
Sanchez & I. bera	Panoso

NAME	POSTOFFICE
Beatrice Mining & Milling Co.	Pinos Altos
A. S. McDonald	"
E. V. Newsham	"
Pacific Gold Mining Co.	"
H. H. Stanley	"
Watts & James	"
V. C. Gilbert	Onesta
Four Creeks Mining Co.	Raton
J. G. Fawcett	San Antonio
E. Montayo	"
W. F. Palmer	"
J. Woodruff	"
Fred W. Keith	San Marcial
Simon Leyser	"
Gold Eagle Mining Co.	San Pedro
John D. Allen	Santa Fe
Cash Entry M. Co.	"
Pinion Mining Co.	"
Azure Mining Co.	Silver City
Benneit & Popper's Grand Central Mine	"
Grout Mining & Milling Co.	"
Hanover Improvement Co.	"
Lane Mountain Mining Co.	"
Manhattan Gold Co.	"
Pacific Gold Mining Co.	"
The Silver Cell Mine	"
W. H. Byerts	Socorro
Wm. De Groot	"
Fred Dorsey	"
Wm. Glasston	"
Adna Lamson	"
L. J. Metcalough	"
A. L. Mann	"
J. M. Robinson	"
J. S. Stiffen	"
C. H. Sperling	"
T. R. Brandt	Stoltz's Pass
Balling Bros. & Friedwald	"
Harwood & Williams	"
H. H. Bell	Taos
Bennett & Miller	"
L. W. Brown	"
Capt. John Kemp	"
Geo. B. Berry	Tres Piedras
Nogal & Bonito Mining Co.	White Oaks
Anson Silver Mining Co.	Whitewater
Julius Wilgenhauser	"

## IRON

Briggs & Doyle	Santa Rita
A. E. Dawson	Whitewater
J. B. Gilechrist	"

## LEAD AND ZINC

Antonio Quintana	Cerro
Sefirino Lara	Questa
E. S. Redding	"

## MICA

Henry Colard	San Antonio
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## STONE, GRANITE, MARBLE AND ONYX

Webster Stone Co.	Albuquerque
San Pedro Quarry & Lime Co.	Carthage
Harry Newton	San Antonio
Southern Pacific Land & Quarry Co.	"
Aztec Onyx Co.	Santa Fe
J. B. Frasier	Socorro
G. H. Thwaites	"
Best & Sellh	White oaks
Hewitt & Watson	"

## NEW YORK

## ALUMINUM

Oliver Aluminum Co.	Brooklyn
392 Bergen st.	
Cowles Electric Smelting & Aluminum Co.	Lockport
Lower Cal. Sul. Mining & Manufacturing Co.	New York
155 Broadway	

## ASBESTOS

Gardner Pulp Co.	Gouverneur
Central Dominion Pulp Co.	"

## COAL BITUMINOUS

NAME	POSTOFFICE
Riverview Coal & Mining Co.	Buffalo
Co. Dominion Lumber Co.	New York City
81 Broadway	
Enterprise Co.	"
12 Broadway	
Federal Valley Coal Co.	"
McKinney Coal & Coke Co.	"
72 Broadway	
New York Underwriters & Indemnity Co.	"
Stewart Bldg.	
New York & W. Virginia Coal & Iron Co.	"
91 Broadway	
Standard Coal & Timber Co.	"
and 33 Broadway	
White Cloud Copper Mining Co.	"
45 and 47 Wall st.	
A. H. Davis	Syracuse
<b>COPPER</b>	
Copper Queen Consolidated Mining Co.	New York City
66 John St.	

## GOLD AND SILVER

Etna Mining Co.	New York City
36 Broadway	
Barcelona Mining Co.	"
45 Broadway	
Captain Mining Co. of Colorado	"
129 Broadway	
Cardinal Bullion Co.	"
15 Wall st.	
Dreadwood-Terra Mining Co.	"
15 Broad st.	
Enterprise Mining Co.	"
29 Wall st.	
Gold Rush Mining Co.	"
14 College pl.	
Hammott Mining Co.	"
Temple st.	
Levi Gold Mining Co.	"
45 Broadway	
S. Matherson	"
Monseratt Silver Mining Co.	"
106 Times Bldg.	
Oasis Mining Co. of Nevada.	"
206 Broadway	
Oxford Gold Mining Co.	"
45 Broadway	
S. Dakota Mining Co.	"
735 Pearl st.	
Sterling Mining Co.	"
43 Wall st.	
White Water Blader Co.	"
78 William st.	
German Mining & Milling Co.	Rochester
Kootenai Placer Mining Co.	"

## GYPSUM

H. W. Roesa	Accord
A. E. Edwards	Fayetteville
Lanning & son	"
G. Taylor	"
A. D. Miller	Phelps
Cayuga Plaster Co.	Union Springs
Thos Conover	Victor

## IRON

London Iron Co.	Amenia
California Iron & Ore Co.	American Lt. Mines
Relief Mining Co.	Boston Corners
Peter Troumley	Clayburg
Franklin Iron Works	Clinton
Abundancia Mining Co.	New York
29 Broadway	
Aluminum S. & Alloy Co.	"
145 Broadway	
Herman Dehr & Co.	"
Bilharz Ore Process Co.	"
47 Broadway	
Calorin Co.	"
2 Wall st.	
Camaguey Mining Co.	"
41 Wall st.	
Confidence Mining Co.	"
29 Wall st.	
Evangeline Gold Mining Co.	"
45 Broadway	

NAME	POSTOFFICE
Hutehinson-Jenkins Steel Co.	New York
5 Beekman St.	
Isle-Royal Mining Co.	"
The Mackirly Mining Co.	"
Magnetic Ore Milling Co.	"
Plutzer Bldg.	
New York & Puerto Prince Mining Co.	"
45 Broadway	
Ogden Electric Power Co.	"
49 Wall st.	
Tennnessee Oil, Gas & Mineral Co.	"
15 Wall st.	
Whitehead Mining Co.	"
O. S. Crosby	Port Henry
Manhattan Mining Co.	Sharon Station

## LEAD AND ZINC

Hanear Zinc & Lead Mining Co. of New Jersey	New York
120 Broadway	
National Lead Co.	"
Hemus of Philippe-Francois Bonant Title Co.	"
45 Broadway	

## MICA

Henry Koons	Buffalo
Alex. Mica Co.	New York

17 Broad st.	
Crystal Mica Mining, Milling & Mineral Co.	"
36 Maiden lane	
J. O'Neil & Co.	"
147 John st.	
Palestino Mica Co.	"
27 Peck slip	
New York State Mica Mining Co.	Utica
J. S. & M. Peckham	"

## MINERAL PAINT

Clinton Metallic Paint Co.	Clinton
Rosie Iron Ore Paint Co.	Ogdenburg
Ben Horner & Co.	Onesta
Ontario Metallic Paint Co.	Rochester

## NICKEL

National Nickel Mining Co.	New York City
56 Broadway	

## PHOSPHATE

Aemo Fert. Co.	Newton
Colonizing Mag. & Chemical Co., Ltd.	New York
Excelsior Polble Phosphate Co.	"
Foots Commercial Phosphate Co.	"
80 Broadway	
International Mica & Phosphate Co.	"
Albion River Mineral Land Co.	Syracuse

## SALT

Bliss Salt & Oil Co.	Bliss
Castle Salt Co.	Castle
Leicester Salt & Mining Co.	Castleville
Conesus Salt & Mining Co.	New York
Genesee Salt Co.	New York
Mercantile Exchange	"
New Florida Salt Co.	"
70 Broadway	
Lehigh Salt Mining Co.	Rochester
W. E. B. Lloyd	Solvay
E. A. Alford	Syracuse
American Dairy Salt Co.	"
G. A. & A. Clark	"
Cape Cod Course Salt Co.	"
Draper & Porter	"
Foster Ely	"
Empire Course Salt Co.	"
O. Franchot & Co.	"
Goddies Course Salt Co.	"
W. Killian	"
W. D. Kirkpatrick	"
D. Lynch	"
A. McKeever	"
J. Maloney	"
A. Martin	"
A. L. Mason	"
P. W. Peck	"
P. Pendergast	"

NAME	POSTOFFICE
M. Prell	Syracuse
P. Rogers	"
Salina C. & F. Salt Co	"
Salina S. C. & S. Co	"
Salt Springs & Solar Salt Co.	"
M. & J. Salmon	"
D. P. Scandon	"
Solvay Process Co.	"
L. Stevens & Co.	"
E. Tracy	"
Turks Island C. S. Co.	"
Union Course Salt Co.	"
R. Youngs	"
Bradley Salt Co.	Warsaw
Empire Dairy Salt Co.	"
Hewley Salt Co.	"
Standard Salt Co.	"
Warsaw Salt Co.	"
Murphy, Slack & Davis	Webb City

**SLATE**

Excelsior Slate Co.	Camden
Brockway & Hughes	Granville
Alex. Clayton	"
H. K. Kays & Co.	"
Warren Slate Co.	"
Mrs. G. Williams	"
R. R. Jones & Co.	Middle Granville
R. B. Pritchard	"
Bangor Central Slate Co.	New York
18 Burling slip.	"
Columbia Slate Co.	"
202 Broadway	"
Pearlry Slate Co.	"
101 E. Seventeenth st.	"
White Oak Slate Co.	"
18 Burling slip.	"
C. H. Pierce	Salem

**STONE, GRANITE, MARBLE AND ONYX**

Jas. Gazely	Albany
Hewitt Bros.	Amsterdam
Manufacturers' Granite Co., Ltd.	Brooklyn
40 Court st.	"
Buffalo Stone Co.	Buffalo
J. Giese Jr.	"
157 Laury av.	"
Gration & Jennings	"
Foot of Main st.	"
Vermontal Stone Co.	"
Empire Marble Co.	Catskill
John A. Lee	"
Fieldler & Co.	Clarksville
B. B. Broadman	Clifton Springs
Daniel Aker	Cobleskill
Bedley & Scandon	"
C. & A. Stillwell	Collamer
A. D. Lyman	Emira
Clark Snook	Eyeleville
Spidner & Kranker	Fort Plain
Wm. E. Weeks	Garbutt
J. G. Barges	Goodyear
W. H. Freeman	Gouverneur
L. M. Gardner	"
F. H. Hault	"
J. H. McDonald	"
Northern New York Manufacturing Co.	"
Henry Patand	"
Daniel Peck	"
J. M. Sparks	"
J. Tracy	"
P. R. Whitney	"
W. G. Lefurgy	Hastings
F. W. Jones	Hudson
John Stupper	Ilion
E. B. Alford	Janesville
Amiable Granite Works	Keseville
J. P. Davis	Kerhonkson
Wm. Vandover	"
Stubbell & Buckert	Kerrigan
Upper Blue Stone Co.	Kirston
W. H. Krom	Kys-rike
Dani. Lawrence	"
Geo. Lawrence	"
P. Cookings	Liverpool
Mrs. C. B. Murray	"
Ariston Marble Co.	Lockwood
L. D. Shurman	Marcellus Falls
Jas. Bohan	Mindus
Biram Anisworth	Middle Granville
D. J. Tyson	New Dorp
American Rose-Garnet Co.	New York
9 W. Thirtieth st.	"
Blue-Ridge-Slate & Tile Co.	"
80 Broadway	"
Brown, McAllister & Co	"
43 W. Fourteenth st.	"
Geo. Chase	"
10th st. and First av.	"

NAME	POSTOFFICE
Electro Silica Co	New York
Gale City Stone & Filter Co.	"
21 Park row	"
Georgia & Florida Investment Co.	"
280 Broadway	"
G. H. Hummel	"
153 Flitton st.	"
Palisades Trap Rock Co.	"
261 Broadway	"
Rersof Mining Co.	"
146 Broadway	"
C. E. Taynter & Co.	"
239 Broadway	"
J. Roberts	Philadelphia
G. H. Kitch & Bros.	Port Chester
L. W. Bond	"
F. Summer	"
F. C. Lauer	Rochester
41 Pinnacle av.	"
Rochester Medina Stone Co.	"
307 Wilder Bldg.	"
A. Kerr, Bro. & Co.	Rock Glen
John Leveley	Shelby Basin
The Oswegatchie Marble Co.	Syracuse

**TIN**

Judge Brindle	Binghamton
American Tin Co.	New York
53 Broadway	"

**NORTH CAROLINA**

**COAL BITUMINOUS**

Greens Coal Mining Co	Walnut Cove
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**COPPER**

A. W. Hendricks	Blue Wing
John H. Reed	"
Rife & Logan	"
W. E. Russell	Chandlers
Cambridge Copper Mining Co.	Jamestown
Deep River Mining Co.	"

**CORUNDUM**

Aeme Emery Wheel Co.	Webster
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**COLD AND SILVER**

Tyra Gold Co.	Bon Salem
W. W. Davis	Eldorado
Jesse Morris	"
Hoover Hill Gold Mining	"
Hoover Hill	Marion
Hon. Joseph Morris	"
W. H. Roberts & Co	"
John Stevens	"
Wm. Carter	Nails
Nelson Russell	"
J. B. Lamer	Salisbury
Thomas Gold Mining Co.	Spartanburg
J. P. Harper	Troy

**IRON**

Abernathy & Porison	Bakersville
D. A. Bowman & Parnell	"
Isaac McKinney & Buchanan	"
J. L. Hyatt	Burnsville
L. H. Smith	"
J. W. Young	"
R. J. Hattelow	Elk Park
A. F. Brevard	Iron Station
W. A. Bailey	Mocksville
John L. Worth	Mount Airy
J. C. Doodson & Sons	Pilot Mount

**MICA**

F. A. Hull	Ashville
Penman & Co.	"
Jesse Jones	Barker
G. J. Ray	Burnesville
Louis McCarth	Celo
Steve M. Pitman	Cranberry
Pepper Mining Co.	Danbury
W. J. Thomas	Doboy
E. S. Dwyer	E. Laport
W. B. Childers	Estatoe
Isaac Cox	"
Burton Grisson	"
E. S. Eldridge	Engenia
J. C. Woods	Fidelity

NAME	POSTOFFICE
T. J. Gouge	Flinty Branch
W. G. Bulgin	Franklin
T. C. Cunningham	"
E. H. Franks	"
Dr. J. M. Lisle & Son	"
D. M. Glenn	Glenn
H. Hawley	Hayesville
F. Z. Meunier	"
C. G. Nienninger	Horse Cove
J. T. Moorehead	Leaksville
Wm. Day	Lenoir
S. Lander	Linsolton
Jas. Bressley	Lincolville
J. G. Edge	"
T. H. Young	"
C. Grimshaw	Mantvale
W. C. Norton	Palmer
J. L. Smith	"
A. Blanton	Shelby
D. A. Elliott	South Toe
G. W. Caraway	"
S. J. Murphy	"
Geo. Robinson	"
M. Westfall	"
J. D. English	Spruce Pine
A. W. Sullins	"
Equitable Mfg. Co.	Sylva
A. J. Long	"
E. Burnett	Three Forks
W. P. Woods	Tuckaseeiger
J. P. Fratz	Webster
Nathan Coward	"
Alfred Hall & Sons	West Mills
Wm. West	"
Thos. Grimshaw	Whiteside Cove

**PHOSPHATE**

North Carolina Phosphate Co.	Castle Hayne
Rory Point & Pender Phosphate Co.	Rocky Point

**SLATE**

Stanley Slate Quarry	New London
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**SOAPSTONE**

Notto Consolidated Marble, Iron & Tale Co.	Klinsey
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**STONE, GRANITE, MARBLE AND ONYX**

Bessemer City Mining & Mfg. Co.	Bessemer City
W. P. Mills	Beta
Grimm Brownstone & Imp. Co.	Carthage
T. Taylor	Chandlers Grove
Johnston & Elliott	Charlotte
J. W. A. Payne	Cowates Ford
L. A. Ridsal	Drumville
J. M. Wilkinson	Gulf
W. S. Russell	McAdensville
C. Hope	"
Henry Thomas	"
Flint Spring Mining Co.	New London
R. D. Ormand	Old Furnace
J. A. Torrence	"
J. A. Ranzor	Rock
J. J. Basinger	"
David Beaver	"
F. B. Arendell	Salisbury
J. D. A. Fisher	"
Pearce Granite & Construction Co.	"
Pink Granite Co.	"
W. H. Reinsner	Troy
E. E. Wade	"
Wadesboro Brown Stone Co.	Wadesboro
Wadesboro Granite Co.	"
J. R. Thomas	Whittier

**NORTH DAKOTA**

**COAL BITUMINOUS**

Missouri Slope Coal Co.	Sims
Northwestern Coal Co.	"
Sims Coal Co.	"

**OHIO**

**COAL BITUMINOUS**

J. H. Burt	Akron
Deminson Coal Co.	"
Excelsior Coal Co.	"
W. S. Heffer	"
J. S. Jacobs	"

NAME	POSTOFFICE	NAME	POSTOFFICE	NAME	POSTOFFICE
H. E. Loomis	Akron	J. H. Earnshaw	Columbus	David Williams	Kitchen
T. E. McIn	"	son & El Board of Trade	"	Benninger & Betch	Kranroy
J. F. Seiberling	"	Haydenville Mining &	"	Peter Zimmermann	Leontonia
M. Seiberling	"	Mfg. Co.	"	Zimmermann & Long-	"
Superior Mining Co	"	Maynard Bros.	"	necker	"
J. W. Waggoner	"	Ohio & Western Coal &	"	Oregon Coal & Naviga-	Libby
L. Allen	Algonquin	Iron Co.	"	tion Co.	"
Jos. W. Bracken	"	Sterling Coal & Coke Co.	"	Wm. G. Halbert	Lick Run
Alliance Block Coal Co.	Alliance	John Conley	Coshocton	S. N. & W. G. McTullough	Linton
Whim & Geo. Battershell	"	John L. Davis	"	W. Greener	Lyondale
W. H. Elliott	"	Davis Bros.	"	Gilman & Gold	McArthur
Aswaburg Mine	Aswaburg	J. H. Robison	"	J. H. Patcher	"
Erie Coal Co	Athens	J. C. Arsel	Creola	Enos Winters	"
Reading Coal & Coke &	"	H. Thomas & Co.	Cuyahoga Falls	O'Neil & Tague	Maloney
Ohio	"	Mrs. E. Morris	Danford	M. & P. Tague	"
Bardle & Co.	Auburn	Lacey Coal & Mining Co.	"	Myers & Day	Magadore
Northern Coal & Stone	"	Almsworth & Lutz	Dennison	Bailey & Sogard	Malohn
Co	Bannock	Jesse Geel	Doersville	P. V. Daugherty & Co.	"
Wm. Harvey	Barnesville	Wm. Goller	"	Robert Applegarth	Martin's Ferry
E. Knauer & Bro	"	Huston Coal Co.	Diamond	Hy. Hellings	"
R. H. Madden	"	Scott Coal Co.	"	Helling Bros	"
E. Francis Walton	"	Orrin Ballou	Dillon	Central Coal Co.	Massillon
N. S. Boggs	Barton	East Hill Coal Co	"	Elm Run Coal Co.	"
Glen Coal Co	Bellaire	Wm. Goller	Doylstown	Millport Coal Co.	"
John Musgrave	"	Hy. C. Galehouse	"	Union Coal Co.	"
Patrick Seidell	"	Joseph Lasher	"	West Massillon Coal Co	"
Ralph Trueman	Bolbit	Saml. Bell	East Liverpool	Manufacturing Co.	Miamisburg
Cooperative Coal Co.	Bergholz	Matthew E. Myers	"	Emt Sauer	Middleport
Yellow Creek Coal Co	"	Chas. Hall & Son	East Liverpool	Thomas D. Scott	"
E. O. Cole	Big Run	John W. Smith	"	Bowen Bros	Millersburg
Federal Mining Co	"	Stratton, Hinkle & Strat-	"	J. H. Harpster	"
Nathan Bixler	Bolivar	ton	"	Mast Bros.	"
East Massillon Coal Co.	Bowestown	Jerry Morrow	Empire	Edward Sharp	Mineral Point
Andrew Wilson	"	Clinton Bethel	Empis	C. E. Brothers	"
Elm Mill Co	"	A. Conron	"	Davis Co.	Mineral Ridge
Bird & Conway	Bridgeport	H. C. Fisher	"	Baldwin & Williams	"
Boston & Porter	"	C. W. Howell	"	Eacoom Mining Co	"
Koehline Bros.	"	John C. Howell	"	H. J. Hughes	"
A. Meister	"	D. R. Humphries	"	Wm. Hutchings & Co.	"
Pittsburg & Wheeling	"	Robt. Kirk	"	Jones & Griffiths	"
Coal Co.	"	J. H. McLean & Co	Forrestdale	D. H. Lewis	"
A. Gilchrist	Bright	Crain L. Steed	"	E. Nicholas & Co.	"
Squadding Iron Co.	"	John White	"	Deaneck Coal Co	"
Frank Ray	Buchtel	A. C. Cochran	Frazeysburg	Warner Coal Co	"
Nelson Bronson	Bucks	Jas. McCann	"	Watkins & Daniels	"
Addison Treatie	"	R. E. McCann	"	Williams Coal & Iron Co.	"
Burr Oak Coal Co	Burr Oak	Jacob Nathan	"	John Hutchings	Mimersville
Burt & Hoopman	Byesville	W. H. Morgan	Fredricksburg	Mimersville Coal Co	"
Buckingham & Todd	Cambridge	Wm. Good	Gard	Thos. Parker & Bro.	"
Cambridge Coal Co	"	Garfield Coal Co.	Girard	Zihl Salt Furnace Co	"
Robbins & Cochran	"	Morris Coal Co	"	Joseph Lawault	Minerton
Scott Coal & Salt Co.	"	Tom Corwin Coal Co	Glen Boy	J. W. Housler	"
Jas. A. Smith	"	Glenwood Coal Co	"	John L. Lewell	"
Harvey Gibbs	Canal Dover	Superior Coal Co	Gloster	Stephenson & Keek	"
J. C. Lind	"	Jos. Vonker	Gold Beach	Staffler & Devaro	Monday
J. C. Newman	"	Golden Cooperative Coal	"	J. J. Robertson	Mt. Union
Poun Iron & Coal Co	"	Co.	Golden	Morris Coal Co	Murray
Osmond Salmon	"	Greendale Furnace Co.	Goldendale	Wm. Barber	Nelsonville
Scott & Krill	"	Hy. Barries	Harlem Springs	Cutcher, Parker & Wil-	"
P. Stockdale	"	James George	"	son	"
Wagner & Worthington	"	A. Moorehead	Harmony	Jumpser Bros. & Lamp	"
Winz Bros	"	Jos. Hawes & Son	Hawkes	min	"
Hoover & Simmons	Canal Fulton	O. L. Hawkes	"	Maple Hill Coal Co	"
Coal Co	"	Henry Diek	Hopewell	Nelsonville Coal & Coke	"
Domestic Coal Co	Canton	J. M. Morrison	"	Co	"
Henry Mumich	"	G. L. Porter	"	New Pittsburg Coal Co	"
Sm Coal Co	"	Joseph Porter	"	Nathan Pickett	"
H. B. Mullin	Cartwick	Isaac Sellers	"	Wallace & Brooks	"
Austin & Faust	Carrollton	C. N. Clinegan	Hubbard	Jas. W. Houston & Son	"
P. Moody	"	Thos. R. Matthews	"	Woodard & Ferrell	"
James Tripp	"	Perry Wolf & Co	"	Shawnee & Ironpoint	"
Stone Bros.	Cedar Run	Wallace Barnfield & Co	Irontdale	Coal Co	Newark
J. R. Brown	Chapman	John A. Blackwell	Ironton	W. W. Morris	Newcomerstown
James Chambers	"	W. E. Enninger	"	Dallas Feigley	New Lexington
Carbondale Coal Co	Chillicothe	Jos. Gillard	"	Jackson & Wright	"
Madeira Coal Co	"	Solomon Grixel & Son	"	Central Mining Co.	New Lisbon
Guy Sampson & Co	Churchill	John J. Johnson	"	Little Beaver Creek Coal	"
Consolidated Coal Co.	Cincinnati	S. E. Kemp	"	Co	"
David Barnhize	Cleveland	Lawrence Iron & Nail Co.	"	Ohio Cement Co.	"
The Consumers Coal Co.	"	Thos. Miller	"	Ohio Land & Coal Co	"
Coshocton Coal Co	"	N. V. & Ohio Iron &	"	Saratoga Gas & Steam	"
Getz Bros & Co	"	Steel Co	"	Coal Co	"
Ellsworth & Morris Coal	"	Richard Bartlett	Jackson	Saratoga Mining Co.	"
Co	"	Buckeye Co. Iron Co	"	Clayton Hall	New Milan
Manufacturers' Coal Co.	"	Centre Valley Coal Co.	"	Brook Hill Coal Co	New Philadelphia
V. & Ohio Coal Co	"	The Cornelia Coal & Iron	"	North Bend Coal & Coke	"
Ohio & Pittsburg Coal	"	Co	"	Co	North Bend
Mining Co.	"	Franklin Coal Co.	"	Philip Eberhart	North Industry
Osborne Coal Co	"	Louis Gibson	"	F. & H. Lippin	"
Osborne Mining Co.	"	Hard Coal Co	"	Pitts., Western & Lake	"
J. H. Sommer	"	Kyle Coal Co	"	Erie Coal Co.	Norwalk
Turner Coal Co	"	Mark Landrum	"	Elijah Rice	Osundub
Tuscarawas Valley Coal	"	Andrew Law	"	The Filer Coal Co.	Palmyra
Co	"	John Law	"	D. Haines	Paris
Valley Coal Co	"	Lewis & James	"	W. A. Taylor	"
Cowell & Poes	Coal Run	James Newport	"	Franklin Walker Jr	"
N. S. Keever & Son	"	Tropic Iron Co	"	W. D. Fletcher	Pondleton
Coalton Coal Co.	Coalton	Willard Coal Co.	"	J. Garrett	Philo
Holliday & Co	Columbiana	Harris Coal Co	"	Sonder & Silo	Pomeroy
W. B. Brooks & So	Columbus	James W. Reed	Kilgore	Charter Oak Coal Co	"
Columbus & Easter Coal	"	Wm. L. Gallien	Kilbuck	Dohney Mining Co	"
Co	"	Sheridan Coal Co	Kitchen		

NAME	POSTOFFICE	NAME	POSTOFFICE	NAME	POSTOFFICE
Mrs. Mary Davis	Pomeroy	Calumet Clay Co.	Calumet	E. H. Franke & Son	Bloomville
Durst & Hennessey	"	Crown Fire Clay Co.	Canal Dover	Kohler & Geiger	"
Frank Hess	"	Anchor Tile & Clay Co.	Canton	Ridler & Greenwald	Bluffton
J. M. Strider	"	Champion Pottery Co.	"	Bruce Hillton	Brunersburg
Austin Vorhies	"	Empire Fire Clay Co.	Empire	Excelsior Sewer Pipe Co.	Calumet
Ed. Williamson	"	Royal Fire Clay Co.	Malvern	C. W. Boley	Canal Dover
Kelly Coal & Coke Co.	Portland Station	Newman Creek Clay Co.	Massillon	Kitzmiller Stone Co.	Canton
Samuel Fielding	Powhatan	United States Fire Clay Co.	"	L. J. Kemperley	Carey
L. E. Ritchey	Radcliff	"	New Lisbon	"	Carroll
Adam Wyatt	Radcliff	Etta Fire Brick & Clay Co.	Oak Hill	R. Stanzel	Centerville
A. P. Simons	Roscoe	Oak Hill Fire Brick & Clay Co.	"	J. S. Brooker	Chambersburg
Martin Miller	"	Standard Pottery Co.	Salineville	Charles Satter	Chargin Falls
New York Crescent Mining Co.	Roseville	Forest City Fire Clay Co.	Toronto	Christ Adler	Cincinnati
Roseville Mining Co.	"	Ohio Valley Fire Clay Co.	"	Ashman & Glasgow	"
Jos. B. Butler	St. Clairsville	Waynesburg Brick & Clay Co.	Waynesburg	John Boyle	"
Jas. Ashman	Salem			L. C. Bucute	"
Robert Anli	"			James P. Byrne	"
Angus Campbell	"			Joseph Hyrne	"
David Gay	"			H. S. Collins	"
Gordon & Stoffsmith	"			Dryer Bros.	"
Ernst Sharpack	"			James Foster	"
James Sheen	"			Joseph Craft	"
John C. Sheppard	"			Isaac Gravenor	"
Jas. C. Trotter	"			Hann & Nagley	"
David L. Zimmerman	"			Hoosier Stone Co.	"
Jas. McKittick	Salina			E. Hoyce & Son	"
Brown Coal Co.	Salineville			David Hummel	"
H. C. Huston	"			John Kasperlein	"
E. Jones	"			Kellinghaus & Knissle	"
James Madison	"			Joseph Kemper	"
Ohio & Pennsylvania Coal Co.	"			Kentucky Stone Co.	"
Jas. Strabley	Sansonville			Kiekamp & Steman	"
A. Chitts & Son	"			C. Lang & Co.	"
Washington Furnace Co.	"			David Wells	"
Hanna & Gabriel	Sandrun			Charlesfield Stone Co.	Clarksfield
Moss Bros. & Rigby	Seneca			Seneca Bank	"
J. Ballie & Co.	Seneca			Albion Stone Co.	Cleveland
Harry Day	Sherronville			Auld & Congor	"
George Neff	Shields			Currier Stone Co.	"
Geo. Hess	Steel			The Diamond Portland Cement Co.	"
Kind Bros.	Stewartsville			Forest City Stone Co.	"
Michael O'Grady	"			J. W. & M. H. Gale	"
Martin & Roan	"			Haldeman Stone Co.	"
Ohio Coal Co.	"			Wm. Lacy	"
Waddle Bros.	Strasburg			Malone Stone Co.	"
W. G. Lagonor	Thurman			Forest City Stone Co.	Columbia Station
Davis & Thomas	"			Wittenmyer Stone Co.	"
Thos. Evans	"			Theo. Curtis	Concord
Elk River Lumber Co.	Trimble			D. Davis	Conesville
John McKinley	Urichsville			R. H. Law	Conotton
Smith & Goins	"			Wm. Devox	Corn
Mrs. F. Hamilton & Son	Wadsworth			M. F. Cole	Constitution
Burns & Lisk	Walcup			A. & J. Burg	Corwin
G. W. Hedges	Wales			Chas. Barringer	Covington
E. D. Jones	"			G. W. Burt & Son	"
English Canal Coal Co.	Warsaw			Covington Stone Co.	"
T. R. Lewis	Washingtonville			Leesville Stone Co.	Crestline
Griffith & Wank	Waynesburg			Lawrence Furnace Co.	Culbertson
W. O. Simington	"			Lewis & Talbot Stone Co.	Dayton
P. Shaaver	Wesge			Huffman & Renner	Dean
Milton Coal Co.	Westlton			Campbell & Hazelton	Delaware
Riverton Coal Co.	"			Monarch Coal Co.	Demison
Wellston Coal Co.	"			J. Slough	Dundee
John Lytle & Sons	"			M. D. Blue	Dunham
John McMillough	"			Knowles, Taylor & Anderson	East Liverpool
Andrew Rowley	"			McDevitt & Moore	"
J. H. McDonald & Son	West Austintown			A. Barnes	Elkton
Blanche Coal Co.	Willsville			Young Buff Stone Co.	Elyria
Hanni Co.	Yenia			Frank Eschtruth	"
Andrews Bros.	Youngstown			Wm. Walsh	Fallsburg
Harrison Coal Co.	"			S. F. Gilbert	Findlay
Hone Black Coal Co.	"			W. H. & Son	Fredericks
Poland Coal Co.	"			E. Bonar	Flag
A.O. Jones Brick & Terra Cotta Co.	Zanesville			P. Dennis	Flatrock
Abram Emery	"			Borting & Dickman	Fort Jennings
Anderson Evans	"			Jas. Chaus	Frezeysburg
M. Fisher	"			Minor, Porter & Co.	Freemint Station
Chas. Frenpout	"			M. Coe & Sons	Freestone
Chas. H. Gallagher	"			V. Chudzinski	Fremont
John J. Grainger	"			Buckeye Stone Co.	Galam
A. Hagenhouse	"			Chicago Brownstone Company	Gomer
Eben Harper	"			N. Stuckey	Green Castle
John F. Lucas	"			J. M. Crouch	Greenville
Fred Lutz	"			N. H. Bailey	Greysburg
McKinney & Huggins	"			Hamden Furnace Co.	Hamden Junction
M. McNulty	"			Joseph Duellman	Hamilton
John S. Marcellus	"			R. G. Wallace	Hammondsville
Isaac Melvin	"			W. H. Wallace & Sons	"
W. T. Perry	"			O. E. Hildrey	Hanover
John Richards	"			M. Shurburn	Henrietta
J. W. Severance	"			J. W. Carpenter	Hooker
Noah Swank	"			John Y. Gray & Son	Iberia
Frank T. Stone	"			Bailey & Huber	Independence
John Wallwork	"			Grudersberger & Sedig	"
John Shidigg	Zoar			L. Halbeson	"
				Christ Herr	"
				Joseph Kitzner	"
				Jesse Kuddler	"
				E. Schucllin	"

## FIRE CLAY

Akron Stone-ware Co. Akron  
Calumet Fire Brick Co. Calumet

NAME	POSTOFFICE	NAME	POSTOFFICE	NAME	POSTOFFICE
F. D. Smith	Independence	Penn. Mining, Manu- facturing & Supply Co.	Toronto	McLane & Monroe	Granite
Standard Gas R. & F. B.	..	J. O. Deem	.. Twin	Milwaukee Mining Co	..
Glabe Furnace Co.	.. Ironton	Columbus Brick & Fire	..	T. D. Jewell	..
McKitterick Bros.	.. Jackson	Clay Works	.. Union Furnace	Emma Mining Co	Haines
Star Furnace Co.	..	Nate Agur	.. Vanghsville	Wm. A. Fisher	Hardman
Tropic Furnace Co.	..	S. Brown	.. Venice	Preston Armstrong	Harney
Hugh Bros. & Bangs	..	Enos Risor	.. Wadsworth	Elmer Boyce	..
M. Kent	.. Kent	Geo. Aitcherson	.. Walnut Grove	H. C. Brown	..
M. P. Chambers	.. Kingston Centre	J. N. Kipner	.. Warsaw	Wm. Crawford	..
J. J. Crook	.. Lancaster	Duncan & Bros.	.. Washington	W. R. Cranard	..
A. H. Sankle	.. Lily	C. Sodal	.. Waterville	Wm. Coalsworth	..
Geo. Burnett	.. Leavittsburg	G. Lorh & Son	..	R. Claypool	..
Leesville Stone Co.	.. Leesville Cross/Rds	James Emmett	.. Waverly	L. J. Dant	..
Leesville Stone Co.	.. Leesville	C. Holiday	.. Westboro	Lewis Foster	..
Cherry Falls Iron Works	.. Leontonia	Clarkfield Stone Co	.. West Clarkfield	T. J. Hollen	..
Cherry Bros	.. Lilly	Stephen Borgan	.. Whitehouse	J. F. Mullen	..
Joseph Lyndecker	.. Litchfield	John Ryan	..	Price Withers	..
Hoeking Clay & Manu- facturing Co.	.. Logan	W. M. Ryan	..	F. P. Moore	..
Baker Stone Co.	.. Lucas	S. A. Moore	.. White Sulphur	Ju. Morris	..
J. H. Antenwelder	.. Ludlow Falls	James Reaney	..	Jas. Post	..
F. M. Cooke	..	Joseph Smith	.. Wilberforce	F. S. Slater	..
Fred Dieter	..	L. Halblison	..	H. Sterdevant	..
George Kerr	..	Mrs. C. Merkless	..	M. F. Williams	..
W. P. Oglesbee	.. Lambertown	Timing Bros.	.. Wilson	J. T. Wooley	..
Canton & Malvern F. B. & P. Co.	.. Malvern	Robert Stewart	.. Windsor	Sterling Mining Co	Jacksonville
Clemens & Sons	.. Marblehead	Robert Stewart	.. Windsor Mills	J. Custer & Son	..
John Evans	.. Marion	Cox, Morris & Howells	..	Kiesling Bros	..
J. S. Coxey	.. Massillon	Joseph Davis	.. Youngstown	Kings & Anderson	..
Earl & Carson	.. Melvin	Youngstown Paving Brick Co	..	O. M. Knox	..
C. H. Clark	.. Mesopotamia	508 Belmont av.	..	A. Schrupp	..
Whetmore, Robinson & Co.	.. Middleburg	Emery Abraham	.. Zanesville	E. T. Briggs	North Canyonville
Detroit Hoeking Valley R. & B. Co.	.. Millville	Evans & Dunweller	..	S. Glor	..
J. A. Elliott	.. Morning Sun	S. L. Elliott	..	A. L. Goodbridge	..
Rob. Cramer	.. Moscow	E. A. Jones	..	P. H. Osher	..
Jacob Fussell	..	T. R. Townsend & Co.	..	Geo. H. Marston	Pendleton
David Iyer	..			John Malban	Peachant Valley
Ohio Sewer Pipe Co.	.. New Lisbon			Black Butter Co. Quick Silver Mining Co	Portland
United States Sewer Pipe Co.	..			Bright Light Mining Co.	..
				H. Hurt	..
				Colville Mining & Devel- oping Co	..
				Bismark Mining & Mill- ing Co	..
				Gold Brick Mining Co	..
				Muneral Hill Mining Co	..
				Shearer & Howell	Prairie City
				Charles Holmndach	..
				G. W. Meard	..
				Reid & Baris	..
				Rineheart & Davis	..
				Lucky Boy Mining Co	Prineville
				Will Q. Brown	Riddles
				Thos. Dyre	..
				H. P. Edgar	..
				Wm. Haekler	..
				Haekler Bros	..
				Harrison Bros	..
				R. M. Moore	..
				North Bowers	Rock Point
				Thomas Carr	..
				Hosmer, Anderson & Co.	..
				J. F. Bassett	..
				Geo. W. Lance & Co	..
				Gustave Pibel	..
				Ed. Pierce	..
				W. Protomtain	..
				N. Ritter	..
				Alex Wilson	..
				Boo Ling Co	Rye Valley
				L. Le Fraus	..
				Montgomery Tunnel & Mining Co	Rosburg
				D. W. Fitzgerald & Bro	Sam's Valley
				March & Selph	..
				Wm. Pature	..
				J. L. Rowe & Co	..
				Dill & Brown	Sanger
				Frank Metcfe	..
				K. J. Martin	..
				Joseph A. Myers	..
				W. Arble	Sparta
				S. S. Barnard	..
				O. S. Burkland	..
				E. E. Clough	..
				Jud Cook	..
				W. V. Donipson	..
				Henry Gibson	..
				G. Hacker	..
				Hugh Jones	..
				M. O'Brien	..
				C. D. Bond	..
				Thos. Rieh	..
				Henry Rogers	..
				Alex Tartar	..
				A. Waldron	..
				C. G. Weis	..
				G. A. Wright	..
				S. Younger	..
				Pacific Coast Prospect- ing & Development	Springfield
				Cable Bros	Sumpter

## OREGON

## COAL BITUMINOUS

Castle Rock Mining Co. Portland  
George Clements. Prospect

## COLD AND SILVER

George Benson. Althouse  
Charles Johnson. ..

W. A. Johnson. ..  
William McKay. ..

C. C. Eaves. ..  
Jas. Turner. ..

Grant & Murray. Auburn  
Wm. Mullen. ..

Mulhu Littlefield Co. ..  
L. Barner. .. Astoria

S. Berry. ..  
S. Carpenter. ..

C. Collier. ..  
Jerry Deasy. .. Baker City

L. Farmer. ..  
Jake Millen. ..

H. Rathjen. ..  
D. Schobts. ..

E. H. Blake. ..  
Geo. Borman & Co. ..

J. M. Boyd. ..  
Louis F. Cook. ..

Lorenzo Durkee. ..  
E. Ferry. ..

U. M. Foster. ..  
Indiana Mining Co. ..

Joseph McKay. ..  
C. Miller. ..

Wm. Milkey. ..  
John Palmer. ..

J. H. Parker. ..  
J. P. Paul. ..

E. P. Vaight. ..  
Virtue Mining Co. ..

Wm. Swan Mining Co. ..  
Bonanza. ..

H. A. Driscoll. ..  
J. Howell. ..

A. Barnhart. .. Bridgeport  
B. Bartholomew & Co. ..

Aug. Myer. ..  
H. Winat. ..

W. W. Crome. .. Caleh  
Wm. Alfred. .. Canyon City

V. G. Kiler. ..  
John Long. ..

Geo. Martin. ..  
F. O. Wadley. ..

L. J. Sisley. .. Connor Creek  
W. S. Davis. .. Cornucopia

John Eaton. ..  
Lawrence Painter. ..  
Chas. Kittrell. .. Ft. Sumter

Huntley & Schack. .. Gold Beach

NAME	POSTOFFICE	NAME	POSTOFFICE	NAME	POSTOFFICE
Jainey & Taber	Sunipier	Joseph South	Dunkard	Fairview Coal Co.	Meversdale
Charles Umbal	"	W. W. South	"	Milwood Coal & Coke Co.	Milwood
T. Cameron	Uniontown	Clay, Stewart	"	Abbott Coal Co.	Miners Mills
Lin Gin	"	E. S. Taylor	"	Abe Hayes Coal Co.	Monongahela City
J. Harris	Waldo	A. D. & F. M. Spencer	Dunmore	Watson Coal Co.	"
A. B. Hopkins	"	Thomas Mitchell & Sons	East Brady	Thos. Gillett	Moosic
Joseph Johnson & Co.	"	Monarch Coal Co.	"	Wm. Springer	"
P. Laitenbaugh	"	John Tugh & Co.	Edwardsdale	Thos. Edge	Morrisdale Mines
Thos. Senior	"	Horne & Roberts	Elizabeth	Bear Ridge Coal & Coke	"
D. Slagle	"	L. L. Bechey	Elk Lick	"	Mountindale
Horace G. Fitch	Woodville	Camberlain & Shaw	"	John Gwin & Son	"
<b>IRON</b>					
Oswego Iron & Mining Co.	Portland	John J. Engle	"	Wray & Co.	"
Wm. Darks	Waldo	E. T. Hay	"	S. S. Bickel & Co.	Mt. Carmel
R. M. Kelly	"	Elias Hershberger	"	Moorewood Coke Co.	Mt. Pleasant
<b>PHOSPHATE</b>					
E. D. Phelps	Gold Beach	B. Jones	"	Thos. Baltimore	Moyer
<b>SALT</b>					
S. C. Hamaker	Bonanza	J. B. Keim	"	Martha Detweiler	"
<b>STONE, GRANITE, MARBLE AND ONYX</b>					
Mountain Lime Co.	Applegate	N. B. Keim	"	Thos. Jones	Nanticoke
Watts & Dutton	Clackamas	Joseph Patton	"	W. R. Jones	"
Frank Duprat	Pendleton	Dennis Wagner	"	Jas. Turner	"
A. Pevard	"	Cameron Coal Co.	Emporium	Jos. Waraw	"
J. H. Robbins	"	W. L. Scott Company	Eric	Fairmount Coal & Iron Co.	New Bethlehem
A. C. Grove	Portland	Enterprise Coal Co.	Excelsior	Middle Lehigh Coal Co.	New Boston
Oregon Paving & Con. Co.	"	Little Redstone Coal Co.	Fayette City	W. J. Coleman	New Geneva
W. H. Cole	"	Chartiers Brook Coal Co.	Federal	A. M. Franks	"
B. T. Bull	Wilderville	Hy. Florsheim	Finleyville	James Hess	"
<b>PENNSYLVANIA</b>					
<b>ALUMINUM</b>					
Georgia Bauxite & Mining Co.	Philadelphia	Ohio Pennsylvania Oil	Co.	B. F. Keister & Co.	Owensdale
506 Drexel Bldg.	"	Port Royal Coal & Coke Co.	Fitz Henry	Cleardfield	Bituminous
<b>COAL</b>					
Clipper Coal Co.	Allenport	Lawrence & Brown	Frankville	Coal Corporation	Beale
Altoona Coal & Coke Co.	Altoona	J. L. Mitchell	Gallitzien	Cymbing Coal Co.	Philadelphia
Chas. A. Hughes	Arnold	Pasmore, Burns & Co.	Glen Campbell	411 Walnut st.	"
Jones, Simpson & Co.	Arnold	Beech Creek Canal Coal	"	Elkins Gas Coal Co.	"
Phenix Coal Co.	Armsbury	"	Glen Richey	251 S. Fourth st.	"
Glenmore Coal Co.	Arnot	Arona Gas Coal Co.	Greensburg	Hearsey Coal Mining Co.	"
Blossburg Coal Co.	Axton	Greensburg Coal Co.	"	385 Walnut st.	"
Axtonmore	Bakersville	Harrison Gas Coal Co.	"	Wm. D. Jones	"
B. H. Gardner	Bellefonte	Campbell Coal Co.	"	Kenova Coal Co.	"
Centre Coal Co.	Bellefonte	Mutual Coke Co.	"	353 Walnut st.	"
Queen City Coal Co.	Bellefonte	Yellow Run Coal Co.	"	N. Y. & Middle Coal Field	"
Belle Vernon Coal & Coke Co.	Belle Vernon	G. G. Stage	Greenville	Ry. & Coal Co.	"
Graham Oil Co.	Big Cove Tannery	Broad Top & Cambria	Harrisburg	228 S. Third st.	"
Gambert & Huey	Blair	Coal Co.	Harrisburg	Phil. & Boston Petroleum	"
Isabella Furnace Co.	Blairsville	Chest. Creek Coal & Coke	"	707 Walnut st.	"
Jacob Jones	Blossburg	Co.	Hastings	J. M. Bacon	Phillipsburg
B. Brazel	Bradock	John Shelden	Hermitage	Thos. Barnes & Bro	"
The Pittsburg & North-western Coal Co.	Bridgeville	McFledge Bros.	Hills	Q. P. Jones	"
A. P. Isenbarg	Brisban	J. M. Cable	Holtzerville	Geo. J. Magee	"
John B. Reed	"	F. E. Clark	"	Samuel E. Pfoutz	"
S. S. Brown	Buena Vista	Cyrus Lohr	"	Sanford & Demann	"
Lake Erie Gas Coal Co.	"	L. A. Meyers	"	John Walton	"
Frank Patterson	"	J. Walter	"	Samuel Banburgh	Phenix
Youghiogheny River Coal Co.	"	C. W. Wrigle	"	C. W. Ellenberger	"
O'Neil & Peterson.	Bumala	A. Dodson	Hopewell	Geo. Baugert	Pine Grove
Geo. Lisle & Sons	Camden	Rays Town Branch Coal	"	Albion Coke Co.	Pittsburg
J. W. H. Cook	Cambria	Co.	Houtzdale	Hartley & Marshall	"
Frisbie, Blanchard & Co.	Carlisle	Samuel Murphy	"	Ohio Sewer Pipe Co.	"
D. S. Cupp	Casselman	United Collieries Co.	Idaville	Pacific Coal Co.	"
John Hannah	"	Vesley Fisher	"	110 Diamond st.	"
J. P. Hostetter	Chartiers	M. Gardner	Jerdio	Republic Coal Co.	"
W. J. Shultz	"	Westmoreland Coal Co.	Irwin	111 Ninth av.	"
Kirkland, Fisher & Marshall	Chester	Singer, Osborne & Co.	Jacob's Creek	United States Fire Clay	"
Courtney Coal Co.	Coal Bluff	J. C. Hayden & Co.	Jenksville	"	"
Globe Coal Co.	Coal Centre	Jeddo Tunnel Co.	Jerdio	Vista Coal Co.	"
Jefferson Coal Co.	Coal Glen	Glenwood Coal Co.	Jernyn	C. C. Bowman	Pittston
Jacob Whitman	Cogan Station	Jas. Brooks	Johnstown	C. S. Cram	"
H. C. Fricke Coke Co.	CConnellsville	Cambria Iron Co.	"	J. H. Mosier	"
W. F. Stillwagon	"	E. C. Corfer	"	David Schady	"
Isaac Taylor	Courtney	Fulton & Cuddy	"	Thos. Waddle	"
J. S. Neel	Dawson	Jonathan Horrocks	"	John C. Haddock	Plymouth
J. Newman & Sons	"	Elen James	"	Thos. Barnes	Rainey
J. M. Schlemmer Coal Co.	Du Bois	Chartiers Valley Coal Co.	Joint	Thos. Reynolds & Lane	Red Bank Furnace
Shawmut Coal Co.	Du Bois	Hillside Coal Co.	Jones Station	H. C. Burchman	Redman Mills
Dunbar Furnace Co.	Dunbar	Mortimer & Co.	Karthaus	Denning Bros.	St. Clair
J. C. Duffy	Dunkard	Spear & Cowan	Kingston	Flowers Field Coal Co.	"
Mrs. L. Lough	"	W. G. Payne & Co.	Kingston	Tyler & McTurk	"
J. M. Ross	"	Gray-White Coal & Lumber Co.	Kittanning Point	Thompson & Hart	"
		James G. Henry	"	McCure Coke Co.	Scotdale
		James McTure	"	Brookside Coal Co.	Scranton
		John Farmer Jr.	"	The Cumberland Coal Co.	"
		Geo. M. Davis	Lansford	Church Coal Co.	"
		John W. Davis	"	Wm. Connelley	"
		John T. Williams	"	Delaware, Lackawanna	"
		Ligonier Coal Co.	Lackawanna	& Western R. R. Co.	"
		Bagdad Coal Co.	Leverburg	Fairlawn Coal Co., Ltd.	"
		Leverburg Coal & Coke Co.	"	Greenwood Coal Co.	"
		Alex. McHaire	Ligonier	Hillsdale Coal & Iron Co.	"
		J. B. Meyers	"	Mt. Vernon Coal Co.	"
		Robert Peoples	"	Nay Aug Coal Co.	"
		C. R. Wetheran	"	Providence Coal Co.	"
		Pat Leahy	Lilly	Ezra H. Ripple	"
		Wm. Miller	Lisbong	Strauch & Williams	"
		Bolivar Coal & Coke Co.	Lockport	Tripp & Co.	"
		Fred Blair	Loydville	Llewellyn Nagle & Co.	Shamokin
		Robbins & Co.	McKeesport	Mineral Railroad & Mining Co.	"
		Nevis & Co.	Mahoning City	"	"
		Valley Mining Co.	Marion	Isaac J. Reese	"
		J. R. Smith	Marysville	Smith & Keiser	"
		Abram Avery	Marion Centre	Trouthman, May & Co.	"
		Lanberg Bros.	"	Sharon Iron & Coal Co.	Sharon
		Hillsdale Coal & Iron Co.	Mayfield	Zerbe & Co.	Shenandoah
		Shenango Coal & Mining Co.	Mercer	Salem Coal Co.	Shicks-Shmy
		"	"	E. P. Jenkins & Co.	Six Mile Iron
		"	"	Mather & Baumgardner	"



NAME	POSTOFFICE
Graver & Madill	Snow Shoe
T. Mackelick	Stanger
Dingelbarger & Co.	Tamaqua
Mitchell & Shopp	"
Phila. Coal & Iron Co.	"
Central Connellsville	"
Coke Co.	Tarrs
Redstone Oil, Coal & Coke Co.	Tippecanoe
Spring Hill Gas Coal Co.	Turtle Creek
Blair Bros.	Tyone
Elizabeth Coal Co.	"
Mitchell Coal & Coke Co.	"
Youngstown Coal Co.	"
A. J. Id.	Uniontown
United Coal & Coke Co.	United
J. Cochran, Sons & Co.	Vanderbilt
Joseph Langeyer	"
Abraham Seeger & Co.	Venetia
Hadlock & Stevens	Vernon
John Cleary	Wampum
Jonathan Allison	Washington
A. A. Allison	Waynesburg
J. D. Flowers	"
Robert Hoskinson	"
John Kennedy	"
Thos. W. Sayers	"
Frank Stewart	"
John Zook	"
Thos. Faneel & Son	Webster
Hanna Bros.	West Brownsville
A. G. Leonard & Co.	"
Geo. Jones & Co.	West Elizabeth
Stoner & Co.	West Newton
West Newton Coal Co.	"
Adams Coal Co.	Wilkes Barre
The Allegheny Coal Co.	"
Cabin Creek & Kanawha Coal Co.	"
Conyngham & Co.	"
A. J. Hayes	"
Hadlock, Shook & Co.	"
The Kidder Coal Co.	"
Langehille Coal Co.	"
Malden Coal Co.	"
Grassy Island Coal Co.	"
Id.	Winter
T. J. Wood	Woods Run
E. Armstrong	Woodville

**FIRE CLAY**

Monongahela Fire Clay Co.	Beaver
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**COLD AND SILVER**

John P. Searll	Pittsburg
P. O. Box 268	"
Millside Mining Co.	Tunkhannock

**IRON**

A. F. Albright	Alburtis
John S. Butz	"
Geo. G. Greise	"
A. Henry	"
Chas. Laurance	"
Frank Lichtenwalmer	"
Peter Wetzel	"
Solomon Boyer	Allentown
Miles Eckert	"
Wm. B. Schaefer	"
C. R. Beyer	Boiling Springs
Carlisle Mining & Paint Manufacturing Co.	Carlisle
Harry Davis	Cogan Station
P. R. Hayes	"
Jesse Guigel	"
Cambria Iron Co.	Dunbar
Eli Lichtenwalmer	Fogelsville
Geo. Pontius	Frederick
Lewis Heck	Heckton Mills
Bachmans Iron Ore Mine	Hellertown
Thomas Iron Co.	"
A. F. Woodring	"
Richland Mining Co.	Huntington
The Irwin Mining Co.	Irwin
Kittanning Iron Co. Ltd.	Kittanning
Kittanning Mining Co.	"
G. A. Langnecker	Mechanicsburg
Alex. Underwood	"
S. M. Dresher	Mertztown
Chas. Peck	"
T. L. Frith & Bros.	"
Geo. H. Roth	"
Robt. P. Cochran	Millerstown
Thos. Markwell	"
Esau Bellow	"
John G. Kaufman	Moselen
Sheble & Stelwagon	"
J. K. Spang	"

NAME	POSTOFFICE
Darlington & Bowers	New Bloomfield
Elias Fisher	Newport
Marshall Furnace Co.	"
Capt. Chas. Doble	Nickel Mines
Jos. Wharton	"
John Barkle	Orbisonia
T. C. Vanzant	"
Peter S. Dunean	Ore Hill
Cranberry Improvement Co.	Philadelphia
1314 S. Fourth St.	"
Dufford Mining Co.	"
1415 N. Seventh St.	"
Kalton Chemical Co.	"
Piedmont Mining & Smelting Co.	Pittsburg
Pottstown Iron Co.	Pottstown
Warwick Iron Co.	"
Moses Gundry	"
Lewis Lamp	Priortown
Leighorn Mining & Manufacturing Co.	Reading
720 Centre av.	"
Coleraine Iron Co.	Redington
Wilson Averill	Sallillo
James Mills	Shade Gap
J. A. Hook	Sligo
Simon P. Boutz	Toppan
Tipton Furnace Co.	"
N. G. Heninger	Trexlerstown
Juniata Mining Co.	Tyone
K. Hoover	Woodbury

**MICA**

John D. Smedley	Lima
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**MINERAL PAINT**

Montandon Liberty Paint Co.	Montandon
Blackwell Paint Co.	Muney
Keystone Paint Co.	"
Rutherford & Barclay	Philadelphia
Drexel Bldg.	"
Pittsburg Iron Paint Co.	Pittsburg

**SALT**

Allegheny Salt Co., Ltd.	Etna
Lehigh Salt Mining Co.	Philadelphia
228 S. Third St.	"
Pennsylvania Salt Manufacturing Co.	"
Pittsburg Salt Co.	Pittsburg

**SLATE**

Black Diamond Slate Co.	Aquishicola
J. Keith & Co.	Bangor
Monarch Slate Co.	"
Henry & Houck	"
New York Slate Co.	"
West Bangor Slate Co.	"
Hughes Slate Co.	Belfast
Beck, Shoemaker & Rob.	"
J. T. Jeter & Co.	Bethlehem
Ryan Slate Co.	"
Blairsville Pink Stone Co.	Blairsville
W. Griffith & Sons.	Danville
Henry & Co.	"
Eureka Peach Bottom	"
Swack Mfg. Co.	Delta
Peach Bottom Slate Co.	"
Susquehanna Slate Co.	"
J. Egan	East Bangor
Swack & Arther Slate Co.	"
Chester Slate Co.	Easton
760 Walnut St.	"
New Wales Hard Vein Slate Co.	"
J. Wagner	"
J. K. Henry	Lynnport
A. F. Mohose	"
Krauss & Szegez	New Tripoli
Bonney, Arthur & Co.	Pon Arget
Central Slate Co.	Philadelphia
1736 Cuthbert St.	"
Guarantee Slate Co.	"
760 Walnut St.	"
J. B. Kimes	"
1822 Filbert St.	"
Fuller Brick & Slate Co.	Pine Grove Furnace
Keystone Slate & Granite Co.	"
"	"
Paul E. Balliet	Slatington
Blue Diamond Slate & Golving Co., Ltd.	"
Ellis Slate Co.	"
Evans & Bros.	"
Gap Slate Co.	"
F. Horlacher	"

NAME	POSTOFFICE
Robert B. Jones & Co.	Slatington
Kern & Fuller	"
Luzerne Slate Co.	"
G. McDowell & Co.	"
Meadow Brook Slate Co.	"
Metropolitan Slate Co.	"
E. B. Nell & Son	"
Slatington Slate Co.	"
Washington Slate Co.	"
Sterling Slate Co.	Walnutport
G. G. Williams & Co.	"
Allentown Slate Co.	Wannamakers
J. E. Williams & Co.	West Bangor
Harding, Bennett & Co.	Wind Gap
York & Peach Bottom Slate Mfg. Co.	York

**STONE, GRANITE, MARBLE AND ONYX**

Jones Acker	Alburtis
A. Dankel	"
Montour Quarry Co.	Aldemira
Uniform Stone Co.	Allegheny
J. T. Biecy	Allentown
Cain Bros.	"
R. Schall	"
Young Quarry Co.	"
Finn & Welsh	Altoona
Levi Knott	"
W. L. Shellenberger	"
Brightbill & Son	Annyville
Harbaway, Putnam & Fimpleyquitt	Ararat
Lewis Lemon	Auburn Four Corners
A. G. Morris & Co.	Ayondale
John Brooks	Baker's Landing
Amos Ewing	"
Hiram Hecks	"
J. L. Hathaway	Bethayers
Rock Hill Granite Co.	Bethlehem
Holmes & Stevens	Birmingham
Brechehill & Webbert	Boiling Springs
A. M. Leidlch	"
John Lewis	Brodbecks
George Hogg	"
Wm. McKinney	"
W. P. Grand & Co.	Bridgeport
Henderson Marble Co.	"
W. B. Bambo	"
G. M. C. oon.	Caution
T. Saffon	"
Gannon & Becker	Carbondale
Ira Cox	"
W. S. Harrah	Casselman
J. Hostetter	"
Adam Lepley	"
Isaac Kane	Chambersburg
A. O. J. O. Doshong	Chester
Shaw, Escoy & Co., Ltd.	"
John Dyer	Chester Valley
Wm. Ritter	"
J. McCre	Chestnut Hill
Lewis Hartman & Co.	Columbia
Jas. Porter	Connellsville
B. S. Stonder	"
James Beatty	Conshohocken
Michael O'Brien	"
P. Graybill	Coopersburg
Peter Kasser	Copley
Carline Supply Co.	Cove Forge
Juniata Limestone Co.	"
Schmucker & Co.	"
W. A. McLaughlin	Delta
Joseph Jacobs	Devault
Lewis Kuntz	Dillsburg
Green, Marquis & John	East Maravia
Ston.	"
G. G. Leiper	Eddystone
Langhorne Spring Water Co.	Eden
John Asher	Edwardsdale
J. Pugh & Co.	"
Chas. Lingmist	Elizabeth
Arnold & Baer	Elk Lick
R. Beachy	"
S. A. Beachy	"
J. M. Hay	"
M. D. Thomas	"
J. B. Luckey	Elmore
Silver Springs Quarry	Esny
Fairbairne Fairbairne Co.	Fairbairne
J. K. Gates & Bros.	"
Robt. Goldsboro	"
Walters & Humphreys	"
A. W. Held & Son	Fogelsville
George Howard	Franklin Corners
Frank Orlando	Franklinstown
P. Apple	Frederick
J. Dick	"
S. G. Hilbish	"
A. Sprueman	"
John Ronich	Freedom

NAME	POSTOFFICE
Table Rock-stone Co.	Prisco
I. T. Bridge	Georges Station
Tawney, Roach & Co.	Gettysburg
W. W. Zeigler	Glenwood
H. & A. Buck	Greenville
Fry Bros.	Greenville
Plymouth Leech	Gregory
Hovells & Hampton	Harrisburg
Kitchen & Baldwin	Hazeldeil
A. A. Hook	Hellertown
Drake, Stratton & Co.	Hellertown
C. F. Rentzheimer	Hellertown
P. H. Riegel	Hendricks
W. M. Hill-berital	Hendricks
C. C. Trout	Herritage
E. J. Brush	Hickory Grove
Kipp & Roose	Hillsville
Andrews Bros.	Hillsville
Meyers-Gindlespergen	Hooversville
F. Rogers	"
A. Washen	"
Collins & Jones Granite Co.	Hummelstown
J. S. Engle	"
Hummelstown Brown-stone Co.	"
Round Top Granite & Freestone Co.	"
Geo. W. Faxton	Hunters Run
John Jarrell	Huntingdon Valley
Booth & Flynn	Idle Park
J. H. Hermon & Co.	Irish Ripple
Chas. Lobach	Ironton
H. Rumlch	"
J. Scholt	"
F. O'Neill & Son	Jenkintown
J. Satterthwaite	"
C. L. Bell	Jermyn
Michael Roberts	"
S. C. Whitmore	"
J. W. Clark	Jersey Mills
Howard Holt	"
G. Reese	"
Ephraim Kimble	Kimble
Bagdad Stone Co.	Kirkland
Geo. B. Donigerty	Kittanning
Harrison Nesbitt	Larksville
Haydelber Bros.	Lebanon
A. Mc'aulny	Lewistown
J. Sutherly	Lime Hill
J. Mc'artney	Listintown
Wass & Lingner	"
C. H. Dullers	Littletown
W. Kemble	Lumberville
Lumberton Granite Co.	"
J. Carl	McKee's Gap
Manning & Davis	"
W. M. Rice	"
McManns & Reiley	McGee's Mills
J. Gower	Manorville
H. F. Cooner	Mast Hope
A. J. Quick	"
M. C. N. Johnston	Milansville
Saml. Johnston	Morton
A. Merkel	Moslem
John Conrad	Mt. Joy
D. B. Boyd	Mt. Pleasant
R. G. Dumeau	"
Jacob Hunt	"
J. G. Kether	Moyer
J. R. Davis	Nanticoke
J. Hamilton	"
E. T. Williams	New Genoa
Andrew Mosher	New Milford
Wm. Holmes	Newport
Henry Mitchell	Newtown
Frank Carlsch	Nicholson
J. S. Rogers	Oakdale
C. Bosler & Son	Ogontz
A. J. Engle	"
N. K. Detrick	Parkside
Bridgeport & Conshohocken Stone Qy.	Philadelphia
D. C. Cleaver	"
19th & Sigz. Garden sts.	"
Conshohocken Stone Co.	"
David Jones	"
733 Green St.	"
New England Brown-stone Co.	"
2202 Chestnut St.	"
Old Dominion Co.	"
Pennsylvania Granite Co.	"
20 S. Broad St.	"
Portable Improvement Company	"
Gilard Bldg.	"
B. M. & J. F. Shanley	"
1429 Market St.	"
Southern Red & Brown Stone Co.	"
1945 N. Seventh St.	"
S. P. Wetherill Co.	"

NAME	POSTOFFICE
G. B. Stranger	Phoenix
Wm. A. Gies & Buckwalter	"
let.	"
V. E. Stark	Pierceville
Joseph Stephens	"
S. W. Thomas	"
South Mountain Mining Co. & Iron Co.	Pine Grove Furnace
C. A. Balph	Pittsburg
Berkeley Sand Co.	"
10 Diamond St.	"
Bente & Martin	"
Burgers Bros.	"
Central Vermont Mar-ble Co.	"
Cleveland Stone Co.	"
J. K. Davison	"
John Fay	"
Haller & Best	"
Hastings Quarry Co.	"
Jolly Bros.	"
H. G. Lagenan	"
Lizonia Stone Co.	"
W. C. & J. M. Taylor	"
Smith Bros.	Pognansport
Glimer Bros.	Point Pleasant
S. N. Haley	"
Thomas Beckley	Pottstown
May & Shanner	"
G. Nagle & Co.	"
H. W. Nagle	"
Joseph Clark	Redington
D. M. Hart & Co.	Roaring Spring
Keystone B. & T. C. Co.	Rochester
Edward Tliche	Rowland
J. A. Park	Saltito
Sutton Stone Co.	Seranton
Samuel Sykes	"
101 N. Washington av.	"
Samuel Bashear	Sells Station
J. Brush	Seewick
P. Creighton	"
Wm. Dickson	"
G. A. Hazlett	Sharon Hill
B. T. Kingsbury	Sherman
Bond & Boone	Shick-shimny
J. Trout	Shillington
Headley & Fish	Silvira
M. Montgomery	"
M. S. Silvira	"
E. Bunnell	Skinner's Eddy
Tewksbury & Co.	"
Samuel Caske	Statington
Griffith R. Davies & Son	"
E. C. Granite Co.	Smudley
Pennsylvania Granite Co.	"
J. Trinn	"
Talbot & Co.	"
Jas. Forbert	Southampton
John Conrad	Spring Mount
Geo. Miller	Summerville
Michael Homar	Swathmore
C. G. Gzden & Co.	"
Wm. Beaver	Swatara Station
Cyrus Gaugrich	"
S. M. Gungrich	"
Christ Hershey	"
Wm. Berryson	"
L. Zimmerman	"
Daniel Coleman	Terrytown
J. H. Brington	Thornbury
George Newman	Tivoli
H. J. Schmoeyer	Trexlerstown
A. J. Morris	Freone
Boyd & Co.	Uniontown
Ed. D. Logan & Bro.	Unionville
Andl & Klander	Upper Boxhoro
C. A. Allen	Yehlar
Good, Guffy & Boyd	Wall
Joseph Goto	Wampum
Fox Hill Granite Co.	Warwick
J. Hieks' Bros.	Water Cure
A. J. Jolly & Co.	"
Jacob Armstrong	Watsontown
Henry Hoyt	"
R. H. Johnson	Wayne
J. Pester	Waynesburg
J. Rusk	"
A. Kelley	Webster
George Hammell	Weldon
Pittsburg Limestone Co.	Williamsburg
Schmutzke & Co.	"
John Crabb	Winfield
Wm. Little	William Penn
John Foster	Winderdale
E. Emme	Wyms Gap
E. Lobbins	Wyoming
York Haven Paper Co.	York Haven

RHODE ISLAND

STONE, GRANITE, MARBLE AND ONYX

NAME	POSTOFFICE
John C. Harris	Arlington
E. A. Angell	Centradale
W. H. Cary	"
R. B. Spencer	Centreville
D. Taylor Jr.	"
Richard Jenner	Cranston
New England Mining Co.	"
Nelson Titus	"
Joseph McOrnack	East Providence
F. L. Mathewson	Harrisville
Fletcher & Palmer	Niantic
A. Desjardins	Providence
Garvey Bros.	"
J. T. Tank	"
29 Exchange Bldg.	"
N. Titus	"
K. McKay	Valley Falls
Chapman Granite Works	Westerly
Dalbeattie Granite Wks.	"
Dixon & Co.	"
Kirkpatrick & Sheehan	"
Murdy & Bird	"
Rhode Island Granite Works	"
Smith Granite Co.	"
Stewart McDonald	"
Robert Thompson	"
Thompson & Platt	"
Fairmont Fara Co.	Woonsocket

SOUTH CAROLINA

GOLD AND SILVER

L. Briggs	Blacksburg
Carolina Mining Co.	"
Ross & Carroll	"
J. A. Smith	"

IRON

Carolina Sulphuric Acid Manufacturing Co.	Blacksburg
Magnetic Iron & Steel Ore Co.	"
Rees & Black	"

MICA

M. M. Manney	Fort Mills
J. C. Lee	Long Creek
Dewdney & Sitton	Walthalla
H. W. Kuhlman	"

PHOSPHATE

Horseshoe Mining Co.	Ashepoo
Banburg Allish Fert. & Bg. Co.	Banburg
Beaufort Phosphate Co.	Beaufort
Carolina Manufacturing Co.	"
Oak Point Mines Co.	"
W. Y. Trippl	"
Ashepoo Phosphate Co.	Charleston
Barton Phosphate Co.	"
Edisto Phosphate Co.	"
Eureka Manufacturing Co.	"
Florida Phosphate Co.	"
E. J. Humahan	"
Imperial Fert. Co.	"
Mt. Holly Mining & Manufacturing Co.	"
Royal Fert. Co.	"
Wanda Phosphate Co.	"
Wilcox & Gibbs Fert. Co.	"
Coosaw Manufacturing Co.	Coosaw
Greenville Fert. Co.	Greenville
Gate City Phosphate Co.	Greenwood
C. C. Fishorne	Jacksonboro
Baldwin Fert. Co.	Port Royal
Port Royal Fert. Co.	"
Campbell & Hertz	Rantowles
W. M. Cummings	Ridgeville
Golden Gate Mining Co.	Spartansburg
Wm. Gregg	Summerville
Sumter Fert. Co.	Sumter

STONE, GRANITE, MARBLE AND ONYX

T. G. Lamar & Co.	Bath
McNamee & Co.	"
Black & Rose	Blacksburg
Reese & Marlin	"
Reese & Jenkins	"
Columbia Granite Const. & Mfg. Co.	Columbia
York Granite Co.	Yorkville

TIN

Stephens Tin Co.	Seranton
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**SOUTH DAKOTA**

NAME	POSTOFFICE
<b>COPPER</b>	
Copper Nob Mining Co.	Galeana
<b>COLD AND SILVER</b>	
Calumet Mining Co.	Deadwood
Cheyenne Consolidated Mining Co.	"
Hiland Mining Co.	"
Keystone Chloride & Mining Co.	"
McDonnell Mining Co.	"
Silver Queen Mining Co.	Galeana
A. C. Roland	Rapid City
Homestead Mining Co.	"

<b>CYPSUM</b>	
W. T. Powers,	Spearfish
S. Plaster & Stueco Co.	Sturgis

<b>STONE, GRANITE, MARBLE AND ONYX</b>	
W. V. Doyle	Galeana
Piedmont Improvement Co.	"
Felix Poznanski	Piedmont
E. M. Reeves,	Rapid City
T. Sweeney,	"
Drake Granite & Petrified Wood Co.	Sionx Falls
John Burke	Whitewood
C. Kane	"
Wm. Nolan,	"

<b>TIN</b>	
Hennessey & Co.	Beur Gulch
Mark Hyalid	"
Jensen & Jackson,	"
McMakin & Co.	"
White & Jensen,	Carbonate
A. Brooks	Custer City
Henry Alden & Co.	"
Clark, Wood & Co.	"
Gaylord & Russell,	"
Charles Hamilton	"
Harney Peak Mining, Milling & Mtg. Co.	"
Frank Herbert	"
E. L. Hunt,	"
Klein & Co.	"
C. Lincoln & Co.	"
McLaughlin & Co.	"
Wm. Oils & Co.	"
Mrs. Wm. Franklin & Co.	Etta Mine
Girard & Co.	"
J. T. Reed	"
Swamy & Co.	"
T. Winslock & Co.	"
August Engle & Co.	Hayward City
Henry Hines & Co.	"
Irwil Alum & Co.	"
B. Offershager	"
F. G. Seidl & Co.	"
M. Thomas	"
George Burr	Hill City
Allen Coole & Co.	"
Victor Couler	"
John Good & Co.	"
John Phelan & Co.	"
Rhinehart & Co.	Lead City
L. E. Davis	Rapid City
Francis & Co.	"
James Haft	"
Jacoby & Evely	"
Scott & Ward,	"
Sweeney & Co.	"
Woods & Co.	"

**TENNESSEE**

<b>COAL</b>	
John Koehler	Altamont
S. H. Northcut & Co.	"
W. W. James & Co.	Bristol
James Alexander	Brylstown
Chas. S. Burr	"
Thos. Lindsay	Caryville
Hy. Miller	"
J. F. Smiddy	"
J. F. Wheeler	"
Leander Wilson	"
Blue Springs Mining Co.	Chattanooga
Geo. M. Clark	"
Care of James & Co.	"

NAME	POSTOFFICE
Dade Coal Co.	Chattanooga
G. W. Ware	"
Empire Coal Co.	Coal Creek
John T. Evans	"
Geo. Pickett,	"
Royal Coal & Coke Co.	"
Shamrock Coal Co.	"
Jacob Wyatt	Crossville
Chattanooga Pottery Co.	Daisy
Dayton Coal & Iron Co.	Dayton
Geo. Furman	"
Glen Mary Coal & Coke Co.	Glen Mary
A. L. Spears,	Jasper
Consolidated Coal & Iron Co.	Kelley's Ferry
McNabb Coal & Coke Co.	"
T. P. Marshall & Co.	"
Coal Creek Mining & Manufacturing Co.	Knoxville
Knoxville Iron Co.	"
Monarch Coal & Coke Co.	"
Southern Jellico Coal Co.	"
Ivan A. Hill & Co.	Sparta
J. L. Wheeler	Spring City
Richards & Howards	Wetker Mines
Roane Iron Co.	"

**STONE, GRANITE, MARBLE AND ONYX**

Daniel Fullz	Altamont
A. A. Griswold & Co.	Bristol
H. H. Haynes	Decaturville
Y. M. Cavite	Embreeville
Embreeville Freehold Land, Iron & Ry. Co.	Embreeville
Elva Iron Co.	Ivy Mills
Southern Iron Co.	"
Elk Valley Coal & Iron Co.	Jellico
John B. Bond	Newburg
Baskl Hensley	"
David Himes	"
J. W. Hilder	"
W. M. Snyder	Spring City
A. H. Kidd	Summertown

**LEAD AND ZINC**

John Winkley,	Marble Switch
Dr. E. Hensley	Newburg

**MINERAL PAINT**

Chattanooga Paint Co.	Chattanooga
Seholze Bros.	"
W. C. Tintcher	"

NAME	POSTOFFICE
J. J. Cam,	Nashville
W. H. Haslam	"
A. E. Howell	"
G. W. Burgess & Co.	Falmira
Cambria Marble Co.	Powder Spgs. Gap
Fulkerson, Chestnut & Co.	Rogersville
Hawkins County Marble	"
"	"
Hornshell & Co.	"
J. M. Pierce	"
J. H. Price & Co.	"
W. B. Russell	"
South Pittsburg Co. n-struction & Bldg. Co.	South Pittsburg
J. Poland	Summertown
Wm. West	"
Tazewell Cement & Lime Co.	Tazewell

**TEXAS**

<b>COAL BITUMINOUS</b>	
E. B. Pine	Atascosa
F. G. Tompkins	"
Peerless Coal Co.	Calvert
Kulfin Coal, Coke & Mining Co.	Dallas
Hy. Greathouse	Decatur
Eagle Pass Coal Co.	Eagle Pass
Montague Coal Mining Co.	Fl. Worth
Texas & Pacific Coal Co.	"
Laredo Coal Co.	Laredo
Texas Coal & Coal Mining Co.	San Antonio
Texas & Pacific Coal Co.	Thurber

<b>COLD AND SILVER</b>	
S. Moyer	Bandera
M. A. Molina	Beldon
Silver Pass M. Co.	Cibola
Florence E. Mining Co.	El Paso
Hand & Maltby	Van Horn

<b>IRON</b>	
La Belle Mining Co.	Dallas
Llano Imp. & Furn. Co.	Llano
Bessinger Iron Mining & Mfg. Co.	Pittsburg
La Fortuna Mining Co.	San Antonio

<b>SALT</b>	
Texas Salt Co.	Colorado
Star & Crescent Salt Wks.	Grand Saline

**STONE, GRANITE, MARBLE AND ONYX**

Shultz & Moyer,	Atascosa
E. B. Pine	"
M. A. Molina	Belen
J. M. Padilla	"
S. T. DeLoek	Decatur
E. L. Johnson	"
Geo. Stotts,	"
T. S. McSpadden	Gordon
J. T. Vlihart	"
C. O'Keefe	Granite Mountain
Burgler & Stevens	Honey Grove
J. K. Finley	Llano
J. Goodman,	"
E. L. Republican	Marble Falls
Texas Mining & Imp. Co.	"
W. B. Moody,	Rockdale
Edward R. Braddon & Sons	San Antonio
White Nigali	"
Mike Nolan	Weatherford

**UTAH**

<b>COAL BITUMINOUS</b>	
H. Lehigh	Cedar City
T. Taylor	"
Geo. Wood	"
Coalville Coal & Coke Co.	Coalville
C. H. Springs	"
E. C. Christensen	Mt. Pleasant
Jas. P. Gunderson	"
William Cassay	Rockport
William Deoney	"
Fredrick John	"

<b>COPPER</b>	
Victoria Copper Mining Co.	Ashley
Adams & Bladen	Cedar City
Montreal Mining Co.	Milford
M. Sarant	"

## COLD AND SILVER

NAME	POSTOFFICE
J. T. Evans	Adamsville
T. M. Reese	"
Rees, Griffith & Sons	"
Chas. Rolfe	"
B. Bates	Alpine City
R. W. Bennett	"
W. Dunsdon	"
E. Nash	"
W. Nash	"
M. T. Woods	"
American Fork Cons. G. & S. Mining Co.	American Fork
W. H. Grant	"
E. H. Hunter	"
Edw. Vehn	"
A. N. Bemis	Bingham Canyon
Brooklyn Mining Co.	"
M. W. Davis	"
Mike Gibbons	"
Dan Henson	"
Last Chance Mining Co.	"
Miners' Dream Mining Co.	"
South Galena Mining Co.	"
Telegraph Mining Co.	"
Yosemite Mining Co.	"
J. F. Carrell	Caineville
Daniel Cook	"
Stephen Farnsworth	"
E. K. Hanks	"
Mount Bady Mining Co.	Castle Gate
Davis & Schmidt	Eureka
Eagle Mining Co.	"
Eureka Centennial Mining Co.	"
Eureka Hill Mining Co.	"
Giant Tunnel Mining Co.	"
Northern Spy Mining Co.	"
Seneca Consolidated Co.	"
Thistle Tunnel Co.	"
S. Kaiser	Greenwood
Adam Peterson	Huntsville
Carl E. Peterson	"
Fred. Strett & Co.	Kingston
Nels Christensen	La Plata
H. B. Westover	"
W. Fairhurst	Magnolia
The Gold Blossom Mining Co.	"
Alma & Plata Mining Co.	Mammoth
Desert Mining Co.	Marysville
Gold Hill Mining Co.	"
Richfield Mining Co.	"
G. Clark	Millford
Jas. Fergie	"
Star Mining Co.	"
Jos. Banks Jr.	Minersville
John Bradshaw	"
Wm. J. Davis	"
Hans Davison	"
Jas. Gallop	"
Louis Lessing	"
Jas. H. Rollins	"
Alma Aque & Co.	Monna
James Burraston	"
J. Harris	"
L. Holdaway	"
Wm. Paterson & Co.	"
S. M. Reed	"
E. B. Roberts	"
P. Young	"
B. Young	"
A. A. Cahoon	Mt. Pleasant
Jonas H. Erikson	"
Jas. Lemont	"
Hickman Mining Co.	Nephi
Nebo Mining Co.	"
The Denver & Ogden Mining Co.	Ogden
Care of S. S. Schraun	"
David Kay	"
Stevens Bros.	"
William Sullivan	"
Jas. Appleby	"
Bauner Mining Co.	Ophir
Barker Bros.	"
Frank Bark	"
D. C. Chisholm	"
Chloride Paint Mining Co.	"
Lion Mining Co.	"
A. A. Macdonald	"
Monarch Mining Co.	"
Northern Light Mining Co.	"
Ophir Hill Mining & Milling Consolidated Co.	"
Peter J. Pollock	"
Isaac Roland	"
Geo. St. Clair	"
Utah Gun M. & M. Co.	"
Wears Mining Co.	"
Park City Mining Co.	Park City

## NAME POSTOFFICE

Edw. Pike	Provo City
Second to None Mining Co.	"
Care A. L. Towle	"
The Dixie Mining & Smelting Co.	St. George
Gen. Logan Mining Co.	Salt Lake City
The Lucky Boy Mining Co.	"
Care Nicholas Treweek	"
Mohawk Queen Mining Co.	"
Monte Cristo Mining & Milling Co.	"
North Tintle Cons. Mining Co.	"
Pride of the West Mining Co.	"
St. Louis Argenta Mining Co.	"
O. J. Sulisbury	"
York Mining Co.	"
American Eagle Mining Co.	Silver City
Frank Azzalea	"
P. H. Connell	"
Wm. Gundry	"
W. W. Hinch	"
J. F. Koppes	"
Jas. McLaughlin	"
W. H. Menary	"
Northern Spy Mining Co.	"
Ocean Wave Gold & Silver Mining Co.	"
R. S. Reed	"
Nelson Sandberg	"
Shoher Cons. G. & S. M. Co.	"
H. H. Sowles	"
E. B. Walker	"
C. V. Wheeler	"
Jas. G. Whider	Silver Reef
Ironosi Mining Co.	"
Brooklyn Mining Co.	Springville
Livf Curtis	"
R. J. Kroupa	"
North Star Mining Co.	"
Samuel P. Lee	Tooele
A. Anderson	Vernon
Bennion Bros.	"
J. Cook	"
P. Hanson	"
P. Jorgenson	"
C. Rollins	"
O. H. Rollins	"
C. J. Saxton	"
D. Sharp	"
J. Sharp	"
T. Taylor	IRON Cedar City
Lee L. Clark	ALPINE CITY Alpine City
H. Healy	"
R. W. Jones	"
L. G. Wilkin	"
Bladen & Harris	" Cedar City
Alma Aque & Co.	" Mona
L. Babcock	"
James Burraston	"
J. Harris	"
L. Holiday	"
Elias Molyneux	"
Wm. Paterson & Co.	"
S. M. Reed	"
E. B. Roberts	"
W. A. Starr	"
John Yates	"
A. P. Young	"
B. Young	"
Nephi Mining Co.	Nephi
Albion Mining Co.	"
Daly Silver Mining Co.	" Park City
Glencoe Mining Co.	"
C. W. Bennett	" Salt Lake City
Aue Spitz	" Stockton
C. Whitting	"
Hot Springs Salt Co.	Ogden
Utah Salt Co.	"
G. Williams Bros.	"
Redmond Salt Co.	Redmond
Salina Salt Beds	Salina
Inland Salt Co.	Salt Lake City
Jeremy & Co.	"
Salt Lake Gilslette Co.	"
Syracuse Salt Co.	"
Utah Forwarding Co.	"
J. E. Hull & Co.	Springville

## STONE, GRANITE, MARBLE AND ONYX

NAME	POSTOFFICE
S. Marsh	Alpine City
Napier Bros.	Castle Gate
Laird Bros. & Co.	Cedar City
W. H. French	Coalville
Culmer Bros.	Fort Duchesne
Gilson Asphalt Co.	"
W. J. Sulte	Gale
Mountain Stone Quarry	Park City
Silver Branch Stone Quarry	"
Diamond Kyune & Cass	"
14 Commercial Block	Salt Lake City
National Rock Co.	"
71 Culmer Block	"
F. G. Peterson	"
75 S. Third East	"
John Sherrill & Co.	"
Second Souths, W. cor.	"
Sixth West	"
Thistle Rock Co.	"
22 W. Second South	"
Varley & Everill	"
147 S. West Temple	"
Willard Child	Springville
J. Smith	"

## SULPHUR

Barnes Sulphur Co.	Salt Lake City
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## VERMONT

## IRON

J. C. Oron	Brandon
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## LEAD AND ZINC

John Hastings	Brandon
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## MINERAL PAINT

Leicester Mineral Paint Co.	Leicester
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## SLATE

J. J. Jones	Castleton
Goodwin, Metcalf & Co.	Fair Haven
Hatch Hill Slate Works	"
Hazard Slate Co.	"
G. J. Pierre	"
Scotch Hill Slate Co.	"
M. H. Vail	"
Webb Slate Co.	"
Adams Slate & Tile Co.	Northfield
J. W. Deane	Podtney
Evans & Thomas	"
Griffith & Nathaniel	"
Jones, Griffith & Williams	"
New Empire Slate Co.	"
G. Parker & Son	"
J. W. Roberts & Co.	"
T. R. Griffith	West Pawlet
O. R. Jones & Co.	"

## SOAPSTONE

Union Soapstone Co.	Chester
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## STONE, GRANITE, MARBLE AND ONYX

Jas. G. Brown	Barre
Forsyth & Ingram	"
Green Mountain Granite Co.	"
Jones Bros.	"
S. Kimball	"
J. W. Mazon	"
Monumental Granite Co.	"
J. B. Taylor	"
R. B. Godfrey	Bennington
Bardillo Marble Co.	Brandon
Corona Marble Co.	"
S. L. Goodell & Co.	"
Neshobe Marble Co.	"
J. C. Oron	"
Thayer & Simonds	"
Trojan Marble Co.	"
Burlington Mining Co.	Burlington
Plint Bros. & Co.	Centre Rutland
E. C. Hutchinson	Chester Depot
W. M. Ames	East Barre
Guy Bros.	"
Vermont Red Slate Co.	Fair Haven
J. L. Butterfield	Grafton
Continental Marble Co.	Manchester
Addison County Marble Co.	"
Cutter Marble Co.	Middlebury

NAME	POSTOFFICE
E. P. Fletcher	Middlebury
Excelsior Granite Co.	Montpelier
Granite Construction Co.	"
Florence & Wakefield	"
Marble Co.	Pittsford
Smith & Co.	"
Clarendon Marble Co.	Rutland
T. M. Deal	St. Albans
Carriek Bros. Granite Co.	St. Johnsbury
R. W. Laird	"
W. A. Root	South Dorset
Tyrel & Kent	"
Blue Mount Granite Co.	South Ryegate
Clark Bros.	West Dummerston
American Marble Co.	West Rutland
A. G. Bardin	"
Dorset Marble Co.	"
Esperanza Marble Co.	"
Orville Marble Co.	"
Sheldon & Sons	"
Williamstown Gte. Co.	Williamstown

VIRGINIA

COAL

Belle Hampton Coal & Iron Co.	Belle Hampton
R. A. Ayers	Big Stone Gap
J. B. Singleton of Fletcher	"
J. K. Taggart	"
Wm. A. Bell	Blacksburg
M. Kipps	"
Elliott's Knob Iron & Coal Co.	Buffalo Gap
Logan Coal & Coke Co.	Charlottesville
Pigeon Creek Coal & Coke Co.	"
Allegheny Trading Co.	Clifton Forge
Farmville Coal & Iron Co.	Farmville
Middletown Coal Mining Co.	"
J. R. Keister	Middletown
P. P. Shepperd	Princes Fork
Albion Coal Co.	Pulaski
Old Dominion Mining Co.	Richmond
Brooklyn Coal Co.	Staunton
Pine Creek Coal & Coke Co.	"
Wolf Trap Coal Mining & Dev. Co.	Wolf Trap

COPPER

Artulmus Copper Mines Co.	Mineral City
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COLD AND SILVER

Lithuan Milling Co.	Alexandria
South Buena Vista Land & Imp. Co.	Buena Vista

CYPSUM

J. D. Barnes	Bradford
Holston Salt & Plaster Co.	Saltville

IRON

Daniel Jordan	Allen's Creek
North L. & Z. Mining Co.	"
Leopold Mining Co.	Anstville
Wm. A. Bell	Blacksburg
Honston Mining Co.	Buehman
Anderson Camp	Carabira
Kingston Iron Co.	Christiansburg
Wm. C. G. Myers	"
Allegheny Mining Co.	Clifton Forge
J. H. Golden	"
A. F. White	"
Columbia Liberty Iron Co.	Columbia Furnace
Ritchie Patch Iron Co.	Covington
Gen. W. Skerrin	"
American Manganese Co.	Crimora Station
C. V. Haden	Evangton
Geo. L. Carter	Foster Falls
Shenandoah Furnace Co.	"
Eureka Iron Co.	Glen Wilton
John L. Hunt	Hunt's Store
Jas. Woodson	Iron Gate
Longdale Iron Co.	Longdale
A. M. Luttler	Marion
Bernadia Ocher Co.	Port Walthall
J. B. Price	Price's Forks
Hughes & Bramblitt	Pulaski City
Peck Creek Coal & Iron Co.	"
Pulaski Development Co.	"
Pulaski Iron Co.	"

NAME	POSTOFFICE
Richlands Flint Glass Co.	Richlands
Long Creek Co.	Richmond
The Southern Coal & Iron Co.	"
10 S. Ninth st.	"
James R. Steel Co.	"
Virginia Steel, Iron & Slate Co.	"
301 E. Main st.	"
Kinz Exploration Co.	Roanoke
Pennsylvania Zinc Iron Mfgs.	"
H. Grillis	Rye Valley
H. B. Hull	"
R. L. Nelson	"
Salem & Craig Mining & Mfg. Co.	Salem
Manganese Mining Co.	Seven Flats
Beverly Ontario Iron Co.	Shenandoah
Rodgers & Dent	"
Shenandoah Furnace Co.	"
W. & M. Peery	Tagewell
Savermake Steel & Tin plate Co.	Triford
Bull Run C. & I. Co.	Warrenton
Shenandoah Lumber & Iron Co.	Winchester

LEAD AND ZINC

Glen Mills Barytes Co.	Marion
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MANGANESE

P. H. Childer	Waynesboro
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MICA

Booker Robertson	Amelia
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PHOSPHATE

Alexander Fertilizer & Chemical Co.	Alexandria
Sta. n. n. rd. Phosphate Mining Co.	"
American Fert. Co.	Gosport
Columbia Gypsum & Phosphate Co.	Harpers Ferry
Norfolk Marl & Phosphate Co.	Norfolk
Virginia Florida Phosphate Co.	Petersburg
Athletic & Virginia Fertilizer Co.	Richmond

SLATE

Virginia Slate Co.	Lynchburg
J. E. Wagon	Old Town
Washington Const. Co.	Rural Retreat

SOAPSTONE

Allegheny Soapstone Co.	Hardware
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STONE, GRANITE, MARBLE AND ONYX

Columbia Building Materials Co.	Alexandria
Loecker & Co.	Babyny Falls
Kanode Bros.	Blacksburg
Kinder & Shafer	"
M. Kipps	"
Brentsville Brownstone Co.	Brentsville
B. F. Brocken	Buehman
J. F. Wilson	"
J. H. Buchman	Chatham Hill
W. A. H. Buchman	"
Virginia F. B. & S. Pipe Co.	"
J. S. Ham	Chilhowie
Huff & Garber	Covington
J. F. Rixey	Crimora Station
J. S. Smith	Culpeper
Chas. W. White	"
A. A. Mettentic	Fineastle
R. Thompson	"
E. Dillon	Indian Rock
T. S. James Mines & Quarry	Iron Gate
Longdale Iron Co.	Longdale
Wm. H. Ford	Lynchburg
Wood & Co.	"
1525 Main st.	"
May Brownstone Co.	Manasses
A. B. Cook	Petersburg
J. W. Smith & Son	"
Alderson Brownstone Co.	Richmond
Peter Copland	"

NAME	POSTOFFICE
Virginia Steel, Iron & Slate Co.	Richmond
90 E. Main st.	"
Westham Granite Co.	"
Kinz Mining Co.	Roanoke
United States Mineral Black Paint Co.	"
A. Z. Cavaerist	Rural Retreat
Columbia Marble & Onyx Co.	"
J. W. Spencer	"
Washington Marble Co.	"
Holston Salt & Plaster Co.	Saltville
Palmer, Carpenter & Co.	"

SULPHUR

Armingsworth Miners Co.	Tolersville
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WASHINGTON

ALUMINUM

Ida Aluminum M. & Mfg. Co.	Spokane
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COAL-BITUMINOUS

Puget Sound Fire Clay Co.	Black Diamond
A. Sherwood	Maple Valley
Bellingham Bay Improvement Co.	New Whatcom
R. R. Co.	"
De Clumplian & Thomas	"
Eagle Coal Mining Co.	"
R. E. Samington	"
Monarch Coal Mining Co.	"
Alta Coal Co.	J. Palmer
Durham Coal Co.	"
Townsend Coal Co.	Port Townsend
Puget Sound Clay Co.	Seattle
Great Northern Land Co.	Siobomish
Cedar River Coal Co.	Tacoma
Cherry Hill Coal Co.	"
Northern Pacific Coal Co.	"
Rich Hill C. & C. Co.	"
Sunset Coal Co.	"

COPPER

Crawford, Harmon & Clayton	Seattle
Puget Sound Iron Co.	"
H. Williams	"

COLD AND SILVER

Centralia M. & Imp. Co.	Centralia
Junction Mining & Melt-Ing Co.	"
The Green River Mining Co.	Chehalis
Little-Malden Mining & Colfax Phosph. Mill & Mining Co.	Colville
J. F. Rice	"
Kahama G. & S. Mining & Milling Co.	Kahama
W. H. Birk	Loomis
L. D. Burton	"
E. W. Crumney	"
A. J. Dexter	"
Fred Fuller	"
Harry Hamilton	"
L. W. Mitchell	"
J. M. Pinnau	"
Rainbow Mining Co.	"
C. H. Scheepster	"
Sharnpeck & Rhine	"
Warner & Laraway	"
Wilton Brock & Co.	"
Monroe Land Improvement Co.	Monroe
Mount Vernon Mining & Smelting Co.	Mt. Vernon
Skagit Valley Mining Co.	"
Pennsylvania Mining & Improvement Co.	Olympia
42 W. Twelfth st.	"
The Washington Reduction Co.	Ruby
The Blake Peersall Co.	Seattle
Blowell Gold Mining Co.	"
Crawford, Harmon & Clayton	"
Enterprise Mining & Milling Co.	"
Western Improvement Co.	"

NAME	POSTOFFICE
Cons. Silver Crown Mining Co.	Spokane
International Mining Co.	"
210 Green Block	"
Josephine Mining Co.	"
Katambin Mining Co.	"
Missoula & Last Chance M. Co.	"
National Mining & Development Co.	"
The Paulsen Ruby Mining Co.	"
Spokane & Gr. North M. Co.	"
Troy Development Co.	"
Union Jack Mining Co.	"
Engle Mining & Milling Co.	Tacoma
Eureka Mining Co.	"
Nettie Mining Co.	"
Fidelity Trust Bldg.	"
Trojan Mining Co.	"
Washington & Nevada Mining Co.	Vancouver
Silver Mountain Mining Co.	Walla Walla
J. McKelvey & Co.	Washington Bar

**MICA**

G. A. Rogers	Asotin
<b>STONE, GRANITE, MARBLE AND ONYX</b>	
J. J. Brennan	New Whitcomb
Denny Clay Co.	Seattle
Idaho A. M. & Mfg. Co.	Spokane
Spokane Pressed Brick Co.	"
John T. Long	Tendlo
A. Robertson & Co.	"

**WEST VIRGINIA**

**COAL BITUMINOUS**

Boggs' Run Mining Co.	Boggs
Flat Top United Coke Co.	Bramwell
Cedar Grove Consolidated Coal Co.	Cedar Grove
Preston Lumber & Coal Co.	Corinth
Crown Hill Spint coal Co.	Crown Hill
Nathaniel Bush	Gaston
Crisis & Gaston	"
T. M. Gaston	"
S. C. Sutton	"
Thomas Pentong	Gladesville
Joseph Finney	Starks Nest
Ferguson Spint Coal Co.	Huntington
Wheeling Mining & Manufacturing Co.	Wheeling

**COLD AND SILVER**

The Baltimore Mining Co.	Charleston
The West Virginia Gold Mining & Milling Co.	Fairmont

**IRON**

Atkinson Land & Developing Co.	Charleston
Brilliant Steel Iron Co.	Wellsburg
Forbes, Carmichael & Co.	"
Hall & Knight	"
C. H. Meyers	"
G. M. Park	"
Principis Furnace & R. M. Co.	Wheeling
Whittaker Iron Co.	"

**SALT**

Hartford City Salt Co.	Hartford City
German Salt & Coal Co.	Mason
Hope Salt & Coal Co.	"

**STONE, GRANITE, MARBLE AND ONYX**

B. S. Beecher	Ada
W. Duggan	Benwood
John Collins	Kanawha City
J. D. Gardner	"
G. A. Morris	Kearneysville
H. W. Plagg Estate Mining & Investment Co.	Martinsburg
J. Geener	Suttons
Magnolia Marble Company of Georgia.	Wheeling
Wheeling Lime & Cement Works	"

**WISCONSIN**

**COAL-BITUMINOUS**

NAME	POSTOFFICE
Jesse Williams	Dodgeville

**COLD AND SILVER**

O. P. Rounds & Co.	Belle Centre
Eastern Ataska Mining Co.	Cumberland
V. Kellogg	"
N. O. Foster	Fairchild
Bush Gold & Silver Mining Co.	Marquette
Badger Silver Mining Co.	Mitwaukee
Denbigh Gold Mining Co.	"
Fire Center Gold Mining Co.	"
Hardin Baker Gold Mining Co.	"
Eastern Alaska Mining & Milling Co.	Stevens Point
Security Gold Mining Co.	"
Superior Silver & Refining Co.	Superior
Northern Chief Mining Co.	Wausau

**IRON**

Columbia Mining Co.	Alma
N. Paist Iron Mining Co.	Ashland
Ontonagon Mining Co.	Cadott
Champion Mining Co.	Darlington
Davis Bros.	Dodgeville
Detroit Iron Co.	East Superior
John Hayes	Iron Ridge
Bowkey Mining Co.	Marquette
Big Creek Iron Co.	Mauston
Arvid Mining Co.	Mitwaukee
Armenia Mining Co.	"
Bessemer Consolidated Iron Co.	"
Britannia Mining Co.	"
DeWido Mining Co.	"
Imneau Mining & Manufacturing Co.	"
Minerva Iron Co.	"
Morning Mining Co.	"
Penon Mining & Milling Co.	"
Prince of Wales Mng. Co.	"
Queen Mining Co.	"
E. S. Schantz & Co.	"
Shovdon Tunnel & Mining Co.	"
South Buffalo Mining Co.	"
Star Tunnel & Mining Co.	"
Story Bros.	"
Superior Mining Co.	"
Whittington Star Mining Co.	Oconomowoc
San Domingo & Hay Tunnel Mining Co.	Oshkosh
Pence Iron Mines	Pence
Tylers Fork Iron Mines	Plummer
T. Sophir Mining Co.	Rolla
Bonanza Mining Co.	Shullsburg
Biwabik Fee Iron Co.	Superior
Northern Chief Iron Co.	Wausau
Lackawanna Iron Co.	West Superior
The Lehigh Coal & Iron Co.	"

**LEAD AND ZINC**

J. L. Bishop & Bros.	Beetown
F. Bowham & Co.	"
J. Gerard & Co.	"
M. Hendricks & Co.	"
James Hughes & Co.	"
Wm. Butcheroff & Co.	"
L. McConnell & Co.	"
A. M. McDonald & Son.	"
T. Morrison & Co.	"
J. Smith & Co.	"
L. Struener & Co.	"
Warden Bros.	"
John Wise & Co.	Dodgeville
Nick Bailey & Co.	"
Hugh Owens	"
J. P. Smelker	"
D. G. Williams	"
E. W. Williams	"
Henry Williams	"
T. T. Williams	"
R. Kennedy	Highland
Emch, Lewis & Co.	"
McGuire Bros.	"
Orr & Co.	Joplin
Leadmine Mining Co.	Leadmine
Jas. Fisher & Wacker	Linton
Samuel Hart	"

**NAME POSTOFFICE**

Wm. James	Linden
Arthur Jewell & Co.	"
T. Kisbury & Co.	"
Samuel Lauder & Co.	"
Pollard, Goldschwartz & Co.	"
Rule & Goldsworthy	"
Wm. Stevens & Co.	"
Geo. B. Treglaw & Co.	"
W. Balsbeck	Meekers Grove
Dunneely & Hynes	"
Hynes Bros.	"
J. Kaine & Co.	"
T. Walton	Millin
D. Amee	"
W. Grundy	"
J. Hird	"
H. Jinkins	"
T. Liddell	"
J. Slack	"
J. Vieckerman	"
Wann Co.	"
Geo. Whilkson	"
T. Wilkon	"
C. Womag	"
P. Wonn	"
J. Young	"
R. Young	"
Young & Schackell	Mitwaukee
Arthur & Rink	Mineral Point
L. L. Jackson & Bros.	"
Wm. Perry	"
J. Tony & Lang	"
T. Chouthwa & Co.	New Diggings
Leary & Co.	"
Balsbeck & Co.	"
W. Redtrae & Co.	"
San Frisco Dr. Bornea Mining Co.	Oshkosh
San Matea Mining Co.	"
N. P. Bailey	Platteville
Dugdale & Bass	"
A. Richter	"

**MINERAL PAINT**

Winters Metallic Paint Co.	Iron Mountain
Ricketson's Mineral Paint Co.	Mitwaukee
Venetian Metallic Paint Co.	North Freedom

**STONE, GRANITE, MARBLE AND ONYX**

C. P. Biggs	Appleton
Fred Besner	Arcadia
Leif French	Baraboo
Mayingfield Brown Stone Dev. Co.	Bayfield
W. Callaway	Beetown
Aschultz & Co.	Cedarburg
Wm. Bowen	Clifton
Chas. Paul	Dodgeville
M. Burnett	Duck Creek
P. E. Harby	Durand
E. H. Emerson	Etna
Emmanuel Burnett	FT. Howard
Wm. Finnegan	"
W. Smith	Fox Lake
F. A. Hagen	Green Bay
Prentice Brownstone Co.	Houghton
Jesse Kidder	Independence
A. T. Wickham	"
North-Western Iron Co.	Iron Mountain
J. H. Horine	Ironton
Hamilton & Phelps	Kankana
Hamilton Lime & Stone Co.	Ketchum
S. Sylvester	"
Hadfield Co.	Lannon
E. A. Pannack	Madison
C. Geiger	Marble Head
Mayville Lime Works	Mayville
Sohn Zeller	Mazo Manie
P. Noolan	Millin
Aldanna Marble Co.	Mitwaukee
American Verde Antique Marble Co.	"
T. R. Bentley	"
Cook & Hyde	"
Monarch Stone Quarry Co.	"
Stoy Bros.	National Home
Wm. McDonald	New Richmond
Russell Bros.	Platteville
Hacker Bros.	Shoebog Falls
Kothgorn Bros.	Spring Green
Peter Beaver & Son	Superior
Superior Jasper Co.	Trempealeau
B. McCrae	Waukesha
Hadfield & Co.	Wausau
R. N. Roberts	Wauwage

NAME	POSTOFFICE
A. F. & L. Manegold	Wauwatosa
Rapher Co	"
W. Stoll	Wauwac

## WYOMING

## COAL-BITUMINOUS

Lawrence Hollywood	Bonanza
Buffalo Fuel Co	Buffalo
Diamond Coal Co	"
W. H. Holland	"
D. C. Hickman	Cokeville
Helman Hofman	"
Consolidated Coal Co. of Wyoming	Hams Fork
Hams Fork Coal & Mining Co	"
Wm. Howell	Luyan Kara
Lander Coal Mining Co	Lander

## COPPER

NAME	POSTOFFICE
T. A. Hadsell & Co	Elk Mountain
Kilpatrick Bros. & Co	"
"    "    "    "    "    "	Now Castle
M. Dillon	Rawlins
Sam Fletcher	Rock Springs
J. Ludington	"
Matt Muir	"
Geo. L. Young	"

## COLD AND SILVER

White Star Mining Co	Buffalo
Cheyenne Mining Co	Cheyenne
Diamond Developing Co	"
Alfred Almgreist	Elk Mountain
Carbon Investment Co	"
Mike Hanley	"
J. Herman, Kidd & Fran-	"
"    "    "    "    "    "	"
Geo. Jackson	Hailey
Pete McKay	"
Jack McTurk	"
E. H. Peck	"
T. K. Westfall	"
Black Buttes Mining Co	Luyan Kara

NAME	POSTOFFICE
E. B. Bulkey	Luyan Kara
Luyan Kara Mining Co	"
J. D. Russell	"
Harry Burk	Miners Delight
Buy Evans	"
Frank Lemme	"
Mary & Ross	"
Frank Nell	"
D. D. Wolf	"

## GYPSUM

Rocky Mountain Plaster, Stone & Mfg. Co	Leah
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## IRON

R. C. Mager	Rawlins
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## MICA

Chas. Frederick	Fairbanks
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## STONE, GRANITE, MARBLE AND ONYX.

Jas. Mills	Alma
R. W. Burkhardt	Laramie
S. W. Howling	"
Chas. Guild & Son	Piedmont





# LIST OF MINING COMPANIES AND OPERATORS

## IN THE DOMINION OF CANADA

(SEE ALSO SUPPLEMENTARY LIST)

### BRITISH COLUMBIA

#### COAL—BITUMINOUS

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, COKE OVEN, AND NAME OF MINE SUPERINTENDENT.
TOWNS AND DISTRICT	
Crows Nest Pass, Victoria Ry. and P. O. Victoria 96, 253, 552.	Crows Nest Coal & Mineral Co., Ltd., Victoria, B. C., 45 Fort St. Col. James Barker, pres.; F. B. Penherton, secy.; I. D. Pemberton, treas. Cap. stk. \$2,000,000. Crows Nest.
Nanaimo Vancouver Ry. Departure Bay 552.	East Wellington Coal Co., San Francisco, Cal., U. S. A., 76 and 500 East st. Splits, pres.; W. Whitney, secy.; R. D. Chandler, treas. and mgr. Cap. stk. \$500,000. East Wellington. Shafts, 50,000 tons; steam. Wm. S. Chandler, supt.

#### COPPER

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, FURNACES, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWNS AND DISTRICT	
Tenada New Westminster (P.O. Nanaimo) Ry. 552.	Tenada Gold & Silver Mining Co., Nanaimo, B. C., P. O. Box 21. J. W. Stottton, pres.; Alfred Rapet, secy.; Thos. Jones, treas.; E. Priest, mgr. Cap. stk. \$300,000. Northern spy, copper. Shaft (developing).

#### GOLD AND SILVER

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWNS AND DISTRICT	
Aldsworth Kootenay (W.) Ry. 96.	Montreal & Kootenay Mining Co., Ltd., Montreal, Que., 30 St. Francois Xavier st. E. B. Greenfields, pres.; Robt. T. Hopper, secy. and treas.; Richard Irwin, mgr. and supt. Cap. stk. \$200,000. Tau O'Shanter, silver. Shaft, tunnel, 700 tons; hand.
"	Neosho Mining Co., Seattle, Wash., U. S. A. F. H. Coe, pres.; I. P. Taylor, secy.; L. R. Dawson, treas.; M. W. Wallace, mgr. and supt. Cap. stk. \$50,000. Neosho, silver. Shaft; free, hand (developing.)
"	Revelstoke Mining Co., London, Eng., 31 Lombard st., E. C. L. R. C. Boyle, pres.; W. A. Balley, secy. and treas.; J. Campbell, mgr. and supt. Cap. stk. \$200,000. United, silver and lead. Shafts, 600 tons, refractory; steam. No. 1, silver and lead. Tunnels, 200 tons; free; hand.
Barkerville Cariboo Ry. Ashcroft 96.	Black Jack Quartz Mining Co., Ltd. E. A. Martin, pres. and mgr.; Wm. H. Phelps, secy. and treas. Cap. stk. \$120,000. Black Jack, gold. Shaft and tunnel, refractory; steam and water.
"	James Innes. Forest Rose and St. George, gold. Pacer; hydraulic.
"	Slough Creek Mining Co., Tacoma, Wash., U. S. A., Hotel Fife. W. H. Fife, pres.; E. M. Onnette, treas.; C. Ramos, mgr. Cap. stk. \$300,000. Slough Creek, gold, shaft and tunnel (developing).
"	Victoria Amalgamated Hydraulic Mining Co. Pinkerton's, gold. Pacer, deep.
"	Waverly Hydraulic Mining Co. I. B. Mason, pres.; J. Stone, secy. and treas.; J. Pomeroy, mgr. Waverly, gold. Pacer; hydraulic.
Clinton Cariboo Ry. Ashcroft 96.	Bonanza Mining Co. E. Bell, secy. Bonanza, gold. Shafts and tunnel; free (developing).

## GOLD AND SILVER—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND DISTRICT.	
Comox..... Vancouver Ry. Nanaimo 253, 532.	E. Priest. Venus, gold. Shaft; free; water (developing).
Fairview..... Yale Ry. & P.O. Sicamous 96.	Wide West Mining Co. H. B. Dexter, prest.; F. R. Kline, secy.; M. C. Sharpneck, treas.; H. W. Bowen, mgr. and supt. Wide West, gold and silver. Tunnel and open pit; free; steam; 6 stamps.
Golden..... Kootenay (East) Ry. 96.	H. C. Hannsot & Co., Toronto, Ont., King st. W. Vermont Discovery, silver and lead. Tunnel (developing). Donald G. Forbes, supt.
"..... "	Thunder Hill Mining Co., Ltd., Victoria, B. C., Jewell Block, Douglas st. J. Nicholles, prest.; W. H. Balm- bridge, secy. and treas.; James Brady, mgr. and supt. Cap. stk. \$500,000. Thunder Hill, gold, silver and lead. Open pit, 15,000 tons; steam.
Hixon Creek..... Cariboo (P. O. Quesnelle) Ry. Ashcroft 96 (210 m.).	Blue Lead Hydraulic Co. G. B. Clarke, secy. and treas.; James Reid, mgr. Cap. stk. \$100,000. Blue Lead, gold. Placer; hydraulic (developing). Maurice Davis, supt.
"..... "	Quesnelle Quartz Mining Co., Ltd. James Reid, prest.; W. A. Johnston, secy. and treas. Cap. stk. \$300,000. Gold and silver. Shaft; free and refractory; steam; 5 stamps.
Hope..... Yale Ry. 96.	Shuniah Mining Co. Shuniah, gold and silver. Slope; refractory; water (developing).
Illilwacut..... Kootenay Ry. 96.	Lanark Consolidated Mining & Smelting Co., Victoria, B. C., 48 Langley st. Thos. Earle, prest.; Geo. A. Sargison, secy.; S. P. Snowden, treas. Cap. stk. \$200,000. Lanark and others, silver and lead. Shaft and tunnel; steam; hand (developing).
Keithley Creek..... Cariboo Ry. Ashcroft 96.	Hayward Mining Co. G. A. Veltz, secy. and treas.; M. Kerr, mgr. and supt. Cap. stk. \$50,000. Hay- ward, gold. Placer; hydraulic.
Lillooet..... Cariboo Ry. Ashcroft 96 (43 m.).	John Irving & Co., Victoria, B. C. Cap. \$20,000. Victor, gold. Placer; hydraulic. J. N. Jensen, supt.
"..... "	Mina Placer Co. J. S. Bell, secy., treas. and supt. W. Duquid, mgr. Mina Placer, gold. Open pit; water (developing).
"..... "	Peters & Ward. Gold. Open pit, placer.
"..... "	Vancouver Enterprise Mining Co., Ltd., Vancouver, B. C. Capt. Malcolm McLeod, prest.; R. A. Anderson, secy. and treas. Cap. stk. \$25,000. Vancouver Enterprise, gold. Placer, tunnel and shaft; hydraulic.
Nanaimo..... Vancouver Ry. 352.	Minerva Mining & Milling Co., Victoria Crescent. B. Raper, prest.; A. Raper, secy. and treas.; E. Priest, mgr. and supt. Eureka, Twin Brothers and Minerva. Open pits and shaft; free and refractory; hand (developing).
"..... "	Texada Gold and Silver Mining Co., Victoria Crescent. J. W. Stuton, prest.; Alfred Raper, secy.; T. D. Jones, treas.; E. Priest, mgr. and supt. Cleopatra, gold and silver. Shaft; refractory; hand.
Osoyoos..... Yale Ry. Kamloops 96.	International Mining & Milling Co. W. C. Kincaid, prest.; J. C. Kincaid, secy.; B. M. Spinning, treas.; R. A. Brown, mgr. and supt. Cap. stk. \$500,000. Volcanic Mountain, silver and lead. Tunnel; hand.
"..... "	Spokane & Great Northern Mining Co., Spokane, Wash., U. S. A., 318 and 319 The Rookery. H. C. Walters, prest.; H. M. Hoyt, secy.; A. B. Keeler, treas.; C. F. Lee, mgr. Cap. stk. \$2,000,000. Gold and silver. Tunnel and shaft; free and refractory; steam; stamps (developing).
Pentlcton..... Yale Ry. Sicamous 96.	Okanagon Mining Co., Spallumcheen, B. C. Capt. Shorts, mgr. Cap. stk. \$2,000. Okanagon Mineral Claim, gold and silver. Shaft, tunnel; refractory; hand (developing).
Quesnelle Forks Cariboo Ry. Ashcroft 96.	South Fork Hydraulic Mining Co. A. C. Knight, secy.; J. K. Barker, mgr. South Fork, gold. Placer; hydraulic (developing).
"..... "	Victoria Hydraulic Mining Co., Ltd., Victoria, B. C., 30 Broad st. Wm. Wilson, prest.; W. D. McGregor, secy. and treas.; John Hepburn, mgr. and supt. Cap. stk. \$100,000. Coquette, gold. Placer; water.
Revelstoke, Kootenay (W.) Ry. 96.	Thomas Downs. Sardeaux Chief, gold. Tunnel; refractory. C. Holten, supt.
"..... "	Kootenay Smelting & Trading Syndicate Ltd., London, Eng., 91 Lombard st. L. R. C. Boyle, prest.; Wm. Bailey, secy.; John Campbell, mgr. and supt. Cap. stk. \$200,000. Silver King, Terrible, Monarch, Emma, Blue Bell and Alice, gold, silver, lead and copper. Tunnels; refractory; steam and hand (developing).
"..... "	Ross & McDonald. Gopher, silver and lead. Open pit; free; hand.
"..... "	P. M. Walker. Great Northern, silver, lead and copper. Tunnel; refractory (developing). C. Holten, supt.
Stanley..... Cariboo (P. O. Van Winkle) Ry. Ashcroft 96 (260 m.).	Albion Mining Co. John Pebbles, secy.; Wm. Wormald, mgr. Albion, gold. Placer; water.
"..... "	Chisholm Creek Co. A. Johnstone, secy. Chisholm Creek, gold. Shaft; water.
"..... "	Clark Mining Co. David Allen, prest.; Archibald Johnstone, secy.; John Cameron, mgr. Gold. Shaft; hand (developing).
"..... "	Danbar Flat Hydraulic Co. K. L. Lee, mgr. Danbar Flat, gold. Water.
"..... "	W. W. Houseman, British Empire, gold. Shaft; water (developing).
"..... "	Laura Mineral Co. Archibald Johnstone, secy. Laura, gold, silver and lead. Shaft; free; hand (developing).
"..... "	E. Perkins. Perkins, gold. Tunnel and shaft; refractory and free; hand, arrastre.
"..... "	South Wales Lease Co. South Wales, gold. Slope and shaft, deep; water and hand.
"..... "	Sunny Point Mining Co. John James, prest.; Louis A. Beedy, secy.; A. Johnstone, treas.; G. P. Munroe, mgr. Sunny Point, gold. Shaft, deep, placer; hand.
"..... "	Willow Mining Co., Orssville, B. C., 73 Columbia st. Josiah Rowe, prest.; George Monroe, secy. and treas.; Frank Hoar, mgr. Gold. Tunnel; hand.
Texada New Westminster (P. O. Nanaimo) Ry. 552.	C. R. Millar. Cap. \$10,000. Nigger Baby, gold. Shaft; refractory and free; water and hand (developing).

## GOLD AND SILVER (CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND DISTRICT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
Texada, New Westminster (Continued.)		Texada Gold & Silver Mining Co., P. O. Box 21, J. W. Sturton, pres.; A. Raper, secy.; Thos. D. Jones, treas.; E. Priest, mgr. and supt. Surprise, Little Gem, gold and silver. Shaft, tunnels; free; hand.
Trail Creek, W. Kootenay Ry. Sproul 36.		Le Roi Mining & Smelting Co., Spokane, Wash., U. S. A. Geo. M. Forster, pres.; I. N. Peyton, secy.; J. W. Binkley, treas. Cap. stk. \$2,000,000. Le Roi, gold, copper. Shaft, tunnel, deep.
Vernon, ..... Vale Ry. Sheahans 36.		Main, Hendricks & Wood. Cap. stk. \$5,000. Hill Discovery, gold. Flacet, shafts; water. C. C. Main, supt.
Vale Ry. 36.	Vale	Queen Mining Co., Front st. Benj. Douglas, pres.; Wm. Teague, secy., treas. and mgr. Cap. stk. \$90,000. Queen, gold and silver. Tunnels, 40 tons; refractory; water. Thomas Rablin, supt.
"	"	Lewis-Stenger, New Whatcom, Wash., U. S. A., 2922 Thirteenth st. Old Sol and Last Chance, gold and platinum. Tunnels (developing).

## IRON

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND DISTRICT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, BLAST FURNACES, ETC., AND NAME OF MINE SUPERINTENDENT.
Kamloops Ry. 36.	Vale	Glen Iron Mining Co., Ltd. J. W. Mackay, pres.; J. Ogden Grahame, secy. and treas.; F. J. Fulton, mgr. Cap. stk. \$50,000. Glen Iron, bessemer. Slope, 4,500 tons.

## LEAD AND ZINC

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND DISTRICT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, SMELTERS, ETC., AND NAME OF MINE SUPERINTENDENT.
Ainsworth Ry. 36.	W. Kootenay	D. W. Clark. Lady of the Lake, lead. Tunnel, shaft, hand.
Golden Ry. 36.	East Kootenay	Golden Mining & Smelting Co., Ltd., Calgary, N. W. Terr., Canada. H. B. Alexander, pres. and mgr.; P. McCarthy, secy. and treas. Cap. stk. \$100,000. Golden, lead and copper (developing).
Hillbrow Ry. 36.	Kootenay	Boyd & Bain Co. Dunningan Mine, lead and copper. Shaft, tunnel, slope; free; hand (developing).

## PLATINUM

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND DISTRICT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, AND NAME OF MINE SUPERINTENDENT.
Granite Creek Ry. 36.	Vale	Tulameen Improvement & Hydraulic Co., Ltd., New Westminster, B. C., 9 Sixth st. Jos. C. Armstrong, pres.; Walter J. Walker, secy. and treas.; Wm. G. Thompson, mgr. Cap. stk. \$60,000. Tulameen, platinum. Flacet; hydraulic (developing). Albert Wells, supt.

## QUICKSILVER

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND DISTRICT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, AND NAME OF MINE SUPERINTENDENT.
Alberni Ry. 552.	Vancouver	Seachart Quicksilver Mining Co., Victoria, B. C., Yates st. P. Dunlevy, pres.; F. J. Clayton, secy.; A. F. Fluemert, treas.; Wm. Wills, mgr. and supt. Cap. stk. \$75,000. Seachart No. 1. Shaft and tunnels; water.

## STONE, MARBLE, GRANITE AND ONYX

LOCATION OF MINE OR QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND DISTRICT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE OR QUARRY, KIND OF STONE, KIND OF MINE OR QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STONE OR MARBLE MILLS, LIMERILNS AND CAPACITY, ETC., AND NAME OF MINE SUPERINTENDENT.
Nanaimo	Vancouver Ry. 552.	Minerva Marble Co., Victoria Crescent. B. Raper, pres.; A. Raper, secy. and treas.; E. Priest, mgr. and supt. Minerva, marble. Open pit; hand.
"	"	Raper, Priest & Co., 28 Victoria Crescent. E. Priest, mgr. Cap. \$2,000. Mataspina, red granite. Open pit; hand (developing).
Nelson Island New Westminster Ry. & P.O. Victoria 552.		Nelson Island Granite Co., Ltd., Victoria, B. C. J. C. Prevost, pres. and treas.; E. J. Thain, secy., mgr. and supt. Cap. stk. \$30,000. Nelson Island, gray granite. Open pit; steam (developing).
Saanich, New Westminster (P. O. N. Saanich) Ry. 552.		Saanich Lime Co., Ltd., Victoria, B. C., 127 Yates st. Peter C. Fernie, pres. and supt.; J. Wriglesworth, secy., treas. and mgr. Cap. stk. \$50,000. Saanich and Millstream, limestone. Open pit, 2,000 tons; horse and hand; kiln, 2,250 tons.
Vancouver N. Westminster Ry. 96, 552.		Vancouver Stone Quarrying, Mining & Transportation Co., Cordova st. Johann Wulffsohn, pres.; R. B. Johnson, secy. and treas.; J. W. Vaughan, mgr. English Bay, sandstone. Open pit; hand.

SEE ALSO SUPPLEMENTARY LIST

NEW BRUNSWICK  
MINERAL PAINT

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF PRODUCT, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, PAINT MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
Newcastle, Northumberl'd Ry. 325.		John Ferguson. Oxide of iron.

## STONE, MARBLE, GRANITE AND ONYX

LOCATION OF MINE OR QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE OR QUARRY, KIND OF STONE, KIND OF MINE OR QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STONE OR MARBLE MILLS, LIMERILNS AND CAPACITY, ETC., AND NAME OF MINE SUPERINTENDENT.
Newcastle, Northumberl'd Ry. 325.		C. E. Fish. Cap. \$5,000. French Fort, olive sandstone. 4,000 tons; steam. William Sutherland, supt.

SEE ALSO SUPPLEMENTARY LIST

## NORTH-WEST TERRITORY

## COAL—ANTHRACITE

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND DISTRICT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, COKE OVENS, AND NAME OF MINE SUPERINTENDENT.
Anthracite.....	Alberta.	Canadian Anthracite Coal Co., Hon. J. G. Thorp, pres.; L. Crabbell, secy.; O. H. Ingham, treas.; H. W. McNeill, mgr. and supt. Cap. stk. \$1,000,000. Stewart. Tunnel and slope; steam; breaker.
"	"	The H. W. McNeill Co., Ltd., H. W. McNeill, pres.; E. L. Little, secy. Cap. stk. \$50,000. Slopes, 50,000 tons; steam; breaker. Phillip Gill, supt.

## COAL—BITUMINOUS

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND DISTRICT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, COKE OVENS, AND NAME OF MINE SUPERINTENDENT.
Bow River Mines Alberta (No P. O.) Ry. 10.	Alberta	Anthracite & Bituminous Coal Co., Toronto, Ont., 15 Toronto st., R. E. Chaffey, pres.; F. A. Fleming, secy.; S. H. Fleming, treas.; Wm. H. Merritt, mgr. Cap. stk. \$250,000. Bow River (developing).
Calgary	Alberta	Golden Mining & Smelting Co. of Canada, Ltd. Gold.
Cannony Ry. 36.	Alberta	Canada Northwest Coal & Lumber Syndicate, London, Eng., 6 Clements lane, E. C. George B. Powell, pres.; J. W. Knowles, secy.; Chas. Dickinson, mgr. and supt. Cap. stk. \$350,000. Cochrane. Slope and tunnel, 36,000 tons; steam.
Lethbridge Ry. 10.	Alberta	Alberta Railway & Coal Co. Wm. Lethbridge, pres.; H. McBeth, treas.; E. T. Galt, mgr. Shafts and tunnels, 150,000 tons; steam. Wm. Stafford, supt.
"	"	Cowdery Bros., Fort McLeod, Alberta. Shafts. Open pit, 1,500 tons; hand. H. D. Freemantle, supt.
Pincher Creek Ry. Lethbridge 10.	Alberta	Andrew Christie. Cap. \$2,000. Christie's Mine. Tunnel, 500 tons; hand.
"	"	Francis Willock (local). Stand-by. Tunnel, 200 tons; hand.

## GOLD AND SILVER

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND DISTRICT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
Clover Bar Ry. Edmonton 36.	Alberta	Alexander Robertson. Gold. Placer; free; water and hand.
Edmonton Ry. 36.	Alberta	Donald Ross. Cap. \$2,500. Ross, gold. Tunnel, 700 tons; hand.
Pt. Saskatchewan, Alberta Ry. Edmonton 36.	Alberta	George Bourk. Gold. Placer; hand, horse and water.

## STONE, MARBLE, GRANITE AND ONYX

LOCATION OF MINE OR QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND DISTRICT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE OR QUARRY, KIND OF STONE, KIND OF MINE OR QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STONE OR MARBLE MILLS, LIMESTONE AND CAPACITY, ETC., AND NAME OF MINE SUPERINTENDENT.
Calgary Ry. 36.	Alberta	John G. McCallum, Stephen av. Cap. \$15,000. Elbow Quarry, freestone. Op. pit, 2,700 tons; steam, mill.

SEE ALSO SUPPLEMENTARY LIST

# NOVA SCOTIA

## COAL—BITUMINOUS

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, COAL BREAKERS, WASHERS, COKE OVENS, AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Caledonia Mines C. Breton Ry. Little Glace Bay 31.	Caledonia Coal & Railway Co. W. Emery, prest.; Eustace Hubbard, secy.; Daera MacKeen, treas., mgr. and supt. Cap. stk. \$900,000. Caledonia. Shaft, 168,000 tons; steam and compressed air.
Little Glace Bay Cape Breton Ry. 31.	Glace Bay Mining Co., Ltd., Halifax, N. S., Lower Water st. E. P. Archbold, prest.; J. R. Lithgow, secy., treas. and mgr. Cap. stk. \$640,000. Little Glace Bay. Shaft, 120,000 tons; hand. C. H. Rigby, supt.
Mahou Harbor Inverness Ry. 31, 767.	Mahou Coal & Gypsum Co., Ltd. C. L. Snow, prest., mgr. and supt.; Lewis McKeen, secy. and treas. Cap. stk. \$30,000. Mahou. Slope, 3,000 tons; water.
Spring Hill In. Cumberland'd Ry. 31, 325.	Cumberland Railway & Coal Co. Montreal, Que. Imperial Bldg., Place d'Armes. R. Cowans, v.-prest.; H. R. Drummond, secy. and treas.; I. R. Cowans, mgr. Spring Hill. Four slopes, 512,300 tons; steam.
Stellarton Pictou Ry. Pictou 325.	Acadia Coal Co., Ltd. J. W. Clendenin, prest. and treas.; Philip Harris, secy.; H. S. Poole, mgr. Cap. stk. \$4,000,000. Slope and open pit, 100,000 tons; steam; 75 coke ovens, 26,000 tons. I. Maxwell, supt.
Sydney Cape Breton Ry. 325.	Gardener Coal Co. John E. Burchell, prest.; J. Sydney Burchell, secy.; James T. Burchell, treas., mgr. and supt. Cap. stk. \$200,000. Gardener. Shaft, 40,000 tons; steam and electricity.
" " " " "	Sydney & Lonsburg Coal & Railway Co., Ltd. C. S. Keefe, secy. and treas.; D. J. Kennedy, mgr. and supt. Cap. stk. \$1,500,000. Reserve. Slope and shaft, 170,000 tons; compressed air and steam.
Thorburn Pictou Ry. 325.	Acadia Coal Co., Ltd., Stellarton, N. S. I. W. Clendenin, prest. and treas.; Philip Harris, secy.; H. S. Poole, mgr. Cap. stk. \$4,000,000. Slope and open pit, 100,000 tons; steam. I. Dunbar, supt.
Truro Colechester Ry. 325. (6 miles).	Truro Coal Mining Co., P. O. Box 523. William Hallett, prest.; George Ross, secy. and mgr.; T. G. McMullin, treas. Cap. stk. \$43,000. Truro. Slope; steam (developing.)
Westville Pictou Ry. 325.	Acadia Coal Co., Ltd., Stellarton, N. S. I. W. Clendenin, prest. and treas.; Philip Harris, secy.; H. S. Poole, mgr. Cap. stk. \$4,000,000. Slope and open pit, 100,000 tons; steam. I. W. Sutherland, supt.
" " " " "	Intercolonial Coal Mining Co., Ltd., Montreal, Que., 139 Commissioners st. James P. Cleghorn, prest.; William J. Nelson, secy. and treas.; Charles Fergie, mgr. and supt. Cap. stk. \$1,000,000. Drummond. Slopes, 190,000 tons; steam; 20 coke ovens, 6,000 tons.

## COPPER

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, FURNACES, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Sydney Cape Breton Ry. North-West Arm Sydney Harbor 31.	Eastern Development Co., Ltd., Boston, Mass., 53 State st. Isaac P. Gregg, prest. and mgr.; Thomas Muir, secy. and treas. Cap. stk. \$3,500,000. Coxheath. Shaft, 60,000 tons; steam and compressed air. Brownell Grainger, supt.

## GOLD AND SILVER

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Country Harbor Guysborough (P. O. Cross Roads, Country Harbor) Ry. Halifax 31.	Country Harbor Gold Mining Co., Ltd., St. Johns, N. B., P. O. Box 132. Robert Blair, prest.; J. Gordon Forbes, secy. and treas.; George McNaughton, mgr. and supt. Cap. stk. \$40,000. McNaughton Bell. gold. Shaft and tunnel, 13,500 tons; free; 20 stamps.
Fifteen-Mile Stream Halifax Ry. Hopewell 325.	New Egerton Mining Co., New Glasgow, N. S. James D. McGregor, prest., secy. and treas.; James A. Fraser, mgr. and supt. Cap. stk. \$40,000. New Egerton, gold. Shafts and tunnels, 4,500 tons; free; steam; 15 stamps.
Goldenaylle Guysborough Ry. Antigonish 325.	C. B. Beresford, Sherbrooke, N. S. Hee, Stryeke, Domingues, gold. 400 tons; free; horse; 15 stamps.
" " " " " (43 miles).	Malcolm Cameron, Wellington, Palmerston and Grape Vine, gold. Shafts and tunnels; free; steam and water; 10 stamps.
Isaac's Harbor Guysboro'h Ry. 31.	Palgrave Gold Mining Co., Portland, Me., Exchange st. H. K. Fisher, prest. and mgr.; W. H. Harrington, secy.; T. R. Gage, treas.; Cap. stk. \$100,000. Palgrave, gold. Shafts and tunnels, 2,400 tons; free; steam; 10 stamps.
Kemptville Yarmouth Ry. Yarmouth 31.	Kempt Gold Mining Co., Ltd., Yarmouth, N. S. Jacob Blunzy, prest.; A. W. Ekins, secy. and treas.; W. H. Nash, mgr. and supt. Cap. stk. \$80,000. Kempt, gold. Shaft, 500 tons; free; steam; 10 stamps.
Malagut Gold Mines Queen's Ry. Bridgewater 532 (26 miles).	Boston Gold Mining Co. Geo. A. Kimball, prest.; B. F. Whittemore, secy. and treas.; F. K. Ballou, mgr. and supt. Cap. stk. \$300,000. Boston, gold. Tunnel, slope and deep, 3,000 tons; free; steam; 10 stamps.
Moosehead Halifax Ry. Spyr Bay 31.	Moosehead Gold Mining Co., Ltd., Halifax, N. S., 52 Bedford row. W. J. Stewart, prest.; W. C. Bishop, secy.; Thos. Brown, treas.; Henry G. Stenshorn, mgr. and supt. Cap. stk. \$100,000. Moosehead, gold. Free; steam; 24 stamps (developing).

## GOLD AND SILVER—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Moose River Gold Mines Halifax Ry. Shubenacadie 325 (30 miles).	Damos Tonquoy. Cap. \$40,000. Tonquoy, gold. 19 shafts, slopes, 5,000 tons; free; water and steam; 15 stamps.
Mount Uniacke. Hants Ry. 325.	Withrow Gold Mining Co. John J. Withrow, pres. and supt., T. P. Putnam, secy., treas. and mgr. Cap. stk. \$7,000. Withrow, gold. Slope, 500 tons; free; steam; 10 stamps.
Oldham . . . . . Halifax Ry. Enfield 325 (3 mi.).	Napier Mining Co. Wm. J. Fraser, pres.; John E. Hardman, secy., treas. and mgr. Cap. stk. \$120,000. Napier, gold. Free and refractory; steam. Wm. Mackintosh supt.
" " " "	Oldham Gold Co. John E. Hardman, mgr. Cap. \$20,000. Baker, gold. 7,000 tons; free and refractory; steam and water; 10 stamps. Wm. Mackintosh, supt.
" " " "	Pleasant Hill Gold Mining Co. Pleasant Hill, gold. Free. J. E. Vandergrift, supt.
" " " "	Rhode Island Mining Co., Providence, R. I., 18 Westminster st., Room 47. C. R. Day, treas.; Norman Logan, mgr. and supt. Donaldson, gold. Shaft; horse (developing).
" " " "	Standard Gold Co. J. E. Hardman, mgr. Cap. stk. \$50,000. Gold. Steam. Wm. MacKintosh, supt.
Rawdon . . . . . Hants Ry. Mt. Uniacke 325.	Central Rawdon Mining Co., Ltd., Windsor, N. S. Joshua H. Smith, pres.; J. C. Gehlert, secy.; Clarence H. Dimock, treas.; T. B. Blos, mgr. Cap. stk. \$120,000. Combination, gold. 15 stamps.
Salmon River . . . Halifax Ry. 32.	Dufferin Gold Mining Co., Ltd., Truro, N. S. A. K. Archibald, pres., mgr. and supt.; S. R. Tipper, secy. and treas. Cap. stk. \$50,000. Dufferin, gold. Shafts, tunnels and slopes, 12,000 tons; free; water; 20 stamps.
Seal Harbor, Guysborough Ry. and P. O. Isaac's Harbor 31.	McNaughton Gold Mining Co., St. Johns, N. B., P. O. Box 132. Alfred C. Blair, pres.; J. Gordon Forbes, secy. and treas.; Robert McNaughton, mgr. Cap. stk. \$20,000. Seal Harbor, gold. Shaft and tunnel, 40,000 tons; free; steam; 15 stamps.
" " " "	McNaughton Gold Mining Co., Ltd., St. Johns, N. B., P. O. Box 132. A. Chelton Blair, pres.; J. Gordon Forbes, secy. and treas.; Robert McNaughton, mgr. and supt. Cap. stk. \$16,000. McNaughton, gold. Shaft and tunnel, 9,000 tons; free; steam; 15 stamps.
Upper Misquodobbitt Halifax Ry. Shubenacadie 325 (35 miles).	Dixon & Co., Halifax, N. S. Herbert Dixon, mgr. and supt. Dixon, gold. Shaft, 1,200 tons; free; steam; 5 stamps.
Waverly . . . . . Halifax Ry. Windsor Junction 325 (2 miles).	Lake View Mining Co., Ltd., Newark, N. J., 489 Market st. T. B. Allen, pres., William L. Allen, secy. and treas.; A. A. Hayward, mgr. and supt. Cap. stk. \$500,000. Lake View, gold. Deep, 19,000 tons; free; steam; 30 stamps.
" " " "	West Waverly Gold Co., Ltd. James C. Ayer, pres., E. L. Nowcombe, secy., John E. Hardman, treas. and mgr. Cap. stk. \$60,000. West Waverly, gold. 15,000 tons; free; steam; 10 stamps. Richard L. Sherman, supt.
" " " "	B. C. Wilson, Halifax, N. S., P. O. Box 520. Cap. \$25,000. East Waverly, gold. Tunnel and incline, 10,000 tons; free; steam and water. James Warren, supt.
Whiteburn Mines, Queen's Ry. New Germany 532 (30 miles).	John C. Coleman. G. J. Partington, mgr. and supt. Whiteburn, gold. Shaft, free; steam; 10 stamps (developing).
Wine Harbor, Guysboro'h Ry. Antigonishe 325.	H. T. Harding, Truro, N. S. E. Conroy, mgr. and supt. Cap. \$10,000. Napier and Eldorado, gold. Shaft and tunnel, 3,000 tons; free; steam; 27 stamps.

## GYPSUM

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Mabou Harbor, Inverness Ry. 31, 707.	Mabou Coal & Gypsum Co., Ltd. C. L. Snow, pres., mgr. and supt.; Lewis McKeen, secy. and treas. Cap. stk. \$50,000. Converse. Open pit, 5,000 tons; steam; mill, 4,000 tons.
Port Bevis . . . . . Victoria (P. O. Baddeck) Ry. 31.	Victoria Gypsum Mining & Manufacturing Co., Ltd. Hon. Duncan C. Fraser, pres.; H. Percy Blanchard, secy. and treas.; W. F. McCurdy, mgr. and supt. Cap. stk. \$100,000. Victoria. Open pit, 15,000 tons; steam.
Windsor . . . . . Hants Ry. 701.	Wentworth Gypsum Co., Ltd. I. B. King, pres.; E. Norman Dimock, secy.; Clarence H. Dimock, treas. and mgr. Cap. stk. \$200,000. Wentworth. Open pit, 25,000 tons; steam. John Phillips sr., supt.

## IRON

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, BLAST FURNACES, ETC., AND NAME OF MINE SUPERINTENDENT.
Acadia Mines Colchester Ry. Londonderry Sta. 325.		Londonderry Iron Co., Montreal, Que. A. T. Patterson, pres.; Jas. Phymister, secy.; F. C. Budden, treas.; R. G. Leckie, mgr. Cap. stk. \$1,000,000. East and West, hematite and limonite. Shaft, 70,000 tons; steam. R. Boutilier and F. Park, supts.
Bridgeville . . . . . Pictou Ry. 325.		Pictou Charcoal Iron Co., Ltd., New Glasgow, N. S. W. B. Moore, pres.; D. R. Grant, secy. and treas.; E. A. Sjøstedt, mgr. and supt. Cap. stk. \$200,000. Grant, brown hematite. Tunnel, 10,000 tons; steam and hand; furnace, 7,000 tons.
Ferrona . . . . . Pictou F. O. and Ry. New Glasgow 325.		New Glasgow Iron, Coal & Railway Co. John F. Stairs, pres.; Harvey Graham, secy.; Thomas Green, treas. Cap. stk. \$1,000,000. East River, brown and red hematite. Slope, 2 shafts, open pit; steam; furnace, 30,000 tons (developing).
Torbrook . . . . . Annapolis Ry. 325.		Torbrook Iron Co., Ltd. Hon. Senator MacFarland, pres.; Geo. De Blois, secy. and treas.; R. G. E. Leckie, mgr. Cap. stk. \$100,000. Torbrook, red hematite. 4 shafts, 35,000 tons; steam. K. Solomon, supt.

## MANGANESE

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, BLAST FURNACES, ETC., AND NAME OF MINE SUPERINTENDENT.
Tenecape . . . . . Hants Ry. 31.		Shaw & Churchill Co., Walton, N. S. Tenecape. Shaft, tunnel and open pit, 250 tons; steam. D. W. Mc- Viear, supt.

## LEAD AND ZINC

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, SMELTERS, ETC., AND NAME OF MINE SUPERINTENDENT.
Halfway Brook Colchester Ry. Brookfield 325.		Clarke & Johnson, Halifax, N. S. Joe Howe, lead. Shaft; steam.
Smithfield . . . . . Guysboro Ry. Halfway Brook 325 (13 miles).		Clark & Fraser, Halifax, N. S., 161 Hollis st. Smithfield Silver Lode, lead. 3 shafts; refractory; steam.

## STONE, MARBLE, GRANITE AND ONYX

LOCATION OF MINE OR QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE OR QUARRY, KIND OF STONE, KIND OF MINE OR QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STONE OR MARBLE MILLS, LIMEKILNS AND CAPACITY, ETC., AND NAME OF MINE SUPERINTENDENT.
Brookfield . . . . . Colchester Ry. 325.		Londonderry Iron Co., Montreal, Que. A. T. Patterson, pres.; Jas. Phymister, secy.; F. C. Budden, treas.; R. G. Leckie, mgr. Cap. stk. \$1,000,000. Lunark, limestone. 11,000 tons; steam. F. Park, supt.
Lower Cove Cumberland Ry. 340.		Atlantic Stone Co., Boston, Mass., 474 Atlantic av. Amos Seaman, pres.; E. Q. Rowan, secy. and treas.; R. S. Hibbard, mgr. and supt. Cap. stk. \$30,000. Lower Cove, sandstone. Open pit, 3,000 tons; steam; mill.
Marble Mountain Ry. 31.	Inverness	Bras d'Or Lime Co., Ltd., Halifax, N. S., 161 Hollis st. C. F. Fraser, pres.; A. Milne Fraser, secy. and treas.; D. MacLachlan, mgr. and supt. Cap. stk. \$50,000. Limestone. Open pits, 10,000 tons; steam; 3 kilns, 3,000 tons.
"	"	Bras d'Or Marble Co., Ltd., Halifax, N. S., 161 Hollis st. C. F. Fraser, pres.; A. Milne Fraser, secy. and treas.; D. MacLachlan, mgr. and supt. Cap. stk. \$100,000. Bras d'Or, marble. Open pit; steam and gravity; mill (developing).
Springville . . . . . Pictou Ry. 325.		New Glasgow Iron & Charcoal Co., New Glasgow, N. S. D. R. Grant, secy.; E. A. Sjøstedt, mgr. Cap. stk. \$500,000. McLean's, limestone. Open pit, 4,500 tons; hand; kiln, 500 tons. S. H. McLean, supt.

SEE ALSO SUPPLEMENTARY LIST



# ONTARIO

## ASBESTOS

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
Ontario Ry. 34, 36, 548.	Ontario	H. I. Boehm & Alex. Bowd, 184 Sussca St. Shaft.

## COPPER

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE OR ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, FURNACES, ETC., AND NAME OF MINE SUPERINTENDENT.
Carleton Place.	Lanark Ry. 36.	Wylie & Weekes, Burside, Nev. Antimony, copper, lead. Open pits; hand.
Copper Cliff	Algoma Ry. 36.	Canadian Copper Co., Cleveland, Ohio, 103 101 Superior St. Stevenson Burke, pres.; H. P. McIntosh, secy. and treas. Cap. \$2,500,000. Copper Cliff, Evans, copper, nickel. Shaft, 47,000 tons; steam; furnace 30,000 tons. J. D. Evans, supt.

## FIRE CLAY

LOCATION OF MINE OR BANK, RAILWAYS, WATER ROUTES, AND SHIPPING POINT.	TOWN AND COUNTY	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE OR BANK, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, ETC., AND NAME OF SUPERINTENDENT.
Milton	Hullton Ry. 36, 290.	Milton Pressed Brick & Sewer Pipe Co., D. Robertson, pres.; J. S. McCannell, secy., treas. and mgr. Cap. \$100,000. Open pits, 8,000 tons; steam.

## GOLD AND SILVER

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE OR BANK, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
Beaver Mine	Algoma Ry. 3650 (10 miles).	Hidden Treasure Silver Mining Co., Minneapolis, Minn., 207 Masonic Temple, F. W. Stevens, pres.; W. R. Steadman, secy.; L. Kimbel, treas.; Neil Campbell, mgr. and supt. Cap. \$100,000. Hidden Treasure, silver. Shaft, tunnel, refractory developing.
Belmont Twp.	Peterboro P. O. and Ry. Marmora 119.	F. R. Lingham, Marmora, Ont. Cap. \$50,000. Belmont, gold. Shaft, 15,000 tons; free; steam. A. W. Carscallen, supt.
Black Bay	Algoma P. O. Port Arthur Ry. Pearl River 96.	Capt. Duncan McEachen, Duluth, Minn., 1 E. Fifth St. McEachen, gold, silver and lead. Shaft, tunnel; free; horse.
Delora	Hastings Ry. Marmora 119.	Stevens, Newberry & Rothwell, lessees, Detroit, Mich., 116 Griswood St. Canada Consolidated, gold. Shaft; refractory, steam and water.
Dorlon Twp.	Algoma P. O. Port Arthur Ry. Pearl River 96.	Ozema Mining & Smelting Co., Camden, N. J., 323 and 325 Federal St. Channing Allen, pres.; J. H. Sixsmith, secy. and treas.; John C. Smith, mgr. and supt. Cap. \$150,000. Ozema, gold, silver and lead. Shafts, drifts; refractory; steam developing.
Fairbank Twp.	Algoma P. O. Chelmsford Ry. Larchwood 36.	William Wilson, Toronto, Ont., on Bay and Adelaide sts. Cap. \$150,000. Clark, gold. Shaft, 30,000 tons; free; steam. John Dufont, supt.
Flinton	Addington Ry. Kaladar Station 36.	Kaladar Mining Co., Nanawau, Ont., Wm. Miller, pres.; F. Burrows, secy.; Dominion Bank, treas. Cap. \$120,000. Kaladar, gold. Free developing.
Gillies	Algoma P. O. Port Arthur Ry. Silver Creek 2650.	Badger Silver Mining Co., Milwaukee, Wis., N. E. cor. East Water and Mason sts. John M. Stowell, pres.; Walter Read, secy.; C. A. Read, treas.; H. Shear, mgr. and supt. Cap. \$250,000. Badger and Porcupine, silver. Shaft and slope, 6,000 tons; free and refractory; steam; 10 stamps.
"	"	Beaver Mining & Milling Co., Detroit, Mich. Silver. Shaft; free; steam; 10 stamps. Capt. Thos. Hooper, supt.
Lybster	Algoma P. O. and Ry. Silver Mountain 3550.	Crown Point Mining Co., Duluth, Minn., H. R. Tinkham, pres.; Emory Tinkham, secy.; C. E. Shannon, treas.; A. D. Cummings, mgr. Cap. \$600,000. Crown Point, silver. Tunnel, 1,500 tons; free, hand. W. N. Montgomery, supt.
"	"	Minneapolis Mineral Lands Co., Minneapolis, Minn., 811 Guaranty Loan Bldg. J. S. Lane, pres.; Eugene N. Best, secy.; C. E. Brewster, treas. W. D. Muddall, mgr. and supt. Cap. \$50,000. Palisade, silver. Shaft and tunnel, 6,000 tons; free; steam.
McTavish	Algoma P. O. Port Arthur Ry. Onimet 36.	A. L. Bain. Rising Sun, gold, silver and lead. Shaft; free, hand.

## GOLD AND SILVER—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWNS AND COUNTY.	
Malone Ry. 119.	Hastings Crescent Gold Mining Co., Ltd., Montreal, Que., Room 12, 39 St. John st., P. Alex. Peterson, pres.; Thomas Watson, secy. and treas.; George McLaughlin, mgr. and supt. Cap. stk. \$100,000. Crescent, gold. Shaft; free; steam; 10 stamps (developing).
Port Arthur Ry. 96, 386.	Algoma Lily of the Valley Mining Co., J. Brinson, pres.; W. J. Barre, treas.; H. Parsons, mgr. and supt. Lily of the Valley, silver. 2 shafts; free; hand.
"	" V-one Mining Co., Chicago, Ill., 114 Adams st. J. S. Morgan, pres. and mgr.; H. S. Sprague, secy.; John T. Huntington, treas. Cap. stk. \$5,000,000. V-one, silver. Shafts and tunnel; free.
Rat Portage Ry. 96.	Algoma Bad Mining Co., P. O. Box H. Bad, silver. Free (developing).
"	" Alex. Matheson. The Premier, gold. Shaft; free; horse and hand.
"	" C. S. Morris, Toronto, Ont., 119 Wellesley st. X 90 and Rosland, gold. Free and refractory (developing).
Silver Islet (No P. O.) Ry. 386.	Algoma Canada Laid Purchase, Detroit, Mich., 80 Griswold st. John J. Marvin, Henry S. Sibley, trustees. Trust certificates \$100,000. Silver Islet, silver. Shaft; free; steam; 50 stamps. Capt. T. H. Fretweary, supt.
Silver Mountain Ry. 595a.	Algoma E. F. Drake Estate, St. Paul, Minn., 291 Drake Block, Third st. A. M. Drake, mgr.; West End, silver. Shaft and tunnel; steam and hand. Wm. Rapsley, supt.
"	" Guaranty Silver Mining Co., Minneapolis, Minn., 816 Elwood av. A. C. Dunn, pres.; John G. Riekel, secy. and treas.; A. D. Westby, mgr. and supt. Cap. stk. \$500,000. Guaranty, silver. Shaft; free; steam (developing).
"	" Shumak Weachu Mine Co., Ltd., Liverpool, Eng., Dale st. Frank Tobin, pres.; V. K. Fry, secy. and treas.; Arthur L. McEwen, mgr. and supt. Cap. stk. \$500,000. Shumak Weachu, silver. Shaft and drifts; refractory; steam; 10 stamps.
Strange P. O. and Ry. Silver Mountain 595a.	Algoma Silver Chief Mining Co., Minneapolis, Minn., 391 N. Y. Life Bldg. Frank E. Mix, pres.; F. M. Hutchinson, secy.; Chas. L. Mendel, treas.; B. F. Moore, mgr. Cap. stk. \$200,000. Silver Chief, silver. Shaft; free.
"	" Silver Lake Mining Co., Duluth, Minn., 5 E. Third st. H. R. Tinkham, pres.; E. Tinkham, secy.; J. H. Hyher, treas.; A. D. Cummings, mgr. Cap. stk. \$2,000,000. Silver Lake, silver and iron. Shaft; free; hand.
Wabigoon (P. O. Barclay) Ry. 96.	Algoma Minnesota & Lake Manitowish & Silver Mining Co., Benson, Minn. Thomas Knudson, pres.; Anton Aronson, secy.; Peter J. Johnson, treas.; George Camden, mgr. Cap. stk. \$20,000. Gold and silver. Tunnel, 3,000 tons; refractory. Firmin Bedard, supt.
"	Algoma Gold Rock Mining & Milling Co., Ltd., Toronto, Ont. James Beatty, v.-pres.; Jos. J. Davis, secy.; Union Bank, treas.; Newbarn & Townsend, mgrs. Cap. stk. \$100,000. Gold Rock and Rabbit Island, gold and lead. Free (developing). E. S. Townsend, supt.

## GYPSUM

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWNS AND COUNTY.	
Cayuga Ry. 290.	Haldimand Adamant Manufacturing Co. of AMSTERDAM, SYRACUSE, N. Y., 300 E. Genesee st. E. W. Farnellee, pres.; S. S. Riston, secy.; C. T. Rockway, treas.; W. B. Chetty, mgr. Cap. stk. \$500,000. Adamant. Drift; steam; mill. J. A. Nellis, supt.
Manchester Ry. 290.	Ontario Ezra Grinnell, Port Gibson, N. Y. Cap. \$1,000. Port Gibson. Open pit, 500 tons; water.
Paris Ry. 290.	Brant Alabastine Co., Ltd., M. B. Church, pres.; J. M. Wheeler, secy., treas. and mgr. Cap. stk. \$84,000. Paris Plaster. Tunnel, 1,000 tons; hand.
Thorold Ry. 290.	Welland Estate of John Battle. Tunnel and open pit, 3,500 tons; water; cement mill, capacity 7,200 tons. Matthew Battle, supt.

## IRON

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, BLAST FURNACES, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWNS AND COUNTY.	
Bedford Mills, Bedford Sta. 368.	Frontenac Bedford Mining Co., Kingston, Ont. R. J. Cartwright, pres.; Joseph Bawden, secy. and mgr.; J. B. Melver, treas. Cap. stk. \$250,000. Black Lake, Lehman, magnetic. 500 tons.
Carleton Place, Ry. 368.	Lanark William H. Wylie, Flora st. Iron Duke, Bessemer. Open pits; hand.
Du River La Seine (No P. O.) Ry. Duluth, Minn. 96.	Rainy River District Atikokan Mining Co., Duluth, Minn., Room 303 Burrows Block. Cap. stk. \$250,000. Atikokan, brown hematite. Tunnel (developing).
Fort William, Ry. 96.	West Algoma Mattawin Iron & Mining Co., Kingston, Ont. B. W. Folger, pres.; Henry M. Folger, treas.; James Hammond, mgr. and supt. Cap. stk. \$100,000. Mattawin Iron Range, hematite.

IRON—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.			NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, BLAST FURNACES, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN	AND	COUNTY.	
Iron Dale	Victoria	Ry. 290, 331.	Baneroff Iron Co., Ltd. Chas. J. Pusey, pres.; L. B. Howland, secy. and treas.; Chas. Hutchinson jr., mgr. Cap. stk. \$1,000,000. Several claims, magnetic and hematite. Horse.
"	"	"	T. D. Ledyard, Toronto, Ont., 57 Colborne st. Snowdon, bessemer. Shaft and open pits. Wm. Nichol, supt.
Kaministiquia	Algoma	Ry. 95.	Kaministiquia Iron Co., Minneapolis, Minn. H. S. Smith, pres.; Clinton Stacy, secy.; G. A. Castle, treas.; S. H. Hall, mgr. Cap. stk. \$100,000.
Marks	Algoma	P. O. and Ry. Port Arthur 96, 755a.	Robert G. Chandler, trustee, Coldwater, Mich. Bessemer, magnetite. Shaft; hand.
Tatlock	Lanark	Ry. Clyde Forks 368.	Wylie, Weekes & Co., Carleton Place, Ont. White Birch, pyrites. Shaft; horse. Henry McCadden, supt.
White	Lanark	Ry. Flower Sta. 368.	William H. Wylie, Carleton Place, Ont. La Cousine, magnetic. Open pit; water.
	Peterboro	P. O. and Ry. Marmorata 293.	Belmont Bessemer Ore Co., Ltd., New York City, 29 Broadway. James M. Ashley jr., pres.; John T. Sill, v.-pres. Robt. L. Major, secy. and gen. mgr.; Wm. A. Kassam, treas. Cap. stk. \$600,000. Belmont, bessemer and magnetic. Shaft, 37,000 tons; steam. G. L. Woodworth, supt.

LEAD AND ZINC

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.			NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, SMELTERS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN	AND	COUNTY.	
Carleton Place	Lanark	Ry. 96.	Wylie & Crain. Lynch, lead. Open pits.
Lindsayville	Leeds	Ry. 290.	H. L. Barker & Co., Lyndhurst, Ont. Lyndhurst, lead. Shafts and tunnel, horse and hand; smelter, 900 tons.

MICA

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.			NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF PRODUCT, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN	AND	COUNTY.	
Kingston	Frontenac	Ry. 290.	Gould Lake Mining Co., Belleville, Ont. Dr. John Grant, pres. and mgr.; A. McClatchie, secy. and treas. Cap. stk. \$300,000. Gould Lake. Shaft, 15 tons, horse.
Loughboro Twp.	Frontenac	P. O. & Ry. Arnprior 96.	Bell, Wylie & Co. W. H. Wylie, secy.; W. McCadden, mgr. Cap. stk. \$10,000. Buck Lake. Open pit and shaft, 2,000 tons, hand.
Miller Twp.	Frontenac	P. O. and Ry. Perth 96.	C. A. Matheson. Landrie. Open pit (developing).
North Burgess	Lanark	P. O. and Ry. Perth 96.	McMartin & Lee. Open pits. D. G. McMartin, supt.
"	"	"	Ogle Cursr. Cap. \$5,000. Mica. Open pit, 30 tons; hand.
Sydenham	Addington	Ry. 290.	Fred. Foxton. Cap. \$100,000. Shaft. Steam. James Foxton, supt.
	Frontenac	(P. O. Perth Road) Ry. Harrowsmith 96.	Bell, Wylie & Co., Carleton Place, Ont. Wm. H. Wylie, mgr. Ronchhorn. Shaft; hand. Henry McCadden, supt.

NICKEL

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.			NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, SMELTERS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN	AND	COUNTY.	
Bleazard Twp.	Nipissing	P. O. & Ry. Sudbury 96.	Saint Nicholas Nickel Mining Co., Toronto, Ont. Cap. stk. \$50,000. Bleazard and Saller, nickel and copper. Shafts, 2,000 tons; hand and steam; smelter. Andrew Waddell, supt.
Carleton Place	Lanark	Ry. 368.	Wylie & Weekes. Maclan, nickel. Open pit.
Graham	Algoma	P. O. & Ry. Whitefish 96.	F. Summerby. Nickel and copper. Shaft.
Little Current	Algoma	Ry. 96.	Master-Lode Nickel Co., Duluth, Minn. A. M. Stearns, pres.; F. A. Fenton, secy.; Geo. A. Elder, treas.; W. C. Dresser, mgr. Cap. stk. \$1,000,000. Wallace, nickel and copper. Open pits.

## NICKEL—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, SMELTERS, ETC., AND NAME OF MINE SUPERINTENDENT.
Nelsonville.....	Algoma Ry. 96.	Algoma Nickel Co., Chicago, Ill., 524 Home Insurance Bldg. John Cudahy, pres.; E. C. Modenvell, secy.; S. P. Parnly, treas.; John C. Jackson, mgr. and supt. Cap. stk. \$250,000. Lotie, nickel and copper. Shaft; hand (developing).
".....	"	Commercial Mining Co., Ltd., Toronto, Ont., 106 King st. W. Arthur H. Hilyard, pres.; Herbert A. Hilyard, secy. and treas.; Robert H. Alm, mgr. and supt. Cap. stk. \$100,000. Star of the West. Shaft; hand.
Nickel City.....	Algoma P.O. & Ry. Whitefish 96.	Barnet, Russell & Co., Renfrew, Ont. Nickel City. Shafts (developing).
Straight Lake.....	Algoma (P. O. Cartier) Ry. 96.	Craig Syndicate, Toronto, Ont., 9 Toronto st. G. H. Watson, pres.; James Todhunter, secy.; W. J. McWhinney, treas.; George Wallace, mgr. Cap. stk. \$50,000. Craig, nickel and copper. Shaft and open pit, 15,000 tons; steam; furnace.
".....	"	Straight Lake Nickel Mining Co., Ltd., Toronto, Ont., 15 King st. W. B. Barclay McMurrich, pres.; Harry Vigeon, secy. and treas.; J. R. Gordon, mgr. Cap. stk. \$300,000. Straight Lake, nickel. Open pit, 30,000 tons; steam.
Sudbury.....	Algoma Ry. 96.	Bonanza Nickel Mining Co., Toronto, Ont., 301 Yonge st. J. G. Rimer, pres. and treas.; Geo. B. Foster, secy. Cap. stk. \$150,000. Bonanza, nickel, platinum and copper (developing).
".....	"	Commercial Mining Co., Ltd., Toronto, Ont., 106 King st. W. A. H. Helyard, pres.; H. A. Helyard, secy. and treas.; John Dafoe, mgr. Cap. stk. \$100,000. Commercial, nickel. Shaft and tunnel; electricity.
".....	"	E. H. Davis, Montreal, Que. E. S. Townsend, mgr. Beatrice, nickel and copper. Shaft; hand (developing).
".....	"	Emens Metal Co., Johnstown, Pa. Gerstoffite, nickel. Shaft and open pit; hand (developing). R. H. Alm, supt.
".....	"	H. H. Vivian & Co., Ltd. London, Eng., 9 Queen st. place, E. C. H. Hussey Vivian, pres.; Robert Sidgley, secy.; A. S. Merry, mgr. Murray, nickel and copper. Shaft, 12,000 tons; steam; furnace; G. Norman Henriksen, supt.
Wahnapitae.....	Nipissing Ry. 96.	Mathew McPhee, Pembroke, Ont. McPhee, nickel, copper and gold. Open pit.
".....	"	Ontario Nickel Mountain Mining Co., Ltd., Toronto, Ont., 88 Elliott st. J. Knox Leslie, pres.; G. S. Macdonald, secy. and treas. Cap. stk. \$500,000. Nickel, lead and gold. Shafts (developing).
Whitefish.....	Algoma Ry. 96.	Barnet & Russell, Renfrew, Ont. Cap. \$25,000. Homestead. Shaft; hand (developing).
".....	"	Drury Nickel Co., Ltd. A. P. Travers, pres.; Thos. L. Nelson, secy.; H. R. Valpey, treas.; Thos. Travers' mgr. and supt. Cap. stk. \$500,000. Inez. Open pit; steam, water jacket.
".....	"	Nickel Belt Mining Co., Ltd., Toronto, Ont., 144 King st. E. John Jones, pres.; H. C. Secord, secy. and treas. Cap. stk. \$75,000. Empire. Shaft (developing).
".....	"	Vermillion Mining Co., Cleveland, Ohio. Stevenson Burke, pres.; H. P. McIntosh, secy. and treas. Vermillion, nickel and copper. Horse.
Worthington.....	Algoma P.O. & Ry. Sudbury 96.	Dominion Mineral Co., Sudbury, Ont. John McIntyre, pres.; H. Cuff, secy.; F. I. Shaw, treas.; J. Cameron, mgr. and supt. Shafts, open pit; steam; furnace.
".....	"	Sault Ste. Marie Nickel Mining Agency Co., Ltd., Sault Ste. Marie, Ont. John McKay, pres.; D. M. Brodie, secy.; John Dawson, treas.; J. B. Miller, mgr. Cap. stk. \$45,000. McKay. Open pit.

## PHOSPHATE

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
Burgess Twp.....	Lamark P. O. and Ry. Perth 96.	G. Wateley. Black Lake, phosphate and mica. Open pits, 680 tons; hand.
Kingston.....	Kingston Ry. 290.	Gold Lake Mining Co., Belleville, Ont. Dr. John Grant, pres. and mgr.; A. McClatchie, secy. and treas. Cap. stk. \$300,000. Gold Lake. Tunnel, 15 tons; horse.
".....	"	N. W. Richardson, Lohoro Lake. Shaft, 750 tons; steam and hand.
Lake Opinicon Fronteneau	Ry. Harrowsmith 381.	Bell & Co., Arnprior, Ont. Cap. \$30,000. Bell, shaft, slopes, 2,000 tons; steam. N. Cochrane, supt.
".....	"	Kingston Phosphate Co., Montreal, Que. Rock Lake. Shaft, 2,000 tons; steam. Chas. A. Pyne, supt.
".....	"	Loimer & Bell, Arnprior, Ont. Niel Cochran, mgr. and supt. Cap. \$40,000. Bell. Shaft, 2,000 tons; steam.
North Burgess.....	Lamark P. O. and Ry. Perth 96.	Anglo-Canadian Phosphate Co., Ltd., London, Eng., 28 Grace Church st., E. C. J. J. Reid, pres.; G. D. Jennings, secy.; Robert C. Adams, mgr. Cap. stk. \$500,000. Otty Lake, Bols Lake, Battle Lake and 17 others, phosphate, mica. Shaft and open pit, 1,000 tons; horse and hand. Robert Cordich, supt.
N. Burgess Twp., Lamark	(P. O. Smith's Falls) Ry. Perth 96.	Ogile Carss. Cap. \$5,000. Standard, phosphate. Open pit, 200 tons; hand.
Sydenham.....	Addington Ry. 290.	Fred Foxton. Cap. \$100,000. Shaft, 500 tons; steam. James Foxton, supt.
".....	"	C. J. R. Stirling, Kingston, Ont. Cap. \$10,000. Stirling, phosphate and mica. Shaft and drift; horse, hand and steam.

## SALT

LOCATION OF MINE OR WELL, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF PRODUCT, KIND OF MINE OR WELL, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Clinton, Ry. 230.	Huron John McGarvey. Cap. \$15,000. Clinton Salt Works, fine and coarse. Well, 25,000 brls.; steam. James Shepherd, supt.
" " " " "	" Henry Ransford. Stapleton Salt Works, fine and coarse. Well, 40,000 brls.; steam.
Goderich, Ry. 240, 379.	Huron Joseph Kidd. Cap. \$10,000. Dominion Salt Works, dairy, table, fine and coarse. Wells, 30,000 brls.; steam.
" " " " "	" Peter McEwan. Cap. \$20,000. Goderich Salt Works, dairy, table and common. Well, 20,000 brls.; steam.
" " " " "	" Ogilvie & Hutchinson. M. Hutchinson, mgr. Coarse. Well, 800 tons; steam.
" " " " "	" John S. Platt. Cap. \$12,000. Maitland Salt Works, dairy, fine and coarse. Well, 15,000 brls.; steam and water.
Warwick, Ry. Kingscourt 290, 368, 302.	Lambton Earlton Salt Works Co., Ltd. C. V. Morris, pres.; T. G. Morris, secy., treas. and mgr. Cap. stk. \$10,000. Earlton, dairy, coarse. Wells, 123,635 brls.; steam.

## STONE, MARBLE, GRANITE AND ONYX

LOCATION OF MINE OR QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE OR QUARRY, KIND OF STONE, KIND OF MINE OR QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STONE OR MARBLE MILLS, LIMEKILNS AND CAPACITY, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Arnprior, Ry. 96.	Renfrew John G. Watson. Cap. \$4,000. Ottawa Grand, marble and limestone. Steam, mill.
Beaconsfield, Ry. 290.	Lincoln William Gibson. Beaconsfield, limestone. 65,000 tons; steam, mill. John Ritchie, supt.
Carleton Place, Ry. 96.	Lanark Daniel R. McNeely. Union. Open pit, hand and horse.
Cayuga, Ry. 440, 290.	Haldimand Reid Gibson. Cap. \$10,000. Gibson, limestone. Open pit; hand.
Credit Forks, Ry. 96.	Cardwell Carroll, Viek & Co., Toronto, Ont., 54 Adelaide st. W. Cap. \$90,000. Brown and gray sandstone. Tunnel, 10,000 tons; steam and horse, mill.
" " " " "	" Credit Valley Quarries Co., Ltd., Toronto, Ont., 80 Bay st. A. Myers, pres.; mgr. and supt.; Chas. Elliott, secy. and treas. Cap. stk. \$85,000. Credit Valley, gray and brown sandstone. Open pits, 15,000 tons; steam; mill.
" " " " "	" Scott, Pattullo & Co., Orangeville, Ont. Cap. \$75,000. No. 1 Credit Forks, brownstone. Tunnel, 16,400 tons; steam. Herman Pattullo, supt.
Cromarty, Ry. Dublin 230.	Perth Anthony Allen (dead). Cap. \$8,000. Cromarty, limestone. Open pit, 200 tons; hand.
Elmsly Twp., P. O. and Ry. Perth 96.	Lanark John Arthur. Limestone.
Grimsby, Ry. 381.	Wentworth Grimsby Quarry Co., Ltd. S. Webster, pres.; F. T. Webster, secy. and treas.; F. L. Webster, mgr. and supt. Cap. stk. \$20,000. Gray and brown sandstone. Slope, 12,000 tons; horse, hand and steam.
Inglewood, Ry. 96, 290.	Cardwell Britnel & Charlton, Toronto, Ont. Cap. \$5,000. Inglewood, freestone. Slope, horse.
" " " " "	" Charlton & Co., Toronto, Ont., 1127 1/2 Yonge st. Cap. stk. \$3,000. Gray sandstone. Open pit, 4,000 tons; horse and hand. Anthony Charlton, supt.
" " " " "	" David Graham. Cap. \$40,000. Sandstone. Open pit, 4,500 tons; hand. Donald Sinclair, supt.
" " " " "	" Thomas Murray. Cap. \$10,000. Inglewood, freestone. Slope; horse.
" " " " "	" William Smeaton. Cap. \$20,000. Credit Valley, brown and gray sandstone. Open pit, 4,500 tons; steam and horse.
" " " " "	" William Wilson. Sharp's, sandstone, rubble. Open pit, 400 tons; horse, mill.
Limehouse, Ry. 290.	Halton Alexander Garvin. Cap. \$1,000. Chanley, gray sandstone. Slope, 7,000 tons; hand; stone mill.
" " " " "	" Toronto Lime Co., Ltd., 118 Esplanade St. Thos. Gowdy, pres.; W. L. Scott, secy. and treas. Cap. stk. \$72,000. Limestone. Kiln, 6,000 tons.
Madoc, Ry. 290.	Hastings J. Brodigan & Co. Victoria, limestone. Open pit, 125 tons; steam. W. P. Kerr, supt.
Milton, Ry. 96, 290.	Halton W. J. Hartley. Cap. \$1,000. Mountain Vein, sandstone. Slope; hand; kiln, 600 tons.
" " " " "	" D. Robertson & Co., Toronto, Ont., 423 Manning av. Rockview, limestone and sandstone. Open pit, 50,000 tons; horse and hand; mill, kiln, 4,800 tons. D. S. Robertson, supt.
Mono Twp., P. O. & Ry. Orangeville 96.	Cardwell William H. Hewson. Cap. \$2,000. Nottawa, sandstone. Open pit, 100 tons; hand.
" " " " "	" Owen Sound Stone Quarrying & Construction Co., Ltd., Owen Sound, Ont. S. J. Parker, pres.; W. B. Stevens, secy. and treas.; P. W. Sabiston, mgr. Cap. stk. \$30,000. Mono, gray sandstone. Slope, steam developing.
Oneida Twp., P. O. and Ry. Nelles Corners 290.	Haldimand Oneida Quarry Co., Ltd., Brantford, Ont., 45 Market st. George H. Wilkes, pres.; J. R. MacKintosh, secy. and treas.; C. S. Hotchkiss, v. pres. and mgr. Cap. stk. \$50,000. De Cow, sandstone and marble. Steam developing.

## STONE, MARBLE, GRANITE AND ONYX—(CONTINUED)

LOCATION OF MINE OR QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE OR QUARRY, KIND OF STONE, KIND OF MINE OR QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STONE OR MARBLE MILLS, LIMEKILNS AND CAPACITY, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Orangeville, Wellington Ry. 96.	A. Franks (lessee), Orangeville. Freestone, white sandstone. Open pit, 1,200 tons; horse. Isaac Nicholas, supt.
Perth, Lamark	T. Alfred Poole. Otty Lake, limestone. 200 tons; hand; kiln, 80 tons.
Renfrew, Renfrew Ry. 96.	Canadian Granite Co., Ottawa, Ont. A. McLean, prest.; J. C. Rogers, secy.; C. I. Rogers, mgr. Cap. \$1,250. Plant's, gray marble. Open pit, 255 tons; hand. Fred Hilliard, supt.
Rockdale, Peterboro Ry. Havelock 96.	T. D. Ledyard, Toronto, Ont., 57 Colborne st. Belmont, white marble. Open pits and shafts. J. F. Purdy, supt.
Thorold, Welland Ry. 290.	Wm. Cartmell. Cap. \$10,000. Mountain, gray limestone. Open pit, 6,000 tons; steam and horse.
Hastings P. O. & Ry. Madoc 290.	Hungerford Marble Co., Ltd., Toronto, Ont., 31 Wellington st. E. P. W. Ellis, prest.; Wm. G. Ellis, secy. and treas. Cap. stk. \$100,000. Black, blue and white marble. Open pit; steam.

SEE ALSO SUPPLEMENTARY LIST

# QUEBEC

## ANTIMONY

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, AND NAME OF MINE SUPERINTENDENT.
South Ham Ry. 669.	Wolfe	James Reed, M. D. Cap. \$30,000. South Ham, antimony. Shafts, tunnels; steam.

## ASBESTOS

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
Black Lake, P. O. Desjardins/Ry. 669.	Megantic	Anglo-Canadian Asbestos Co., Ltd., Montreal, Que., 30 St. Francois Xavier st. Irwin, Hooper & Co., mgrs. Cap. stk. \$125,000. Open pits, 1,100 tons; steam.
"	"	Glasgow & Montreal Asbestos Co., Ltd., Glasgow, Scotland, 68 St. Vincent st. Matthew Penhale, mgr. and supt. Cap. stk. \$350,000. Glasgow and Montreal. Open pits, 1,000 tons; steam.
"	"	A. Tremblay, St. Agapit, Lotbiniere County, Que. Cap. \$80,000. Asbestos. Open pit (developing).
"	"	United Asbestos Co., Ltd., London, Eng., Dock House, Billiter st., E. C. James Allport, prest.; J. Alfred Fisher, treas. and mgr. Cap. stk. \$300,000. Asbestos. Open pits, 800 tons; steam. John J. Penhale, supt.
Broughton Station, Beauce Ry. 669.	Beauce	Beaudou, Veasy & William, East Broughton, Que. Cap. \$16,000. Asbestos. Horse and hand (developing).
"	"	M. Gagne. Open pit.
"	"	Glasgow & Montreal Asbestos Co., Ltd., Glasgow, Scotland, 68 St. Vincent st. Matthew Penhale, mgr. and supt. Cap. stk. \$350,000. Glasgow and Montreal. Open pits, 1,000 tons; steam.
"	"	Hall & Price, Quebec, Que. Price. Hand (developing).
Buckingham Ry. 96.	Ottawa	Asbestos Mining & Manufacturing Co., Denver, Colo. Arthur McConnell, prest. and mgr.; G. W. Carnshaw, secy.; F. H. Whiting, treas. Cap. stk. \$100,000. Tunnel (developing).
Coleraine Station, Megantic Ry. Black Lake 669.	Megantic	American Asbestos Co., Ltd., Liverpool, Eng., 5 Chapel Walks. Louis Wertheim, prest.; D. Yablonsen, secy. and treas.; Ed. Wertheim, mgr. Cap. stk. \$200,000. Wertheim. Open pits, tunnels; steam and compressed air. L. A. Klein, supt.
"	"	James Reed, M. D., Desjardins, Que. Cap. \$100,000. Asbestos. Open pits, 150 tons; steam and compressed air. James Savage, supt.
Danville Ry. 280.	Richmond	W. H. Jeffery. Cap. \$750,000. Danville. Open pit, 2,000 tons; steam. Robert L. Thorpe, supt.
Hull Ry. 96.	Ottawa	Asbestos Mining & Manufacturing Co., Denver, Colo., 43 Tabor Block. Arthur McConnell, prest.; G. W. Carnshaw, secy.; F. H. Whiting, treas. Cap. stk. \$100,000. Shaft; steam (developing).
Perkins Ry. East Templeton 96.	Ottawa	Templeton Asbestos Mining Co., Ltd., London, E. C., Eng., 4 Heredes Passage, Threadneedle st. Rudolph Wissmann, prest.; G. T. du Clouth, secy.; Friedrich Cirkel, mgr. and supt. Cap. stk. \$125,000. Open pit; steam.
St. Francois Beauce Beauce Ry. 669.	Beauce	Beauce Asbestos Co. J. Godbout, prest.; P. Augers, secy. and mgr.; T. Fortier, treas. Cap. stk. \$10,000. Des Plantes. Open pit and shaft.
Theftford Mines Ry. 669.	Megantic	Bell's Asbestos Co., London, S. E., Eng., 118 Southwark st. John Bell, prest.; J. L. Maclaren, secy.; D. A. Brown, mgr. Bell's. Open pits; steam and compressed air. Geo. R. Smith, supt.
"	"	Johnson's Asbestos Co., Quebec, Que., St. Peter st. Geo. Irvine, prest.; Lawrence Lynch, secy. and treas.; A. S. Johnson, mgr. and supt. Cap. stk. \$250,000. Johnson's. Open pit, 1,300 tons; steam.
"	"	Theftford Asbestos Cotton Co., New York City, 45 William st. Edmund W. Powers, prest.; J. W. Bauer, secy.; F. I. Whitcomb, treas.; Oscar G. Barron, mgr. Cap. stk. \$100,000. Power's. Open pit, 500 tons; steam. Patrick Camden, supt.
Wolfston Ry. Coleraine Sta. 669.	Wolfe	A. O. Bergeron. Open pit; horse.

## COPPER

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, FURNACES, ETC., AND NAME OF MINE SUPERINTENDENT.
Broughton Station, Beauce Ry. 669.	Beauce	Leeds Copper Co., Ltd., London, Eng., 11 Blossfield st., E. C. R. P. Gould, prest.; C. H. Smith, secy. Cap. stk. \$300,000. Leeds, copper. Shaft, 10,000 tons; steam. Fred. Hosking, supt.
Robertson Sta., Ry. 669.	Megantic	Theodore Pare. Cap. \$2,000. Pare's, copper. Open pit; hand.
Sutton Ry. 96.	Brome	Daniel F. Smith. Cap. \$10,000. North Sutton, copper. Shaft; horse.
West Broughton, Megantic Ry. 669.	Megantic	James Noonan. Copper. Open pit.

## GOLD AND SILVER

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Jersey Mills . . . . . Beauce Ry. St. François 325.	Louis Gendreau. Jersey, gold. Placer; free; water.
Leeds . . . . . Megantic Ry. Broughton Stn. 693.	John H. Nutbrown, West Broughton, Que. Gold and copper. Shaft and drift; refractory; hand.
Marlow . . . . . Beauce Ry. St. François 603.	John Armstrong & Co. Armstrong, gold and silver. Shafts; free; hand.
Patten . . . . . Brome (P. O. Eastman) Ry. 96.	Memphremungog Mining Co., Eastman, Que. C. C. Smith, pres.; Thomas Bell, secy. and treas. Cap. \$50,000. Patten, silver, copper and iron. Shaft and tunnel.
Risborough . . . . . Beauce Ry. 96.	John Armstrong & Co., Marlow, Que. Armstrong, gold and silver. Shafts; free; hand.

## IRON

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, BLAST FURNACES, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Ascot . . . . . Sherbrooke Ry. and P. O. Eastis 71.	Eastis Mining Co., Capetou, Que. N. E. C. Eastis, pres.; John Blue, mgr. and supt. Cap. \$1,500,000. Eastis, iron and copper pyrites. Slope and shaft, 40,000 tons; steam and compressed air.
Bristol . . . . . Pontiac (P. O. Billeker) Ry. Wymans 96.	Ennis & Co., Philadelphia, Pa., 420 Walnut st. Bristol, magnetic. Shaft, slope, open pit, 55,000 tons; steam. Thos. M. Williams, supt.
Leeds . . . . . Megantic Ry. Robertson Stn. 693.	J. A. McVety. Leeds. Open pit; hand.
Montreal . . . . . Champlain Ry. 96, 290.	Canada Iron Furnace Co., Ltd., Montreal, Que., New York Life Insurance Bldg. P. H. Griffin, pres.; Thos. J. Drummond, secy.; Geo. E. Drummond, treas.; John J. Drummond, mgr. and supt. Cap. \$1,000,000. Bog and magnetic, 40,000 tons; furnace, 15,000 tons. (Mine in Champlain county.)
Sherbrooke . . . . . Sherbrooke Ry. 603.	S. E. Smith. Smith's, magnetic. Shaft (developing).

## MINERAL PAINT

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF PRODUCT, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, PAINT MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Three Rivers . . . . . Champlain Ry. St. Malo Sidling 96.	Canada Paint Co., Ltd., Montreal, Que., 572 William st. S. F. McKinnon, pres.; H. M. Pellatt, secy.; Gustaf Gylling, treas.; Robert Munro, mgr. Cap. \$1,500,000. St. Malo, magnetic iron oxide. Open pit, 400 tons; horse and hand. (Mine in Champlain county.)

## PHOSPHATE

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME AND KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND COUNTY.	
Buckingham . . . . . Ottawa Ry. 96.	Canadian Phosphate Co., Ltd., Montreal, Que., 200 Commissioners st. H. C. Miller, pres. and mgr.; P. C. Packard, secy. Cap. \$1,000,000. Open pits and tunnel, 8,000 tons; steam. Thos. Lyons, supt.
" . . . . . "	East Templeton District Phosphate Mining Syndicate, Ltd., London, Eng., 4 Fenchurch st. J. F. Higginson, mgr. Cap. \$1,000,000. Shafts, open pits, 5,000 tons; steam; mill, 7,500 tons. S. Hunter, supt.
" . . . . . "	General Phosphate Corporation, Ltd., London, Eng. Lord Stalbridge, pres.; J. L. Langmead, secy.; Alex. Benson, mgr. Cap. \$1,000,000. High Falls and Ross Mountain. Pits and shafts, 5,000 tons; steam. Wm. R. Stewart, supt.
East Templeton . . . . . Ottawa Ry. 96.	Canada Industrial Co., Ltd., Montreal, Que., 180 St. James st. C. B. Falardeau, pres. and mgr.; F. R. White, secy.-treas. Cap. \$1,000,000. Phosphate, mica, feldspar, barytes, asbestos and quartz. Slope, pit, shaft, 8,000 tons; steam. E. Leclerc, supt.
" . . . . . "	East Templeton District Phosphate Mining Co., Ltd., Montreal, Que., 8 Custom House Square. A. Hunter, pres.; C. M. Anderson, secy.-treas. Cap. \$1,000,000. Blackburn. Shaft and open pit, 6,000 tons; steam. J. F. Higginson, supt.
" . . . . . "	Electric Mining Co., Ltd., Ottawa, Ont., 16 Metcalf st. J. W. McRae, pres.; H. McRae, secy. and treas. Cap. \$1,000,000. Bull Dog and Dixie Lake, rock phosphate. Shafts and open pits, 2,000 tons; steam and electricity. James Kelly, supt.
Glen Almond . . . . . Ottawa Ry. Buckingham 96.	Emerald Phosphate Co., Buckingham, Que. Emerald. Slopes and tunnels; hand. Robert Henwood, supt.
High Rock . . . . . Ottawa Ry. Buckingham 96.	Central Lake Mining Co., Buckingham, Que. Central Lake. Shaft, tunnel, pit; steam. Joseph Gilchrist, supt.
" . . . . . "	Phosphate of Lime Co., Ltd., London, Eng. Augustus Abraham, pres.; Westwood Richards, secy. Cap. \$1,000,000. High Rock, phosphate of lime. Shaft, tunnel, pit, 6,000 tons; steam and compressed air. A. P. Fwidalé, supt.
Perkins . . . . . Ottawa Ry. East Templeton 96.	Netherlands Phosphate Co., Amsterdam, Holland. Eugene Bunze, pres.; J. Kogel, mgr. Cap. \$1,000,000. Amsterdam, apatite. Shaft and pit; steam. T. C. Reichenbach, supt.



SLATE

LOCATION OF QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT. TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF QUARRY, KIND OF SLATE, KIND OF QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, MILLS, ETC., AND NAME OF QUARRY SUPERINTENDENT.
New Rockland Richmond Ry. Rockland 290.	New Rockland Slate Co., Montreal, Que., 337 St. Paul st. Geo. A. Drummond, prest.; James Terrier, v.-prest.; Thos. R. Bacon, secy.-treas.; J. J. Williams, mgr. and supt. Cap. stk. \$150,000. Roofing slate. Open pit; steam, water, electricity; mill.

STONE, MARBLE, GRANITE AND ONYX

LOCATION OF MINE OR QUARRY, RAILWAYS, WATER ROUTES AND SHIPPING POINT. TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE OR QUARRY, KIND OF STONE, KIND OF MINE OR QUARRY, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STONE OR MARBLE MILLS, LIMEKILNS AND CAPACITY, ETC., AND NAME OF MINE SUPERINTENDENT.
Dudswell Centre Wolfe Ry. 414.	Dominion Lime Co., Sherbrooke, Que. Frank Jones, prest.; J. R. Woodward, secy.; F. K. Buck, treas. and mgr. Cap. stk. \$450,000. Dominion, limestone. Open pit, 16,000 tons; steam; kiln, 16,000 tons. J. H. Barker, supt.
" " "	Sherbrooke & Dudswell Lime & Marble Co., Sherbrooke, Que. T. J. Tuck, prest.; H. P. Buck, secy.; F. P. Buck, treas. and mgr. Cap. stk. \$50,000. Limestone and marble. Open pit; steam.
Perce. Gaspé Ry. 707 and 38.	Joseph O. Boucher. Cap. \$10,000. Limestone and plaster. Slope, open pit, 10,000 tons; horse; kilns, 10,000 tons.
St. Alban. Portneuf Ry. La Chevroliere 36.	George Beauchage, Portneuf, Que. Cap. \$50,000. St. Alban, cut stone. Open pit, 12,000 tons; steam, horse, hand; mill, limekiln, 2,000 tons. François Beauchage, supt.
Stanstead. Stanstead Ry. 71.	Stanstead Granite Co., Beebe Plain, Que. H. W. Elder, prest.; L. B. Fregeau, vice-prest.; I. W. Elder, secy.-treas.; S. R. Norton, mgr. and supt. Cap. stk. \$25,000. Stanstead, light and dark granite. Open pit, 6,000 tons, steam and horse; mill.

SEE ALSO SUPPLEMENTARY LIST



# SUPPLEMENTARY LIST

OF

# MINING COMPANIES AND OPERATORS

IN THE

## DOMINION OF CANADA

WHOM WE HAVE REASON TO BELIEVE ARE AT POINTS GIVEN, BUT WHO HAVE  
 FAILED TO FURNISH DESIRED DETAILED INFORMATION  
 FOR REGULAR LISTS

### BRITISH COLUMBIA

COAL BITUMINOUS	
NAME	POSTOFFICE
New Vancouver Coal Co. Nanaimo	
Kettle River Coal Co. New Westminster	
Tumalo Island Coal Mining Co. Mayne	
Union Colliery Co. Victoria	
R. Dunsman & Sons Wellington	

COPPER	
NAME	POSTOFFICE
C. J. Law Golden	
Stadacora Silver-Copper Mining Co. Victoria	

COLD AND SILVER	
NAME	POSTOFFICE
L. Alexander & Co. Ainsworth	
H. Anderson .....	
D. Clark & Co. ....	
R. F. Green .....	
W. H. Hendry & Co. ....	
I. J. Lendrino & Co. ....	
McTune & Co. ....	
C. Olson & Co. ....	
J. L. Retfall & Co. ....	
Geo. Whitten .....	
Frank McMillan & Co. Albern	
Alabama Hydraulic Gold Mining Co. Barkerville	
Flynn Bros. ....	
Toronto Mining Co. of Sugar Creek. Boundary Creek	
Atwood & Co. ....	
Atwood & Schofield. ....	
Atwood, Lefron & Co. ....	
Atwood & Lemon. ....	
Atwood, Smith & Co. ....	
Wm. Austin .....	
A. Brown .....	
J. M. Buckley .....	
Campbell & Creston .....	
Chaplin & Co. ....	
Chaplin & Ruenberger .....	
R. Douzler .....	
Denzler & Douglass .....	
Denzler & Gibbs .....	
John Douglass .....	
John H. East .....	
Ewing, Knichthly & Co. ....	
Frank George .....	
Frank Gome .....	
Matt Hatter .....	
J. F. Krene .....	
Laudy & Nicholson .....	
E. LeFron .....	
James Lynch .....	
Mrs. McVuley .....	
L. M. McCarren .....	
W. McCormack & Co. ....	
Mrs. McDonnell .....	
Donald McLaren .....	
McLennan & Kay .....	
Colin McRae .....	
Donald McRae .....	
Mangatt & Taylor .....	
Clarence Mitchell .....	

NAME	POSTOFFICE
Moran & Hammer .....	Boundary Creek
A. C. Overton .....	"
Geo. Riber .....	"
E. J. Roberts .....	"
Ruenberger & Taylor .....	"
James Schofield .....	"
Ben. Shaw .....	"
W. T. Smith .....	"
Smith & Mitchell .....	"
John Sullivan .....	"
Thomas Wake .....	"
Henry White .....	"
A. D. Andrews .....	Fairview
Sam. Barkley .....	"
Boeing, Coryell & Sheehan .....	"
John Buelian .....	"
Geo. H. Cahill .....	"
D. A. Carmichael .....	"
Carmichael & Wilkinson .....	"
M. Chapman .....	"
Chapman & Pickard .....	"
Mrs. Davis .....	"
Oliver Davis & Co. ....	"
M. Dalrymple .....	"
Dexter & Seeley .....	"
O. M. Dutton .....	"
Eaton & Hunter .....	"
J. A. Fillback .....	"
J. K. Fleming .....	"
L. K. Fleming & Co. ....	"
James Grant .....	"
Grant & Dalrymple .....	"
Bryson Guest .....	"
A. W. Hunsinger .....	"
A. R. Junkin .....	"
D. Leggat & Co. ....	"
McBride & Powers .....	"
D. M. McDougall .....	"
Manson McMillan .....	"
McMillan & Mead .....	"
S. Mangatt & Co. ....	"
Mead & Carmichael .....	"
Moff & Boeing .....	"
Henry Nicholson .....	"
Henry Oetting .....	"
Knight Parker .....	"
L. L. Patrick .....	"
W. J. Porter .....	"
Mrs. Powers .....	"
Felix M. Pugh .....	"
Edmund D. Reynolds .....	"
H. Rase .....	"
O. D. Sanford .....	"
Sanford & Co. ....	"
Geo. Sheehan & Co. ....	"
Sheehan & Gwatkins .....	"
S. L. Silverman & Co. ....	"
F. K. Simmons .....	"
I. A. Suid .....	"
John Stevens .....	"
Stevens & Gwatkins .....	"
Stronach & Rose .....	"
Mrs. B. Thible .....	"
Trivess & Dalrymple .....	"
S. Thrall .....	"
G. Wilkinson .....	"
Williams & Gates .....	"
Anglo-American Platinum Co. Granite Creek	
British Platinum Co. ....	

NAME	POSTOFFICE
Eagle Creek Platinum Co. Granite Creek	
Honest Creek Platinum Co. "	
New York Platinum Co. "	
Tulameen Improvement & Hydraulic Co. "	
Henry Hunter .....	Hope
Jas. Wardle .....	"
A. C. Birchard .....	Keramos
Clifton & Judd .....	"
C. W. Gardner .....	"
John Grigley .....	"
Lillooet Hydraulic Mining Co. Lillooet	
John Marshall .....	"
Ming Placer Mining Co. "	
A. J. Baxter .....	Osoyoos
J. A. Fillback .....	"
C. W. Gardner .....	"
Fred Johnson .....	"
Keller & Engle .....	"
W. F. Keller .....	"
Lambly & Edwards .....	"
Jack McNeil .....	"
Frank Richter .....	"
Frank Strowe .....	"
Taylor & Seeley .....	"
Kootenay Mining & Smelting Co. Pilot Bay, via Nelson	
Carlton Hyd. Mining Co. Quesnelle	
Champion Hyd. Mining Co. "	
Columbia & Kootenay Smelting Co. Revelstoke	
J. W. Haskins .....	"
John Stauber .....	"
Hugh Cameron .....	Rock Creek
Charles Dietz .....	"
Wm. Edwards .....	"
John Moran .....	"
Moran, Hotter & Co. ....	"
Stonash & Mass .....	"
Wm. Beattie .....	Van Winkle
Big Bonanza Co. ....	"
Coyne Mining Co. ....	"
Jos. Domavan .....	"
David Edwards .....	"
Barry Jones .....	"
Justice Mining Co. ....	"
Mouraker Co. ....	"
A. Montgomery .....	"
Golf, Poutelhard .....	"
John Reed .....	"
Snowden Mining Co. ....	"
Fred J. Tregillis .....	"
W. L. White .....	"
John A. Yeats .....	"
B. C. Mining & Milling Co., Ltd. Victoria	
Frazer River Gold Gravel Syndicate Vale	
Whateon Gold Mining Co. "	
Vale Gold Mining Co. "	

### LEAD AND ZINC

Ashworth & Jevons	Ainsworth
S. C. Hammond	Golden
Gus Anderson	Illecillewaet

NAME	POSTOFFICE
J. B. Banfield.....	Hillbillaewaet
Thos. Barlo.....	"
Corbin & Kennedy	"
Laurik Cons. Mining & Smelting Co.....	"
D. A. Loney.....	"
A. C. McArthur.....	"
Alex. McFar.....	"
Walter Scott.....	"
Chas. Strawberg.....	"
John Taylor.....	"
Rand Bros.....	Vancouver

**SLATE**

R. Nightingale & Co.....	Nanaimo
Westminster Slate Co.....	New Westminster

**STONE, GRANITE, MARBLE AND ONYX**

Makasihna Red Granite Quarry Co.....	Nanaimo
Texada Lime Co.....	Vancouver
Vancouver Brick & Tile Co.....	"
Vancouver San Juan Lime Co.....	"
British Columbia Pottery & Terra Cotta Co.....	Victoria
St. Langley.....	"
Koksilah Quarry Co.....	"

**NEW BRUNSWICK****COAL**

Canada Coal Co.....	St. John
Joggins Coal Mining Association.....	"

**IRON**

Londonderry Iron Wks. Londonderry
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**STONE, GRANITE, MARBLE AND ONYX.**

Milne, Coutts & Co.....	St. George
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**NORTHWEST TER.****COAL**

Owen Osburn.....	Clover Bar
Phill Ottowell.....	"
Shearan Mining Co.....	Lethbridge
Smith, Neison & Holway.....	Middle Fork
Stone & Wilson.....	"
W. E. Stone.....	Pincher Creek

**GOLD AND SILVER**

H. N. Gibson.....	Clover Bar
Israel Adam.....	Fort Saskatchewan
John B. Beattie.....	"
Thomas Bartleigh.....	"
James Dandy.....	"
Israel Lamoureux.....	"
R. H. Meemis.....	"
Baptiste Pilon.....	"

**STONE**

W. H. Cushing.....	Calgary
J. McIntosh.....	"
Colpman Bros.....	Lethbridge
Howard Bros.....	"
Canada Northwest Coal & Lumber Co.....	Milford

**NOVA SCOTIA****COAL**

R. McGraham.....	Brookfield
East Bay Coal Co.....	East Bay
Cape Breton Island.....	"
Douglas Coal Mining Co.....	Malhams
East River Coal Co.....	New Glasgow
Gowrie Coal Mining Co.....	North Sydney
Colechester Coal Mining Co.....	Truro

**COPPER**

Spring Hill Prospecting & Mining Co.....	Oxford
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**GOLD AND SILVER**

NAME	POSTOFFICE
Robert Wright.....	Caribon
Loxley McLean.....	Fifteen Mile Stream
Duncan McQuinn.....	"
Jos. Sowa.....	"
Stanley Gold Co.....	"
South Uniake Gold Mining Co.....	Halifax
124 Hollis St.....	"
Rockland Gold Mining & Milling Co.....	Isanaga Harbor
R. McLeod.....	Malaga Gold Mines
Malaga Mining Co.....	"
G. A. Wade.....	"
J. J. Breton.....	Middle Stewiacke
Henry Smith.....	Montague Gold Mines
Chas. Armand.....	"
C. P. Maynard.....	"
Jonathan Irving.....	Moose Landing
S. Shorn.....	"
Peninsula Gold Mining Co.....	"
Jacob Dowell.....	Oldham
Greynough Bros.....	"
John Morrison.....	"
P. O'Shaughnessy.....	"
J. W. N. Reeves.....	"
Ed. Whidden.....	"
McDonnell & F. Andrews.....	Renfrew
Chas. H. North.....	"
M. Thompson.....	"
Alonzo Hayward.....	"
Thompson & Quirk Gold Co.....	South Uniake
Antigonish Co.....	Stornont
Mason Co.....	"
North Star Co.....	"
G. Clish.....	Truro
G. W. Stuart.....	"
Nova Scotia Syndicate.....	Wayerly
John Stephen.....	Wine Harbor
Thomas Ralph.....	"

**IRON**

E. Churchill & Sons.....	Hansport
Robert Chambers.....	New Glasgow
Nova Scotia Iron Co.....	"
D. W. McElear.....	Tene Cape
J. W. Stephens.....	"
Wm. Stephens.....	"

**STONE, GRANITE, MARBLE AND ONYX**

R. Fisher.....	Middle Stewiacke
Wm. Putnam.....	"
Sam'l. Pyke.....	"
John Taylor.....	"
Batye Frostone Co.....	Wallace

**ONTARIO****COAL-BITUMINOUS**

Canadian Iron Anthracite Coal Co.....	Ottawa
14 Metcalfe St.....	"
Anthracite & Bituminous Coal Co.....	Toronto
1 S. Toronto St.....	"
Provincial Natural Gas & Fuel Co.....	Welland

**COPPER**

Robert Tough.....	Amprior
Blackwell & Mitchell.....	Gallbraith
Thos. Frood.....	Little Current
H. S. Hodges.....	"
Thomas Ledret.....	Port Arthur
Richard H. Paulson.....	"
Silver Islet Co.....	"
Ontario Mining Co.....	Rat Portage
John K. Wright.....	"
Chicago Algona Nickel Co.....	Sudbury
Sudbury Mining Co.....	Toronto
104 Bay St.....	"
John DeLuft.....	White Fish
W. G. Bunce.....	"
John Dwyer.....	"
Empire Mining Co.....	"
Arthur Gordon.....	"
James Gordon.....	"
S. P. Kelly.....	"
A. McCharles.....	"
Russell & Barnett.....	"
A. Simpson.....	"
Henry Smith.....	"

NAME	POSTOFFICE
G. A. Wilson.....	White Fish
Thos. Martindale.....	York

**GOLD AND SILVER**

James Bell.....	Amprior
Badger Mining Co.....	Beaver Mine
Climax Mining Co.....	"
Rabbit Mount Mining Co.....	"
South Algonia General Exp. & Mining Co.....	Belleville
Gillies Bros.....	Braside
Jos. Butler & G. C. Scott.....	Chatham
James H. Hargood.....	Ft. William
Rockland Silver Mining Co.....	"
H. Parsons.....	"
Victoria Mining Co.....	Garden River
Elgin Silver Mining Co.....	Jack Fish Bay
J. C. Boyne.....	Marmora
Edorado Gold Mining Co.....	"
Walter Betts.....	Nickel City
John Ferguson.....	North Bay
J. E. Askwith.....	Ottawa
Beaver Silver Mining Co.....	Port Arthur
James Connor.....	"
East End Silver Mount-ain Co.....	"
N. Garland.....	"
Peter Geroux.....	"
Thomas Marks.....	"
Silver Mountain Co.....	"
Society General Belgian Co.....	"
Wiley & Co.....	"
Jas. Stobie.....	Port Lock
T. S. Hampton.....	Starbuck Lake
Messrs. Demorrest & Julimoth.....	Sudbury
A. Merry.....	"
Dani. O'Connor.....	"
Sudbury Customs Silver Co.....	"
J. M. Clarke.....	Toronto
W. D. McTherson.....	"
W. J. Skinner, esq.....	"
Straight Lake Mining Co.....	"
Toronto Gold Mining & Reducing Co.....	"

**GYPSUM**

Excelsior Gypsum Mining Co.....	Cayuga
Grand River Plaster Co.....	"

**IRON**

D. B. Burdette.....	Belleville
A. L. Barnes.....	Black Bay
Frank Front.....	Bruce Mines
L. H. Johnson.....	Caledonia
Thos. Tisdale.....	Cayuga
McKellar Bros.....	Port Williams
Mountain Lake Co.....	Jack Fish Bay
Kingston & Penbroke Iron Mining Co.....	Kingston
Sterling Corporation.....	"
Cadwell N. C. M. P. E. Fenton & Co.....	Laurik
P. Frood.....	Little Current
Wm. Ward.....	"
Wm. Bell.....	Marmora
N. H. Powell.....	"
Donaldson & Co.....	Mt. Hesley
A. McCharles.....	Nickle City
Anglo Nickel Co.....	Perth
Robert Ordick.....	"
Peter McLaren.....	"
W. J. Morris.....	"
Ed. Walls.....	"
John Wilson.....	"
Peterborough & Frontenac Mining Co.....	Peterborough
W. J. Barrie.....	Port Arthur
S. Dawson.....	"
Robert Bunting.....	Rat Portage
Dr. Henson.....	"
Holmes & Inch.....	"
Winnipeg Consolidated Co.....	"
Alex. Barnett.....	Renfrew
John McAndrew.....	"
Ed. McKay.....	"
James Russell.....	"
Martin Russell.....	"
Wm. Bell.....	Stult Ste. Marie
Joseph Cozons.....	Stobie
Jas. Stobie.....	"
Canadian Copper Cliff Co.....	Sudbury
Dominion Mineral Co.....	"
Travers.....	"
Care Brary Nickel Co.....	"
Mic McConack.....	"

NAME	POSTOFFICE
Aug. J. McDonnell	Sudbury
Andrew Wadell	"
Sydenham Mica & Mining Co.	Sydenham
Empire Mining Co.	Toronto
Henry Lombes	"
G. F. Marler	"
Nickel Mountain Co.	"
Nickel Steel Co. of Ontario	"
North Shore Nickel Mining Co.	"
Sudbury Nickel Co.	"
Wadupaqua Nickel Co.	"
Tom Sheppard	"
The Chicago Nickel Co.	Whitefish
Win. McVitie	"

**PHOSPHATE**

Fleming Phosphate Co.	Kingston
Fronchar Phosphate Co.	"
Electric Mining Co.	Ottawa
16 Metcalfe st.	"
Little Rapids Mining Co.	Victoria Chambers
Sliper Phosphate Co.	Smith Falls
Blossington Phosphate Mining Co.	Tiehorne
Halliburton Mining Co.	Toronto

**SALT**

Enterprise Salt Wks.	Brussels
North American Chemical Co.	Goderich
McMillan, Kitchridge & Co.	Petrolia
Producers Tanking Co.	"

**STONE**

R. McDonald & Son	Arnprior
H. P. McLaughlin	"
Wm. Spencer	"
P. McEwen	Charlton Place
Adamant Co.	Cayuga
T. Martindale	"
Dent & Sons	Credit Forks
C. H. Smith	"
Smith & Way	"
R. J. McGregor	Inglewood
J. Meyers	"
Arthur Irwin	Kincardine
Rock Lake Mine	Kingston
John Craig	Lithhouse
Jas. Newton	"
Essex Molding Sand Co.	London
Milton Pressed Brick & Sewer Pipe Co.	Milton
W. Buchanan	Norval
S. Nixon	"
Joseph Pattullo	Orangeville
Orustown Brick & Terra Cotta Co.	Ottawa
86 Sparks st.	"

NAME	POSTOFFICE
Captain Boyd Smith	Parkham
Anglo-American Mining Co.	Perth
Wm. Davis	"
D. J. McDonia	"
A. J. Matheson	"
A. C. Vaughan	Port Arthur
J. A. Jamieson	Renfrew
Thos. Henderson	"
Morgan	"
C. A. Russell	"
M. L. Russell	"
R. J. Brodie	Smith Falls
Isaac Estier & Son	Thorold
Myres Terra Cotta & Brick Co.	Toronto
Myerlan Marble Co.	of Canada
Toronto Granite Co.	"
R. Leslie	West Toronto Jn.

NAME	POSTOFFICE
no Works Co.	Glen Almond
Anglo-Canadian Phosphate Co.	Montreal
Dominion Phosphate & Mining Co.	"
103 St. Francois Xavier	"
MacLaurin Phosphate Mining Syndicate	"
Custom House Square	"
North American Phosphate Co.	"
30 St. Francois st.	"
Sebastopol Phosphate Syndicate	"
Custom House Square	"
Templeton & North Ottawa Mining Co.	"
St. Francois Xavier st.	"

**SLATE**

Dauville Slate Quarry	Richmond
St. Francis Slate Quarry	"

**QUEBEC**

**ASBESTOS**

Brompton Lake Asbestos Mining Co.	Brompton Lake
Scottish Canadian Asbestos Co.	Broughton
Richmond Slate Quarrying & Manufacturing & Asbestos Co.	Richmond
Beaver Asbestos Co.	Sherbrooke

**COAL—BITUMINOUS**

Cumberland Ry. & Coal Co.	Montreal
Imperial Bldg. Place d'Armes	"
Intercolonial Coal Mining Co.	"
199 Commissioner st.	"

**COPPER**

Nicholas Chemical Co.	Capelton
Excelsior Copper Co.	W. Broughton

**IRON**

John McDougall	Drummondville
Moisie Iron Co.	Moisie
Capt. R. C. Adams	Montreal
Rhee, Lower & Co.	"
Octave Chantoumy	W. Broughton
John Babson	"
John Roberson	"
Jacques Rousseau	"

**PHOSPHATE**

Ottawa Phosphate Mining Co.	Buckingham
Anglo-Continental Guano	"

**STONE. GRANITE, MARBLE AND ONYX**

North Star Mining Co.	Buckingham
Central Lake Mining Co.	"
A. Lomer	"
Thomas Lyons	"
A. P. Twiddle	"
L. S. L'Heureux	Chateau Richeur
L. M. Lambert	Coleraine
Julien Lapointe	"
Sifroid Simard	"
Jean Baptiste Tangway	"
Johnson & Loomis	Coleraine
Laurier Mining Co.	Lennoxville
G. H. Nichols	Lennoxville
English Portland Cement Co.	Montreal
308 St. Francois Xavier st.	"
Irwin Hopper & Co.	"
308 St. Francois Xavier st.	"
Joseph Valliere	Robertson Station
Pierre Chateaufvert	St. Alban
Damase Sand	"
L. Perrisse	"
Eugene Dieard	Sault Au Recollet
William Dieard	"
Haroldus Lussisse	"
Gardien Menard	"
Grife Pliard	"
Odile Sagunaw	"
Dominion Marble Co.	Sherbrooke
Moir Granite Co.	Stansstead
Basilton & Moir	"
D. L. Smith	Sutton
J. E. Caron	Tadoussac Saguenay
King Bros	Theftford Mines
Lucke, Mitchell & Co.	"
Ward & Ross	"
Wolfestown Mining Co.	Wolfestown



# LIST OF MINING COMPANIES AND OPERATORS

OF THE  
REPUBLIC OF MEXICO  
(SEE ALSO SUPPLEMENTARY LIST, PAGE 482)

## ANTIMONY

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, AND NAME OF MINE SUPERINTENDENT.
TOWN AND STATE.	
Nieves, Zacatecas By Jimenez 434 (90 miles).	Basilio Moreno, 42 Calle de la Caja, Zacatecas, Mex., \$30,000. Santo Niño. Antimony. Shaft and open pit, 30,000 tons; free.

## COPPER

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, FURNACES, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND STATE.	
Santa Rosalia Lower Cal. By 685.	Compagnie du Boleo, Paris, France, 5 Cité d'Orléans. Chas. Laforgue, mgr. Cap. stk. \$2,400,000. Boleo. Shaft, 120,000 tons; steam.

## GOLD AND SILVER

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND STATE.	
Carbo, Sonora By 26, 685.	Gowan Mining Co., Minneapolis, Minn., 40 Nicollet st., A. H. Linton, pres.; C. S. Langdon, secy. and treas.; John A. Gowan, mgr. and supt. Cap. stk. \$500,000. El Socorro, silver. Shaft; refractory.
Catorce, San Luis Potosí By, Vaqueros 436 (20 miles).	Compañía Minera Anonima de Concepcion y Anexas, San Luis Potosí, Mex., 24 Calle de Maltos. Carlos Diez Gutiérrez, pres.; Paulino F. Alvarado, secy. and treas.; Chas. E. Hoffman, mgr. Concepcion. Prisca, gold, silver and lead. Shafts, tunnels and slopes, 80,000 tons; refractory and free; steam and horse; 40 stamps. Luis Barragan, supt., Valenciana, San Jose.
" "	Compañía Minera del Refugio. Mateas H. Soberon, pres.; Adolfo Olderoep, mgr. and supt. La Luz, silver. Tunnel, 5,000 tons; free; horse; patio process. Dolores, silver. Shaft and tunnel, 1,500 tons; free; horse; patio process.
" "	Compañía Union Catorceña. Pedro de la Maya, pres. and treas.; Bernabe Rocha, secy.; Joaquin Barrera, mgr. Cap. stk. (syndicate). San Augustin, silver. Shafts, tunnels and cuts, 2,340 tons; refractory; horse. Isabel Carrillo, supt.
" "	Gregorio de la Maza. Cap. \$1,000,000. Negociacion de Santa Ana, silver. Tunnels and shafts, 15,000 tons; free; steam and electricity; patio process. Francisco M. Coghlan, supt.
Corralitos Chihuahua By, San Jose 434.	Corralitos Mining Co., New York City, 54 Exchange pl. Solon Humphreys, pres.; S. Newton Smith, secy. and treas.; Britton Davis, mgr. Cap. stk. \$1,500,000. Candelaria, San Pedro, Lead, Congress and others, gold, silver and lead. Slopes, 3,000 tons; refractory; steam; concentrator and smelter. Geo. Bond, supt.
El Grande, Sonora P. O. and By, Santa Ana 685.	El Plomo Gold Mining Co., New York City, 29 Broadway. H. Cummins, pres.; John C. Rogers, secy.; Geo. D. Roberts, mgr. Cap. stk. \$1,250,000. Colorado, El Plomo and Blanco, gold, silver and lead. Shaft and tunnel; refractory; steam; smelter.
El Potrero, Chihuahua (P. O. Jesus Maria) By, Chihuahua 434 (250 miles).	El Potrero Gold & Silver Mining & Milling Co., Chicago, Ill., Union Stock Yards. N. Cochran, pres.; J. C. Denison, secy. and treas.; S. S. Gates, mgr. and supt. Cap. stk. \$4,000,000. Guadalupe, gold and silver. Shaft and tunnel, 15,000 tons; free; steam; 20 stamps.
Guadalupe Calvo Chihuahua (P. O. San Jose) Ry. Chihuahua 434.	San Jose Consolidated Gold & Silver Mining Co., Chicago, Ill., 920 Chamber of Commerce Bldg. Wm. G. Reeve, pres.; Edgar H. Toland, secy.; Austin H. Rowe, treas.; C. Freeman, mgr. Cap. stk. \$3,000,000. Forty-three claims, gold and silver; steam and water (developing).

## GOLD AND SILVER—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND STATE.	
Guhimevi.....Durango Ry. Jimenez 434 (190m.).	Cañuto Bolívar. Cap. \$500,000. Guadalupe, silver. Shaft, cut, 2,000 tons; refractory; horse. Daniel Bar- raza, supt.
"....."	Compañía Minera La Sirena Mexico, 8 Calle de San Francisco, Mex. Martin del Castillo, prest.; Manuel Vivanco, secy.; Antero Munizuri, treas.; Cañuto Bolívar, mgr. Guanacavi, Durango, Mex. Cap. stk. \$800,000. La Sirena, gold, silver and lead. Shaft, 20,000 tons; refractory; steam; 2 Chill mills. Juan B. Duarte, supt.
Gnauyas.....Sonora Ry. 552.	Gulf Gold Mining Co., Akron, Ohio. Cap. stk. \$2,000,000. Santa Marta, gold. Tunnel; free; steam.
Inde.....Durango Ry. Jimenez 434 (90m.).	Compañía de Guadalupe. Guillermo I. Benton, prest. and supt.; Miguel M. Sámper, secy.; Andres Avila, treas.; Cap. stk. \$15,000. Guadalupe, silver and lead. Shaft; smelting; hand.
"....."	Garabatos Mining & Smelting Co., Joliet, Ill., 63 Young Block. J. Russell Burks, prest.; Geo. J. Munne, secy.; D. Robertson, treas. and mgr. Cap. stk. \$2,000,000. Garabatos, gold, silver and lead. Shaft, 6,000 tons; refractory; steam. Frank Her, supt.
"....."	Inde Mining Co., 4 E. First st. Henry R. Wolcott, prest.; P. S. Bailey, secy. and treas.; E. M. Parrish, mgr. and supt. Cap. stk. \$500,000. Mina del Agua, silver. Shaft; refractory; steam and water.
"....."	Negociación Minera del Caballo. William Benton, Corpus Christi, Tex., prest. and mgr.; Juan B. Baca, Jimenez, Chihuahua, Mex., secy. and treas. El Caballo, silver, lead, carbonates. Shaft and tunnel, 25,000 tons; smelting, free; hand. W. I. Benton, supt.
"....."	Tepocates Mining & Smelting Co., C. B. Zeck, secy. and treas.; D. W. Farris, gen. mgr. Los Machos, silver and lead. Shaft, 1,200 tons; refractory. Quirino Corrilla, supt.
Jesus Maria. Chihuahua Ry. Chihuahua 434 (250 miles).	Santa Eduviges Mining & Milling Co. H. A. W. Tabor, prest.; C. J. Rowell, secy.; A. S. Weston, treas.; J. C. Carrea, mgr. Cap. stk. \$1,000,000. Santa Eduviges, gold and silver. Tunnels, 10,000 tons; free; steam and water; 25 stamps.
Magdalena.....Sonora Ry. 685.	Sonora Gold & Silver Mining Co., Cleveland, Ohio. W. M. Williams, prest.; H. W. Gebaur, secy.; J. S. Malone, treas.; J. S. Morgan, mgr. Cap. stk. \$10,000. Homerie, Cleopatra, Josephine and Isabel, gold. Shaft, tunnel; free; steam; 10 stamps. E. Kipp, supt.
Majistral.....Durango (P. O. El Oro) Ry. Jim- enez 434 (130 miles).	Laurel Mining Co., Pittsburg, Pa., 95 Fifth av. H. D. Gamble, prest.; W. J. Miller, secy. and treas. Cap. stk. \$200,000. Cochera and El Colorado, gold and silver. Shaft, 6,000 tons; free, refractory; steam; 5 stamps and pulverizers. J. A. Reed, supt.
Matchuala San Luis Potosi Ry. 436.	Compañía Minera La Paz Matchuala, 2 Calle del Moro, San Luis Potosi, Mex. Anastasio Moreno, prest.; Enrique Battenhecher, secy. and treas.; Santa Maria de La Paz and others, gold, silver, lead and iron. Shafts, 50,000 tons; free; steam. Guillermo Dingwall, supt.
"....."	Santa Rita Mining Co. W. B. A. Dingwall, prest. and mgr.; Jose Perez Perez, treas. San Silvestre, La Colorado and Santa Rita, silver, lead and iron. Tunnel and shaft, 3,000 tons; refractory. Jesus Pedro Flores, supt.
Moris.....Chihuahua Ry. 494.	El Socorro Mining & Milling Co., Cincinnati, Ohio, Room 410 Neave Bldg. Wilson E. Griffiths, prest.; Judson W. Breed, secy. and treas.; Jas. F. Mason, mgr. and supt. Cap. stk. \$100,000. El Socorro, gold and silver. Shafts and tunnels, 14,000 tons; free; steam; mill.
"....."	La Dura Mining & Milling Co., Cincinnati, Ohio, Room 410 Neave Bldg. Wilson E. Griffiths, prest.; Judson W. Breed, secy. and treas.; John R. Patton, mgr. and supt. Cap. stk. \$125,000. La Dura, gold and silver. Shafts and tunnels; free; steam.
Ojoaliente. Chihuahua Ry. 494.	Roberts & Broxton, El Paso, Texas. Ferosa, silver and lead. Shafts; free; hand. A. C. Broxton, supt.
Pachua.....Hidalgo	San Felipe de Jesus Mining Co., City of Mexico, Calle Gante 14. Samuel B. Knight, prest.; Jose D. Vargas, secy.; A. C. Young, treas.; Francisco Rule, mgr. and supt. San Felipe de Jesus, gold and silver. Shaft, 1,200 tons; refractory; horse.
Parral.....Chihuahua Ry. Jimenez 434 (90 miles).	Compañía Minera de El Fajo, Mex. Francisco Gomez, prest.; Lie Justo Prieto, secy.; Miguel Chavez, treas.; Victor Esperon, mgr. Syndicate. El Fajo y Anexos, silver and lead. Shafts, tunnels and slopes, 3,500 tons; refractory and free. Jose Calles, supt.
"....."	Cia Minera de San Gregorio, 2 Calle de Guadalupe. Lie Miguel Rodriguez, prest. and mgr.; Ricardo Rodriguez Dominguez, secy.; Ricardo Rodriguez Chavez, treas. Cap. stk. \$50,000. San Gregorio, silver. Shafts and tunnels, 4,200 tons; free; steam. Ricardo Martinez, supt.
"....."	Hidalgo Mining Co., Pittsburg, Pa., Westinghouse Bldg. John H. McKelvy, prest.; Samuel E. Gill, secy. and treas.; Jas. I. Long, mgr. Cap. stk. \$1,000,000. Philadelphia, Potosi, Salto, etc., silver and lead. Shaft; refractory; steam; mill.
"....."	Compañía Minera San Patrio, 2a Calle de Coronado. Francisco Gomez, prest.; Victor Esperon, secy.; Miguel Dominguez, treas.; Juan Almanzan, mgr. Syndicate. San Patrio, silver and lead. Shafts and tunnels, 3,000 tons; refractory; mules. Simon Armerendariz, supt.
"....."	Negociación Minera de Veta Grande. Federico Stallforth y Hermano, owners. Veta Grande and El Verde, gold and silver. Shafts and tunnels, 20,000 tons; free; steam; 30 stamps. Carlos Seifert, supt.
"....."	North American Mining Co., New York City, 60 Broadway, Room 428. D. T. Alger, prest.; A. C. McMechan, secy.; C. J. Lape, treas.; W. H. Kingsbury, mgr. Cap. stk. \$2,500,000. San Cristobal and San Rafael, silver. Shaft and slope, 3,000 tons; free; horse; mill. T. S. Kingsbury, supt.
"....."	John F. Ramsden. San Francisco and La Morena, silver. Shaft, 5,000 tons; free; horse.
"....."	J. F. Seilberling, G. C. Beckmann, mgr. Cap. \$150,000. Alfarena and Viscaina, silver. Slope, 10,000 tons; refractory; steam.
"....."	Federico Stallforth & Bro. San Francisco del Cerro Colorado, gold and silver. 1,500 tons; mule. Clement Kuchle, supt.
"....."	J. F. Townsend, Canal Dover, Ohio. Cap. \$50,000. Quebradillas, silver. Shaft; refractory; steam. T. R. Willard, supt.
Piedra Larga. Chihuahua Ry. Jimenez 434 (160 miles).	Le Mars & La Dura Mining Co., Le Mars, Iowa. G. C. MacLagan, prest.; E. D. Chossell, secy.; J. W. Myers, treas.; J. D. Knotts, mgr. and supt. Cap. stk. \$1,000,000. La Dura. Shaft; free; steam; 10 stamps.



## GOLD AND SILVER—(CONTINUED)

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, STAMP MILLS, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND STATE.	
Pinos, Zacatecas Ry. La Honda 434 (25 miles).	Compañia Minera Anonima de Candelaria y Anexas, San Luis Potosí, Mex., 3a Calle de Maltos No. 1. Edward Meade, presnt. and treas.; Francisco Cosío, secy. Cap. stk. \$300,000. Candelaria, gold and silver. Shaft, 4,000 tons; free; steam, horse; patio process. Carlos Palancon, supt.
" " "	Guadalupe Mining & Milling Co., Chicago, Ill., 225 Dearborn st. Wm. H. Fuller, presnt.; W. W. Watson, secy.; B. A. Watson, treas.; Isaac N. Miller, mgr. and supt. Cap. stk. \$1,000,000. Guadalupe, gold and silver. Shaft; free.
Ramos, San Luis Potosí Ry. Salinas 434 (16 m.).	Ramos Mining Co., Milwaukee, Wis., U. S. A., 425 E. Water st. C. A. Read, presnt.; J. C. Iverson, secy. and treas.; Jas. F. Flynn, mgr. and supt. Cap. stk. \$300,000. Twenty-eight mines, silver and copper. Shafts; refractory; steam.
Rosa Morada, Jalisco (P. O. Rosa Morada) Ry. San Blas 552.	Santiago Mining & Milling Co., Oakland, Cal., U. S. A., J. S. Burpee, presnt.; L. T. Farr, secy.; W. W. Whitman, treas.; J. A. Chesnutte, mgr. and supt. Cap. stk. \$100,000. La Reforma, gold and silver. Shaft and tunnel, 3,000 tons; refractory and free; water; mill. (Mine in Tepeh Ter.)
Sabinal, Chihuahua Ry. San José 434 (90 m.).	A. Mungenerger, Cap. \$100,000. Santa Domingo and Bismark, gold, silver and lead. Tunnels and shaft, 1,000 tons; refractory; horse. Fernando Sortero, supt.
" " "	Tomas & Cleofas Salazar, Mexico, silver and lead. Shaft and tunnel, 300 tons. Alberto Trujillo, supt.
Salinas, Nuevo Leon Ry. 436.	Rosario Mining Co., Dallas, Tex., U. S. A., Bankers' & Merchants' National Bank. Gen. Geo. F. Alford, presnt.; Col. Wm. J. Keller, secy.; Juan Weber, treas.; Prof. H. Ph. Ehrhardt, mgr. and supt. Cap. stk. \$2,600,000. Rosario, silver and lead. Shaft and slope; refractory (developing).
San Julian Mine, Chihuahua Ry. Jimenez 434 (230 miles).	Tenta Duras Mining & Milling Co., Cherokee, Iowa, U. S. A., John Clarkson, presnt.; A. C. Hobart, secy. and treas.; G. P. Perley, mgr. Cap. stk. \$20,000. Tenta Duras, gold and silver. Tunnel; free; steam; mill (developing).
San Pablo, Sonora Ry. P. O. Bisbee, Ariz., 20 (105 miles).	San Luis Mining & Reduction Co., St. Louis, Mo., Room 23 Turner Bldg. Gains Paddock, presnt.; F. A. Banister, secy.; M. A. Demoss, treas.; F. V. Layton, mgr. and supt. Cap. stk. \$1,000,000. San Pablo and others, gold, silver and lead. Tunnels and shafts, 85,000 tons; refractory; steam; crusher.
Santa Barbara, Chihuahua (P. O. Parral) Ry. Jim- enez 434. (60 miles).	Brazon y Cumingham, Cap. \$15,000. El Cabrestante, silver and lead. Tunnel, 1,000 tons; refractory; steam; mill. J. J. Brazon, supt.
" " "	Mexican Santa Barbara Mining Co., San Francisco del Oro, gold and silver. Shaft, 4,000 tons; refractory; steam; 20 stamps.
Sierra Mojada, Coahuila Ry. 437.	Consolidated Kansas City Smelting & Refining Co., Kansas City, Mo., U. S. A., 23 Exchange Bldg. A. R. Meyer, presnt. and treas.; R. D. Everett, secy.; H. Huber, mgr. Cap. stk. \$2,500,000. San José and San Salvador, silver and lead. Shaft, 60,000 tons; refractory; steam; furnace; F. Escher, supt.
Sombretete, Zacatecas Ry. Presnido 434 (90 m.).	San Martin Mining Co., New York City, 15 Wall st. J. L. Carnaghan, presnt.; Henry Bradstreet, secy. and treas. Cap. stk. \$1,500,000. Thirty mines, gold and silver. Shafts and tunnels; refractory.
Sultepec, Mexico Ry. Tolima 436.	Hidalgo Smelting Co., Milwaukee, Wis., U. S. A., 408 Milwaukee st. John E. Burton, presnt. and treas.; Stoddard H. Martin, secy.; Chas. R. Lathrop, mgr. Cap. stk. \$5,000,000. La Cruz, Guamio and Cerro Bartula, silver. Tunnel; refractory; water, smelter, 30,000 tons.
Victoria, Tamaulipas Ry. 436.	La Fortuna Mining Co., Dallas, Texas, U. S. A., Bankers' & Merchants' National Bank, 1000 F. Alford, presnt.; Wm. J. Keller, secy.; Juan Weber, treas.; H. Ph. Ehrhardt, mgr. and supt. Cap. stk. \$2,600,000. La Fortuna, Santa Cristo and Don Julio, silver and lead. Shaft, tunnel and slope; refractory (developing).
Zacatecas, Zacatecas Ry. 434.	Compañia Anonima de Purisima de Napolés y Anexas, Federico Luis y Diaz, presnt.; Lje Mariano Sanchez, secy.; Benjamin Gomez Gordon, treas. Cap. stk. \$75,000. Estrella, Purisima, Santa Mariana, Bodega, Fortuna and Tesero, silver. Shafts and tunnels, 500 tons; smelting; horse. Ambrosio Aranza, supt.
" " "	Cia. Purisima de los Compadres, Guadalupe, Zacatecas. Cleofas Galvan, presnt.; Francisco Camacho, secy.; Eduardo von Gabor, treas. Cap. stk. \$30,000. Purisima de los Compadres, silver and lead. 20 tons, tunnels; horse. Genaro Palacios, supt.
" " "	Negociacion Minera de Sanceda, Vicente Yrizar, presnt.; Jesus Salmeron, secy.; Maximo P. Lamiel, treas. and mgr. San Anselmo and Anexas, silver. Shafts and tunnels, 20,000 tons; refractory; steam. M. Molina, supt.
(No town given), Sonora P. O. and Ry. Bisbee, Ariz., U. S. A., 20.	Valenzuela Consolidated Land and Mining Co., San Francisco, Cal., 411 California st. Cesar Berthoin, presnt.; A. Everett Ball, secy.; Anglo-Californian Bank, San Francisco, Cal., treas.; Julius Koebig, mgr. Cap. stk. \$2,000,000. Valenzuela, San Patricio and San Felipe, gold and silver. Shaft and tunnel; free. Samuel T. Curtis, supt.
(No town given), Sonora P. O. and Ry. Nogales, Ariz., U. S. A., 25, 685.	Sonora Development Co., Ltd., New Orleans, La., U. S. A., Morris Bldg. Chas. Noel, presnt.; E. J. Guer- inger, secy. and treas.; H. B. Carroll, mgr. Cap. stk. \$50,000. Plata Reina, silver. Shaft and tunnel; free. A. Hoover, supt.

## IRON

LOCATION OF MINE, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK, NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER USED, BLAST FURNACES, ETC., AND NAME OF MINE SUPERINTENDENT.
TOWN AND STATE.	
Durango, Durango Ry. 326.	Durango Steel & Iron Co., Des Moines, Iowa, Iowa Loan and Trust Bldg. Jas. Callahan, presnt.; Geo. Cubic, v. presnt.; Geo. W. Baker, secy.; A. Holland, treas.; J. S. Metcalf, mgr. Cap. stk. \$5,000,000. Sierra Morena. Shaft and tunnel, 2,000 tons; steam; furnace.

## LEAD AND ZINC

LOCATION OF MINE,  
RAILWAYS, WATER ROUTES  
AND SHIPPING POINT.  
TOWN AND STATE.

Guadalupeville Durango  
Ry. Jimenez 434 (180M.).

NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK,  
NAME OF MINE, KIND OF ORE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF  
POWER USED, SMELTERS, ETC., AND NAME OF MINE SUPERINTENDENT.

Canuto Bolivar. \$500,000. La Miseria, lead and copper. Shafts. In litigation.

## QUICKSILVER

LOCATION OF MINE,  
RAILWAYS, WATER ROUTES  
AND SHIPPING POINT.  
TOWN AND STATE.

Guadalupezar San Luis Potosi  
Ry. Villar 434.

NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK,  
NAME OF MINE, KIND OF MINE, ANNUAL OUTPUT IN TONS OF 2,000 POUNDS, KIND OF POWER  
USED, AND NAME OF MINE SUPERINTENDENT.

Guadalupezar Quicksilver Mining Co., Ltd., London, E. C., Edg., 7 Doughty st. John Metrylees, pres.;  
Percy W. Furber, secy. and treas.; Robert Mackenzie, met. and supt. Cap. strk. \$2,000,000. La Trin-  
idad y Anevas. Shaft, tunnel and slope, 1,200 tons; hand; furnace.

## SALT

LOCATION OF MINE  
OR WELL,  
RAILWAYS, WATER ROUTES  
AND SHIPPING POINT.  
TOWN AND STATE.

Carmen Island Lower Cal.  
(P. O. Guaymas, Mex.)  
Ry. 552 and 685.

NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK,  
NAME OF MINE, KIND OF PRODUCT, KIND OF MINE OR WELL, ANNUAL OUTPUT IN TONS OF 2,000  
POUNDS, KIND OF POWER USED, ETC., AND NAME OF MINE SUPERINTENDENT.

Carmen Island Salt Co., Chicago, Ill., 608 Phenix Bldg. Chas. Miller, pres.; Chas. E. Schaeffler, secy.  
and mgr.; Conrad Einbeck, mgr. Cap. stock, \$1,000,000. Carmen, table and rock salt. Open pit, 50-  
000 tons. Vincente R. Mexias, supt.

## STONE, MARBLE, GRANITE AND ONYX

LOCATION OF MINE  
OR QUARRY,  
RAILWAYS, WATER ROUTES  
AND SHIPPING POINT.  
TOWN AND STATE.

Chualta Morelos  
Ry. 325.

NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE, NAMES OF OFFICERS, CAPITAL STOCK,  
NAME OF MINE OR QUARRY, KIND OF STONE, KIND OF MINE OR QUARRY, ANNUAL OUTPUT IN TONS OF  
2,000 POUNDS, KIND OF POWER USED, STONE OR MARBLE MILLS, LIMEKILNS AND  
CAPACITY, ETC., AND NAME OF MINE SUPERINTENDENT.

American Rose Garnet Co., New York City, 733 Broadway. Edwin C. Atkinson, pres.; Wm. Niven,  
V.-pres. and met.; Fiedelrick A. Scamilli, secy.; George A. English, treas. Cap. strk. \$250,000. Mina de  
Granite de Rosa, rose garnet. Open pit; hand; mill.

Torreón Coahuila  
Ry. 434 and 435.

Mexico Onyx Quarry Co., New York City, 44 Wall st. Henry McVoy, pres.; W. H. Reynolds, secy. and  
treas.; David J. Kelley, mgr. Cap. strk. \$500,000. Kelley, onyx. Shaft; horse and hand. W. H. Kelley,  
supt.

## SUPPLEMENTARY LIST

OF

## MINING COMPANIES AND OPERATORS

IN THE

## REPUBLIC OF MEXICO

WHOM WE HAVE REASON TO BELIEVE ARE AT POINTS GIVEN, BUT WHO HAVE  
FAILED TO FURNISH DESIRED DETAILED INFORMATION  
FOR REGULAR LISTS

MEXICO  
GOLD AND SILVER

NAME POSTOFFICE  
Palmarero Mining Co., Alamos  
Princesa Gold Mining Co., "  
Mexican Copper Co., Arispe  
Miford Gold Mining Co., Arispe  
Parissima Mining & Ex-  
ploration Co., Barranca

NAME POSTOFFICE  
Francisco M. Coghlan, Catere  
Mexican Ore Co., "  
Don Enrique Mining Co., Guadalupe  
Candelaria Mining Co., Durango  
Recompense & California  
Mine, El Oro  
Maehs Mining Co., Inde  
D. W. Farris, Los Maehos  
Via Cerro Gordo,  
Benoles Mining Co., Mapahu

NAME POSTOFFICE  
Cia Minera de Santa Fe, Matehuala  
Pachuca Silver Mining  
Co., Pachuca  
Presena Mining Co., Parral  
Edgar G. Tuttle, esq., San Felipe  
Ireneo Lopez, San Luis Potosi  
El Huelo Copper Co., Santa Rosalia  
Torreón Silver-Copper  
Mining Co., Torreón

# BLAST FURNACES

## ALABAMA

LOCATION, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE WHEN DIFFERENT FROM LOCATION OF WORKS, NAMES OF OFFICERS, PAID-UP CAPITAL STOCK, KIND OF FURNACE, NUMBER AND SIZE OF STACKS, ANNUAL CAPACITY IN TONS OF 2,000 POUNDS, NATURE OF OUTPUT, BRANDS, AND SELLING AGENTS.
TOWN AND COUNTY	
Anniston..... Calhoun Ry. 240, 408, 622.	Woodstock Iron Co. W. G. Ledbetter, prest.; J. W. Stillwell, secy. and treas.; Stephen N. Noble, mgr. Pd.-up cap. \$3,099,000. Woodstock Nos. 1 and 4, charcoal and coke blast, 2 stacks, coke 75x16 feet, charcoal 50x12 feet, 24,000 tons, ear wheel and foundry pig. Brands, coke "Anniston," charcoal "Woodstock." Selling agents, Rogers, Brown & Co., Cincinnati, Ohio; C. L. Pierson & Co., Boston, Mass.
Bessemer..... Jefferson Ry. 408, 612, 351.	De Bardeleben Coal & Iron Co. H. F. De Bardeleben, prest.; David Roberts, v.-prest.; Andrew M. Adger, secy. and treas.; L. W. Johns, supt. Cap. stk. \$10,000,000. De Bardeleben hot blast, 6 stacks 17x75 feet, 1 stack 12x60 feet, 300,000 tons, coke foundry and iron. Brand "De Bardeleben." Selling agents, Matthew Addy & Co., Cincinnati, Ohio, and Rogers, Brown & Co., New York City.
Birmingham..... Jefferson Ry. 183, 240, 351, 408, 422, 612, 622.	The Vanderbilt Steel & Iron Co. G. O. Vanderbilt, prest.; C. A. Meissner, v.-prest. and mgr.; F. T. Akermann, secy. and treas. Pd.-up cap. \$150,000. Clara Furnace, coke blast, 1 stack 65x14 feet, 20,000 tons, pig. Brand "Vanderbilt." Selling agents, Rogers, Brown & Co., Cincinnati, Ohio.
"..... "	Williamson Iron Co. C. P. Williamson, prest.; H. D. Williamson, v.-prest.; J. B. Simpson, secy. and treas. Pd.-up cap. \$150,000. Williamson, coke blast, 1 stack 65x14 feet, 20,000 tons, pig. Brand "Williamson." Selling agents, Chamberlain, Turney & Baird, Columbus, Ohio; Hicknam, Conson & Co., Louisville, Ky.
Gadsden..... Etowah Ry. 126, 240, 408, 747.	Gadsden Iron Co. A. J. Crawford, prest.; T. W. Stewart, secy. and mgr. Cap. stk. \$125,000. Gadsden, charcoal blast, 1 stack 12x65 feet, 11,000 tons, pig iron. Brands "Stewart" and "Gadsden."
Irontrion..... Talladega Ry. 408.	Clifton Iron Co. T. G. Bush, prest.; Paul Roberts, secy.; J. L. Pierson, treas. Cap. stk. \$500,000. Clifton Furnace, 1 stack, ear wheel pig iron, Brand "Clifton." Selling agents, Matthew Addy & Co., St. Louis, Mo., and Cincinnati, Ohio; C. L. Pierson & Co., Boston, Mass.
Jenifer..... Talladega Ry. 240, 408.	Jenifer Iron Co. John W. Noble, prest.; W. D. Piles, secy. and treas.; A. E. Noble, supt. Pd.-up cap. \$300,000. Jenifer, charcoal blast, 1 stack 55x10 feet, 12,250 tons, ear wheel pig. Selling agents, Geo. H. Hull & Co., Louisville, Ky.
Langdon..... Cherokee (P. O. Langdon City) Ry. 463.	Alabama Ore & R. R. Co. P. D. Langdon, prest.; R. P. Sibley, secy. Cap. stk. \$100,000. Langdon, 1 stack 65x11 feet, 11,000 tons, ear wheel pig iron. Brand "Langdon." Selling agents, Rogers, Brown & Co., New York; Horsford & Phemer and W. D. Bennage & Co.
Round Mountain, Cherokee Ry. 240.	The Elliott Pig Iron Co., Gadsden, Ala. Round Mountain, charcoal cold blast, 1 stack 66x9 feet, 6,000 tons, pig. Brand "Round Mountain." Selling agents, Rogers, Brown & Co., Cincinnati, Ohio.
Sheffield..... Colbert Ry. 61, 408, 430.	Lady Enslay Coal, Iron & Ry. Co. W. M. Sneed, prest.; Martin Enslay, v.-prest.; Thos. D. Radcliffe, secy. and treas.; Walter Moore, gen. mgr.; J. A. Short, supt. Pd.-up cap. \$2,000,000. Lady Enslay and Hatfield Enslay, coke hot blast, 2 stacks 75x17 feet, 80,000 tons, foundry pig. Brand "Lady Enslay." Selling agents, Matthew Addy & Co., Cincinnati, Ohio, and St. Louis, Mo.
Shelby..... Shelby Ry. 408.	Shelby Iron Co. T. G. Bush, prest.; H. C. Cooper, secy.; W. S. Gurnee, treas.; E. T. Witherby, asst. treas. Cap. stk. \$1,000,000. Shelby, hot blast, 2 stacks 14x60 feet, 40,000 tons, charcoal ear wheel pig iron. Selling agents, Matthew Addy & Co., Cincinnati, Ohio.
Tecumseh..... Cherokee Ry. 240.	Tecumseh Iron Co. P. S. Moore, prest.; J. W. Dinnick, v.-prest.; P. B. Warner, secy.; S. J. Fearing, gen. mgr. Pd.-up cap. \$200,000. Tecumseh, charcoal blast, 1 stack 60x16 feet, 15,000 tons, pig. Brand "Tecumseh." Selling agent, P. B. Warner, Cincinnati, Ohio.
Trussville..... Jefferson Ry. 612.	Trussville Furnace & Mining Co. R. D. Smith, prest. and mgr.; W. L. Smith, secy. and treas. Trussville, charcoal blast, 1 stack 65x16 feet, 36,000 tons, pig. Brand "Trussville." Selling agents, Rogers, Brown & Co., Cincinnati, Ohio.
Woodward..... Jefferson Ry. 408.	Woodward Iron Co. J. H. Woodward, prest.; S. Mathews, secy. Pd.-up cap. \$1,000,000. Woodward, coke blast, 2 stacks each 75x17 feet, 75,000 tons, pig. Brand "Woodward."

## CONNECTICUT

Canaan..... Litchfield Ry. 116, 312.	Barnum, Richardson Co., Lime Rock, Conn. M. B. Richardson, prest.; C. W. Barnum, v.-prest.; S. P. Ensign, secy.; P. S. Burrall, treas. Pd.-up cap. \$200,000. Canaan Furnace, charcoal blast, 3 stacks each 32x3 feet, 15,000 tons, pig. Brand "Salisbury."
Kent..... Litchfield (P. O. Kent Furnace) Ry. 312.	Kent Iron Co. Donald J. Warner, prest.; Geo. R. Bull, secy.; John Hopson, treas., mgr. and supt. Cap. stk. \$80,000. Kent, hot blast, 1 stack 42x9 feet, 5,000 tons, charcoal pig iron. Brands "Salisbury" and "Kent Iron."

## GEORGIA

Edartown..... Polk Ry. 234, 284.	Cherokee Iron Co. Wm. C. Browning, prest.; J. R. Barber, secy. and gen. mgr.; J. H. Browning, treas. Pd.-up cap. \$50,000. Cherokee, charcoal blast, 1 stack 48x14 feet, 27,000 tons, foundry pig. Brand "Cherokee." Selling agents, Hall Bros. & Co., Louisville, Ky.
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## ILLINOIS

Chicago..... Cook Ry. 42, 383, 385, 26, 135, 142, 145, 150.	Chicago Furnace Co., Rookery Bldg. J. M. Flower, prest.; Irving T. Hartz, secy., treas. and mgr.; Terry N. Conlin, supt. Cap. stk. \$90,000. Calumet, coke blast, 1 stack 17'x50 feet, 50,000 tons, foundry and Bessemer pig iron. Brand "Calumet."
"..... "	Hilnos Steel Co., Rookery Bldg. Adams and La Salle sts. Jay C. Morse, prest.; W. R. Stirling and H. S. Smith, v.-pres.; H. A. Gray, secy.; J. C. Stirling, treas. South, North and Union, hot blast, 14 stacks, 340,000 tons, Bessemer pig, foundry and mill pig, and spiezel. Selling agents, Piekands, Brown & Co., tenth floor Rookery Bldg.

## ILLINOIS (CONTINUED)

LOCATION, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE WHEN DIFFERENT FROM LOCATION OF WORKS, NAMES OF OFFICERS, PAID-UP CAPITAL STOCK, KIND OF FURNACE, NUMBER AND SIZE OF STACKS, ANNUAL CAPACITY IN TONS OF 2,000 POUNDS, NATURE OF OUTPUT, BRANDS, AND SELLING AGENTS.
Joliet . . . . .	Will Ry. 26, 135, 142, 145, 245.	Illinois Steel Co., Chicago, Ill., Rookery Bldg., Adams and La Salle sts. Jay C. Morse, pres.; W. R. Stirling and H. S. Smith, v-pres.; H. A. Gray, secy.; J. C. Stirling, treas. Joliet, hot blast, 3 stacks, 180,000 tons, Bessemer, tondrny and mill pig and spiegel. Selling agents, Pickands, Brown & Co., tenth floor Rookery Bldg., Chicago.
South Chicago . . . . .	Cook Ry. 42, 383, 585.	Troquois Furnace Co., Chicago, Ill., 638 Rookery Bldg. Hay Walker, pres.; Charles F. Forster, secy. and gen. mgr.; T. H. Given, treas.; F. M. Kerwin, supt. Pd-up cap. \$500,000. Troquois, coke blast, 1 stack 30x17 feet, 80,000 tons, pig. Brands "Troquois," "Stirling scotch" and "Peerless." Selling agents, Forster, Backman & Hawes, Chicago, Ill., 638 Rookery Bldg.
<b>INDIANA</b>		
Brazil . . . . .	Clay Ry. 146, 256, 563.	Central Iron & Steel Co. Major Collins, pres. and gen. mgr.; A. S. Faiber, acting secy.; John H. Lewis, treas. Cap. stk. \$1,500,000. Brazil, hot blast, 1 stack 13x10 feet, 12,000 tons, pig iron. Brand "Brazil."
Vigo . . . . .	Indiana Ry. 146, 170, 256, 563, 749.	Vigo Iron Co., Terre Haute, Ind. A. J. Crawford, pres.; J. P. Crawford, secy., treas. and supt. Pd-up cap. \$50,000. Vigo, coal blast, 1 stack 62½x13 feet, 12,000 tons, pig. Brand "Vigo."

## KENTUCKY

Ashland . . . . .	Boyd Ry. 132, 499, 523, 537.	Ashland Coal & Iron Ry. Co. Douglas Putnam, pres. and gen. mgr.; John G. Peebles, v-pres.; Robt. Peebles, secy.; E. C. Means, supt. Ashland, coal and coke blast, 2 stacks each 62x16 feet, 40,000 tons, pig. Brand "Ashland."
" . . . . .	"	Means & Russell Iron Co. John Russell, pres.; C. W. Means, secy.; Ashland National Bank, treas.; W. B. Seaton, mgr. and supt. Pd-up cap. \$200,000. Bellefonte, charcoal blast, 1 stack 34x10½ feet, 4,500 tons, pig. Brand "Bellefonte Foundry Pig Iron." Selling agents, Bacon, Flato & Co., Cincinnati, Ohio; Adams, Watkins & Co., Louisville, Ky.
" . . . . .	"	Norton Iron Works. Chas. H. Greene, pres.; Thos. M. Adams, v-pres.; Edw. E. Seaton, secy.; John Russell, treas.; Geo. Carp, supt. Pd-up cap. \$738,000. Norton, coke blast, 1 stack 68x16 feet, 40,000 tons, pig. Brand "Norton." Selling agent, P. B. Warner, Cincinnati, Ohio, 18 Johnston Bldg.
Grand Rivers . . . . .	Livingston Ry. 449.	Grand Rivers Co., Boston, Mass., 64 Federal st. A. B. Ward, pres.; W. Lawson, v-pres. and mgr.; Fred Joy, secy.; J. M. Searle, supt. Pd-up cap. \$3,000,000. Grand Rivers, charcoal blast, 2 stacks each 60x13½ feet, 40,000 tons, pig. Brand "Grand Rivers."
Middlesboro . . . . .	Jell Ry. 371, 408.	The Watts Steel & Iron Syndicate, Ltd. Edmund H. Watts, pres.; Robt. Andrews, secy.; Edgar and Frank Watts, managing directors; Geo. L. Reis, mgr. Pd-up cap. \$1,250,000. Watts, coke, hot blast, 2 stacks 75x17 feet, 80,000 tons, pig. Brand "Watts."

## MARYLAND

Baltimore . . . . .	Baltimore Ry. 16, 17, 41, 42, 44, 528, 577, 894.	Stickney Iron Co., 11 S. Gay st. Geo. H. Stickney, pres.; Wm. Harvey, secy.; Chas. W. Klipper, mgr. Cap. stk. \$300,000. Blast furnace, 2 stacks 50x11 feet, 6,500 tons, charcoal pig iron. Brand "Stickney Iron." Selling agents, Reed, Stickney & Co., 11 S. Gay st., Baltimore, Md.
Catoctin Furnace . . . . .	Frederick Ry. 42.	Catoctin Mountain Iron Co., Thomas Gorsuch, pres. and mgr.; Harry P. Gorsuch, secy. and supt.; Geo. Houck, treas. Deborah, coke blast, 2 stacks 60x11½ and 32x10 feet, 14,000 tons, pig. Brand "Catoctin." Selling agents, L. & R. Westler & Co., Philadelphia, Pa., 257 S. Fourth st.
Muirkirk, Prince George's Ry. 42.		Chas. E. Coffin. Muirkirk, hot blast, 1 stack 36x8½ feet, 7,000 tons, ear wheel and ordnance charcoal pig iron. Brand "Muirkirk." Selling agents, C. L. Larson & Co., Boston, Mass.; A. W. Howe, 607 Drexel Bldg., Philadelphia, Pa.; Robinson & Orr, Pittsburg, Pa.

## MICHIGAN

Detroit . . . . .	Wayne Ry. 26, 221, 222, 262, 290, 383, 449, 784.	Detroit Iron Furnace Co., foot of Meldrum st. James McMillan, pres.; Hugh McMillan, v-pres.; Ernest C. Wetmore, secy. and mgr.; Wm. C. McMillan, treas. Cap. stk. \$250,000. Detroit, hot blast, charcoal, 1 stack 11x20 feet, 18,000 tons, Lake Superior charcoal pig iron. Brand "I. I. P." Selling agents, W. F. Jarvis & Co., Newbury Bldg., Detroit.
" . . . . .	"	Gaylord Iron Co., foot of Iron st. Chas. A. Kent, pres.; Wm. M. Gaylord, v-pres. and treas.; Frank B. Gaylord, secy. and supt. Cap. stk. \$260,000. Gaylord, closed top blast furnace, 1 stack 56x9½ feet, 18,000 tons, charcoal pig iron. Brand "G. I. Co. Det."
" . . . . .	"	The Peninsular Iron Co., foot of Bellevue av. Theo. H. Eaton, pres.; Robt. Lutes, v-pres.; Solon Burt, secy., treas. and mgr. Pd-up cap. \$200,000. Peninsular, charcoal blast, 1 stack 42x9½ feet, 12,000 tons, pig. Brand "Peninsular."
" . . . . .	"	Union Iron Co. Austin Burt, pres.; Wm. Gerhauser, secy., treas. and mgr. Pd-up cap. \$200,000. Union, charcoal blast, 1 stack 46x10 feet, 15,000 tons, pig. Brand "U. I. Co. Det."
Elk Rapids . . . . .	Antrim Ry. 152.	Elk Rapids Iron Co. X. K. Fairbank, pres.; N. H. Noble, v-pres. and mgr.; E. S. Noble, secy. and treas. Pd-up cap. \$600,000. Elk Rapids, charcoal blast, 1 stack 60x10½ feet, 25,000 tons, pig. Brand "Elk Rapids." Selling agents, M. A. Hanna & Co., Cleveland, Ohio.
Fruitport . . . . .	Muskegon Ry. 152.	Spring Lake Iron Co. J. M. Bean, pres.; C. F. Itsky, v-pres.; J. C. Ford, secy. and mgr.; S. Marshall, treas. Pd-up cap. \$260,000. Spring Lake, charcoal blast, 1 stack 56x11 feet, 30,000 tons, pig. Brand "Spring Lake."
Harvey . . . . .	Marquette Ry. 150, 151.	Northern Furnace Co., Marquette, Mich. J. M. Longyear, pres.; H. M. Kaufman, v-pres.; J. G. Reynolds, secy.; J. M. Wilkinson, treas.; F. B. Spear, mgr. Northern, charcoal blast, 1 stack 50x10½ feet, 20,000 tons, ear wheel pig. Brand "Northern." Selling agents, M. A. Hanna & Co., Cleveland, Ohio.
Ishpeming . . . . .	Marquette Ry. 150, 229.	Deer Lake Company, W. H. Rood, pres., treas. and mgr.; J. N. St. Clair, secy. Deer Lake, charcoal blast, 1 stack 8x47½, 1 stack 9x49 feet, 12,000 tons, charcoal pig iron. Brand "Deer Lake." Selling agents, Chas. Huron & Co., Chicago, Ill.

## MICHIGAN—(CONTINUED)

LOCATION, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE WHEN DIFFERENT FROM LOCATION OF WORKS, NAMES OF OFFICERS, PAID-UP CAPITAL STOCK, KIND OF FURNACE, NUMBER AND SIZE OF STACKS, ANNUAL CAPACITY IN TONS OF 2,000 POUNDS, NATURE OF OUTPUT, BRANDS, AND SELLING AGENTS.
Ishpeming . . . Marquette (Continued.)	Chas. H. Schaffer, W. J. Elson, supt. Cap. \$80,000. Excelsior, charcoal blast, 1 stack, 50x9 feet, 10,000 tons, pig. Brand "Excelsior Furnace." Selling agents, Wm. T. Jarvis, Detroit, Mich.; Chas. Hinrod & Co., Chicago, Ill.
Marquette . . . Marquette Ry. 229.	Carp River Furnace Co., Detroit, Mich. Hiram A. Burt, prest.; Theo. H. Eaton, v.-prest.; Solon Burt, seey, treas. and mgr. Pd.-up cap. \$50,000. Carp River, charcoal blast, 1 stack 47½x10 feet, 12,000 tons, pig. Brand "Carp." Selling agent, Solon Burt, Detroit, Mich.
Newberry . . . Luce Ry. 229.	Newberry Furnace Co., Hugh McMillan, prest.; W. C. McMillan, v.-prest.; Claude W. Cass, seey and mgr.; W. H. Anderson, treas. Pd.-up cap. \$145,250. Newberry, charcoal blast, 1 stack 52x10 feet, 20,000 tons, pig. Brand "Vulcan." Selling agents, Wm. F. Jarvis & Co., Detroit, Mich.
Wyandotte . . . Wayne Ry. 383, 440.	Euroka Iron & Steel Works, Detroit, Mich., 2 Butler Bldg. Sidney D. Miller, v.-prest. and seey.; W. V. Miller, treas.; J. S. Van Alstyne, mgr.; John Desmond, supt. Pd.-up cap. \$820,000. Euroka, blast, 1 stack 55x12 feet, 22,000 tons, pig. Brand "Euroka."

## MINNESOTA

Duluth . . . St. Louis Ry. 143, 229, 230, 293, 529, 721.	West Duluth Furnace Co., Chicago, Ill., Rookery Bldg., Charles Hinrod, prest.; John Crerar, v.-prest.; R. Floyd Clinch, seey.; Kirk Hinrod, treas.; A. S. Bertolotti, mgr. and supt. Pd.-up cap. \$40,000. West Duluth, coke blast, 1 stack 75x15 feet, 45,000 tons, pig. Brand "West Duluth."
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## MISSOURI

Midland . . . Crawford Ry. 710.	Midland Blast Furnace Co., St. Louis, Mo., 111 Olive St. Wm. H. Lee, prest.; E. A. Hitchcock, v.-prest.; T. F. Turner, seey.; R. B. Reagan, supt. Pd.-up cap. \$800,000. Midland, charcoal blast, 1 stack 55x10 feet, 18,000 tons, pig. Brand "Midland."
St. Louis . . . St. Louis Ry. 135, 145, 170, 400, 563, 720, 784.	Jupiter Furnace Co., 26 LaCade Bldg. D. E. Garrison, prest.; O. W. Meyssenburg, v.-prest.; W. O. Garrison, seey. and treas. Pd.-up cap. \$50,000. Jupiter, coke blast, 1 stack 75x20 feet, 70,000 tons, pig. Brand "Jupiter."
Silgo . . . Dent Ry. 720.	Silgo Furnace Co., Hugh A. Crawford, prest. and treas.; Emerson L. Foote, v.-prest. and seey.; E. L. Foote, supt. Pd.-up cap. \$600,000. Silgo, charcoal hot blast, 1 stack 55x11 feet, 17,000 tons, pig. Brand "Silgo."

## NEW JERSEY

Hackettstown . . . Warren Ry. 269.	Warren Iron Co., John P. Jones, prest.; John R. Bennett, mgr. Warren, anthracite and coke blast, 1 stack 55x14 feet, 15,000 tons, foundry pig. Brand "Warren."
Jersey City . . . Hudson Ry. 118, 503, 503, 505, 510, 561.	Passaic Zinc Co., Wm. B. Brown, prest.; Chas. B. Spuler, seey. and treas.; F. C. Spuler, mgr.; Fritz Gleim, supt. Cap. stk. \$625,000. Passaic, Spiegel, 1 stack 40x19 feet, 6,000 tons, Spiegel. Selling agents, Manning & Squier, 111 Liberty St., New York City.
Oxford . . . Warren Ry. 269.	Oxford Iron & Nail Co., New York City, 52 Wall St., Theodore Sturges, prest.; John I. Blair, v.-prest.; Edmund T. Lukens, seey. and mgr.; A. P. Cobb, treas. Pd.-up cap. \$1,000,000. Oxford Iron Co., anthracite hot blast, 1 stack 62x17½ feet, 18,000 tons, rolling mill iron.
Phillipsburg . . . Warren Ry. 118, 209, 303, 563.	Andover Iron Co., Philadelphia, Pa., 240 S. Third St., John R. Fell, prest.; Chas. Gilpin jr., seey. and treas.; Jos. C. Kent, supt. Cap. stk. \$1,000,000. Andover Iron Works, hot blast, 3 stacks 75x15 feet, 35,000 tons, pig iron. Brand "Andover." Selling agents, J. Tatum Lea & Co., 400 Chestnut St., Philadelphia.
Port Ormonde . . . Morris Ry. 118, 209.	Joseph Wharton, Philadelphia, Pa., Edward Kelly, mgr., Wharton, hot blast, 1 stack 15x7½ feet, 25,000 tons, foundry and forge pig iron. Brand "Wharton." Selling agents, H. W. Adams & Co., 56 Pine St., New York City.
Stanhope . . . Sussex Ry. 269.	Miscellaneous Iron Works, Philadelphia, Pa., 237 S. Third St., John R. Fell, prest.; H. H. Wilson, seey. and treas.; I. H. Fardoe, mgr. Miscellaneous, charcoal, 2 stacks 50x20 and 70x18 feet, 55,000 tons, pig. Brand "M. I. W." Selling agents, Crocker Bros., New York City, 32 Cliff St.; J. M. Pullman, Philadelphia, Pa., 238 S. Third St.

## NEW YORK

Charlotte . . . Monroe Ry. 501, 638.	Charlotte Iron Works, A. G. Yates, prest.; J. E. Roberts, v.-prest.; A. S. Clarke, seey. and treas. Pd.-up cap. \$160,000. Charlotte, coke blast, 1 stack 65x15 feet, 20,000 tons, foundry pig. Brand "Charlotte."
Chatham . . . Columbia Ry. 70, 392, 501.	Chatham Furnace Co., C. S. Whitney, prest., treas. and mgr.; H. P. Whitney, v.-prest.; L. Mallory, seey. and supt. Pd.-up cap. \$80,000. Chatham, charcoal blast, 1 stack 38x9 feet, 6,000 tons, pig. Brand "Chatham."
Crown Point . . . Essex Ry. 196, 213.	Crown Point Iron Co., Chester Griswold, prest.; H. M. Olmstead, seey. and treas.; A. L. Inman, gen. mgr. Pd.-up cap. \$1,500,000. Crown Point, anthracite and coke blast, 2 stacks 70x15, and 60x16 feet, 50,000 tons, Bessemer pig. Brand "Crown Point." Selling agent, F. J. Donmeck, New York City, 21 Cortland St.
Elnira . . . Chenung Ry. 261, 247, 303, 363, 528.	Elnira Iron & Steel Rolling Mill Co., 722 Hatch St., James B. Rathbone, prest. and supt.; Jesse L. Cooley, seey. and treas. Cap. stk. \$500,000. Elnira, hot blast, 2 stacks 16x60 feet, 36,000 tons, pig iron. Brand "Elnira."
Hudson . . . Columbia Ry. 70, 367, 501.	Hudson Iron Co., John E. Gillette, prest.; F. H. Stott, v.-prest.; S. R. Rainey, seey. and treas.; S. C. McArthur, mgr.; David Barry, supt. Pd.-up cap. \$175,375. Hudson, charcoal blast, 2 stacks each 50x15 feet, 20,000 tons, pig. Brand "Hudson." Selling agent, F. C. Mosedale, New Haven, Conn., Box 1232.
Kirkland . . . Oneida Ry. 505.	Franklin Iron Manufacturing Co., Franklin Iron Works, N. Y., E. L. Holdron, prest.; W. A. Holden, treas.; C. H. Smyth, mgr. and supt. Pd.-up cap. \$250,000. Franklin, anthracite, coke blast, 1 stack 70x14 feet, 35,000 tons, soft pig. Brand "Franklin."

## NEW YORK—(CONTINUED)

LOCATION, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	TOWN AND COUNTY	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE WHEN DIFFERENT FROM LOCATION OF WORKS, NAMES OF OFFICERS, PAID-UP CAPITAL STOCK, KIND OF FURNACE, NUMBER AND SIZE OF STACKS, ANNUAL CAPACITY IN TONS OF 2,000 POUNDS, NATURE OF OUTPUT, BRANDS, AND SELLING AGENTS.
Port Henry..... Essex Ry. 213.		Port Henry Furnace Co. G. R. Sherman, pres.; W. C. Witherbee, v.-pres.; H. B. Willard, secy. and treas.; N. M. Langton, supt. Pd.-up cap. \$100,000. Port Henry, charcoal hot blast, 2 stacks each 6x16 feet, 30,000 tons, Bessemer pig. Brand "Port Henry." Selling agents, Witherbee, Sherman & Co., New York City, 46 Wall st.
Saranac..... Clinton (P. O. Standish) Ry. 124.		Chateaugay Ore & Iron Co., Plattsburg, N. Y. Smith M. Weed, pres.; F. J. Dominick, v.-pres.; A. L. Tinnin, secy. and mgr.; H. M. Orsted, 1st mgr.; M. L. French, asst. mgr. Cap. stk. \$1,500,000. Standish, blast, 1 stack 60x12 feet, 12,000 tons. Brand "Chateaugay." Selling agent, F. J. Dominick, New York City, 21 Cortland st.
Tonawanda..... Niagara Ry. 501, 503.		Tonawanda Iron & Steel Co. Wm. A. Rogers, pres.; Archer Brown, v.-pres.; Geo. G. Hamilton, secy.; Wm. A. Gamble, treas.; W. B. Kerr, supt. Pd.-up cap. \$250,000. Niagara, coke blast, 1 stack 76x18 feet, 95,000 tons, foundry pig. Brand "Niagara." Selling agents, Rogers, Brown & Co., Boston, Mass., Buffalo, N. Y., and Philadelphia, Pa.

## NORTH CAROLINA

Greensboro..... Guilford Ry. 98, 622.		North Carolina Steel & Iron Co. J. A. Odell, pres.; D. W. C. Benbow, v.-pres.; C. D. Benbow, secy. and treas.; J. D. Kase, mgr. and supt. Pd.-up cap. \$267,200. Carolina, charcoal blast, 1 stack 70x16 feet, 35,000 tons, pig. Brand "Carolina."
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## OHIO

Bellaire..... Belmont Ry. 42, 53, 171, 175.		Bellaire Nail Works. J. R. McCortney, pres.; A. B. Carter, secy. and treas. Cap. stk. \$750,000. Bellaire, hot blast, 1 stack 75x16 feet, 30,000 tons, Bessemer pig iron. Brand "Bellaire."
Bloom Switch..... Scioto Ry. 43.		The Clare Iron Co., Portsmouth, Ohio. J. D. Clare, pres. and treas.; J. H. Simmonds, v.-pres.; E. H. Clute, secy. and supt. Pd.-up cap. \$100,000. Bloom, charcoal, 1 stack 34x10 feet, 3,000 tons, pig. Brand "Bloom." Selling agent, J. D. Clare, Portsmouth, Ohio.
Campbell..... Lawrence Ry. 156.		The Campbell Iron Co., John H. Moulton, pres. and secy.; John W. Campbell, v.-pres. and mgr.; J. H. Campbell, treas. Pd.-up cap. \$300,000. Mt. Vernon, charcoal blast, 1 stack 35x12 feet, 3,000 tons, pig. Brand "Mt. Vernon." Selling agents, Bacon, Flato & Co., Cincinnati, Ohio.
Canal Dover..... Tuscarawas Ry. 171, 174, 175.		The Penn Iron & Coal Co. J. P. Burton, pres.; H. C. Davis, v.-pres.; H. C. Iream, secy.; S. W. Croxton, treas. and mgr.; Chas. Pifer, supt. Pd.-up cap. \$200,000. Dover, blast, 1 stack 6x16 feet, 30,000 tons, pig. Brand "Tuscarawas."
Cleveland..... Cuyahoga Ry. 170, 173, 174, 383, 502, 503, 778.		Union Rolling Mill Co., 502 Perry-Payne Bldg. S. W. Sessions, pres.; A. S. Upson, v.-pres.; H. H. Wyman, secy.; H. A. Fuller, treas. and mgr. Willard Fuller, supt. Pd.-up cap. \$300,000. Emma, 1 stack 72x17 feet, 55,000 tons, foundry and pig. Brand "Emma." Selling agents, The Condit-Fuller Co., Cleveland, Ohio.
Hanging Rock..... Lawrence Ry. 523.		Means, Kyle & Co. E. B. Willard, pres. and mgr.; James Bull, secy. and treas. Pd.-up cap. \$500,000. Hamilton and Pine Grove, coke and charcoal, 2 stacks 65x16 and 33x10 $\frac{1}{2}$ feet, 25,000 tons coke pig and 5,500 tons charcoal pig. Brands "Hamilton" and "Pine Grove." Selling agents, Rogers, Brown & Co., Cincinnati, Ohio; James Colford, Pittsburg, Pa.
Jackson..... Jackson Ry. 43, 535.		Globe Iron Co. Eben Jones, pres.; Elvas Crandall, v.-pres., treas. and supt.; John E. Jones, secy.; L. T. Murfin, mgr. Pd.-up cap. \$92,000. Fulton, hot blast, 1 stack 52x14 feet, 7,000 tons, Scotch pig. Brand "Globe." Selling agents, W. R. Thomas, New York City; Chas. Hunsard & Co., Chicago, Ill.
"....."		Star Furnace Co. B. Kahn, pres.; C. O. Brown, secy.; L. V. Brown, mgr. Star, blast, 1 stack 14x54 feet, 10,000 tons, pig iron. Brand "Star."
Leetonia..... Columbiana Ry. 503, 585.		Cherry Valley Iron Works. J. H. King, pres.; S. E. Welker, secy.; C. N. Schmieck, treas. Pd.-up cap. \$250,000. Cherry Valley, blast, 1 stack 75x16 feet, 50,000 tons, foundry pig. Brands "Cherry Valley" and "Leetonia."
"....."		Salem Iron Co., Pittsburg, Pa. cor. Wood st. and Sixth av. John McKeefrey, pres. and gen. mgr.; W. D. McKeefrey, v.-pres. and treas.; S. J. McKeefrey, secy.; P. W. Murphy, supt. Cap. stk. \$50,000. Granton, hot blast, 1 stack 13x54 and 1 stack 14x54 feet, 20,000 tons, coke pig iron, Bessemer, foundry and forge. Brands "Seneca," "Allegheny" and "Salem." Selling agents, McKeefrey & Co., Leetonia, Ohio, and Pittsburg, Pa.
Lowellville..... Mahoning Ry. 591, 592.		Ohio Iron & Steel Co. Thos. H. Wells, pres.; John C. Wick, v.-pres.; R. Bentley, secy. and mgr.; F. H. Wick, treas.; W. S. McCombs, supt. Pd.-up cap. \$150,000. The Mary, blast, 1 stack 75x16 feet, 70,000 tons, Scotch pig. Brand "The Mary Ohio Scotch." Selling agents, Pickands, Mather & Co., Cleveland, Ohio; Pickands, Brown & Co., Chicago, Ill.; N. S. Bartlett & Co., Boston, Mass.
Madison..... Jackson (P. O. Rempel) Ry. 156.		Clare Dudint & Co., Rempel, Ohio. Linn Bentley, financial agent and supt. Pd.-up cap. \$40,000. Madison, charcoal hot blast, 1 stack 37x9 $\frac{1}{2}$ feet, 3,500 tons, pig. Brand "Madison."
Niles..... Trumbull Ry. 503, 564, 589, 592.		Thomas Furnace Co. J. R. Thomas, pres.; J. M. Thomas, mgr.; W. Aubrey Thomas, supt. Thomas, blast, 1 stack 70 $\frac{1}{2}$ x17 $\frac{1}{2}$ feet, 70,000 tons, Bessemer pig. Brand "Thomas."
Oak Hill..... Jackson Ry. 43.		Jefferson Furnace Co. Jos. J. Jones, secy.; Eben J. Jones, treas. and mgr.; Lot Davies, supt. Cap. stk. \$75,000. Jefferson, charcoal cold blast, 1 stack 35x11 feet, 3,000 tons, pig iron. Brand "Jefferson."
Steubenville..... Jefferson Ry. 175, 584, 809.		Jefferson Iron Works, S. Third st. S. K. Wallace, pres.; W. H. McLinton, v.-pres.; Geo. P. Harden, secy. and treas.; John Kennedy, mgr. and supt. Cap. stock \$800,000. Jefferson, hot blast, 1 stack 17x30 feet, 82,555 tons, Bessemer pig iron. Brand "Jefferson."
"....."		Riverside Iron Works, Wheeling, W. Va., 1304 Main st. J. N. Vance, pres.; John D. Culbertson, secy. and treas.; F. J. Hearne, mgr.; F. Sherman, supt. Cap. stk. \$1,500,000. Steubenville, hot blast, 1 stack 75x16 feet, 70,000 tons, pig iron. Brand "Riverside."
Wellston..... Jackson Ry. 43, 155, 535.		Wellston Furnace Co., Chicago, Ill., 70 Dearborn st. E. A. Hyde, pres.; Robt. Vierling, v.-pres.; J. F. Forsyth, secy. and treas.; J. C. Cluffs, mgr. Pd.-up cap. \$40,000. Wellston, coke, 2 stacks each 52x13 $\frac{1}{2}$ feet, 28,000 tons, foundry pig. Brand "Wellston." Selling agents, Forsyth, Hylic & Co., Chicago, Ill., 48 and 70 Dearborn st.

## OHIO (CONTINUED)

LOCATIONS, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE WHEN DIFFERENT FROM LOCATION OF WORKS, NAMES OF OFFICERS, PAID-UP CAPITAL STOCK, KIND OF FURNACE, NUMBER AND SIZE OF STACKS, ANNUAL CAPACITY IN TONS OF 2,000 POUNDS, NATURE OF OUTPUT, BRANDS AND SELLING AGENTS.
Youngstown... Mahoning Ry. 388, 503, 585, 589, 391, 502.	Briar Hill Iron & Coal Co. George Tod, pres.; Henry Tod, v.-pres.; H. H. Stambaugh, secy. and treas.; J. G. Butler jr., mgr. Cap. stk. \$500,000. Grace Nos. 1 and 2, hot blast, 2 stacks 18x80 feet, 30,000 tons, pig iron.
" " " " " "	The Youngstown Steel Co., 35 Central Square. Tod Ford, pres. and gen. mgr.; Paul Jones, v.-pres.; John Stambaugh, secy. and treas.; Edw. L. Ford, supt. Pd.-up cap. \$300,000. The Tod, coke, 1 stack 65x14 feet, 50,000 tons, Bessemer, foundry and mill. Brand "Youngstown Scotch." Selling agents, H. G. Dravo, Pittsburg, Pa.; J. L. Hogan & Co., Philadelphia, Pa.; Tod, Stambaugh & Co., Cleveland, Ohio.
Zanesville... Muskingum Ry. 42, 164, 173, 182, 169.	Ohio Iron Co. M. Churchill, pres.; E. B. Greene, v.-pres.; John R. Cary, secy.; C. D. Greene, treas.; F. C. Greene, supt. Cap. stk. \$500,000. Hot blast, 1 stack 16x75 feet, 50,000 tons, Bessemer, foundry and gray forge pig iron.

## OREGON

Oswego... Clackamas Ry. 529.	Oregon Iron & Steel Co. Portland, Ore., 106 Third st. Theo. R. Wilcox, pres.; Martin Winch, v.-pres.; J. Frank Watson, secy. and gen. supt.; Ladd & Tilton, treas. Cap. stk. \$940,000. Hot blast charcoal, 1 stack 20x15x60 feet, 15,000 tons, pig iron. Brand "Oregon." Selling agents, Falk & Saeger, 320 Mission st., San Francisco, Cal.; Northwestern Supply Co., Tacoma and Seattle, Wash.
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## PENNSYLVANIA

Allentown... Lehigh Ry. 118, 393, 573, 578.	Allentown Iron Co., Philadelphia, Pa., 226 S. Third st. Joseph S. Harris, pres.; C. F. Howell, secy. and treas.; E. T. Clizer, supt. Pd.-up cap. \$850,000. Allentown, 2 stacks each 60x17 feet, 70,000 tons, foundry pig. Brand "Allentown." Selling agent, E. Hill, Philadelphia, Pa., 226 S. Third st.
Bellefonte... Centre Ry. 86, 563.	The Valentine Iron Co. G. W. Gophart, pres.; Robt. Valentine, secy. and treas.; Wm. Kelley, supt. Pd.-up cap. \$637,000. Valentine, hot blast, 1 stack 75x15 feet, 38,000 tons, foundry and gray forge pig. Brand "Nittany."
Bloomsburg... Columbia Ry. 66, 203, 578.	The Bloomsburg Iron Co. L. S. Wintersteen, pres.; J. J. Brown, secy. and treas.; Josiah Raiston, mgr. Pd.-up cap. \$100,000. Irondale, coke, 2 stacks 40x7 and 14x8 feet, 13,000 tons, pig. Brand "Irondale."
" " " " "	Wm. Neal & Sons. Cap. \$150,000. Bloom, charcoal blast, 1 stack 56x14 feet, 16,000 tons, pig. Brand "Bloom."
Boiling Springs... Cumberland Ry. 578.	Boiling Springs Iron Co. J. C. Bacher, pres.; W. A. Mullin, secy. Cap. \$30,000. Boiling Springs, charcoal blast, 1 stack 30x12 feet, 3,500 tons, pig. Brand "High Grade Charcoal."
Carlisle... Cumberland Ry. 199.	C. W. Ahl's Son, N. W. Ahl, mgr. Cap. \$100,000. Katherine, coke, 1 stack 50x12 feet, 14,000 tons, foundry pig. Brand "Katherine."
Catsauniga... Lehigh Ry. 110, 118, 393.	The Crane Iron Co., Philadelphia, Pa., 224 S. Fourth st. H. W. Hazard, pres.; James M. Hodge, secy. and treas.; Leonard Poekitt, supt. Pd.-up cap. \$1,500,000. Crane Iron Works, coal and coke blast, 1 stack, two 60x16 feet and two 75x18 feet, 100,000 tons, pig. Brands "Crane," "Castle" and "Mohican." Selling agents, Geo. T. Barvis & Co., Philadelphia, Pa., 312 Walnut st.
Chambersburg... Franklin Ry. 199, 804.	Bonebrake, Burkhardt & Co. Falling Spring, charcoal cold blast, 1 stack 40x8 $\frac{1}{2}$ feet, 5,000 tons, pig. Brand "Falling Spring."
Coplay... Lehigh Ry. 393.	Coplay Iron Co. E. P. Wilbur, pres.; W. A. Wilbur, secy.; Horace Boyd, supt. Pd.-up cap. \$200,000. Coplay, 2 stacks 70x15 $\frac{1}{2}$ and 54x16 feet, 49,500 tons, pig. Brand "Coplay." Selling agents, Balleit & Co., Philadelphia, Pa., 204 Walnut pl. C. W. Gleason & Co., New York City, 96 Liberty st.
Danville... Montour Ry. 209, 563, 578.	Grove Bros. Columbia, charcoal, 1 stack 50x14 feet. Brand "Columbia."
" " " " "	North Branch Steel Co., Philadelphia, Pa., Twenty-fifth st. and Washington av. Edw. Samuel, pres.; F. P. Howe, v.-pres.; Chas. M. Griffith, secy.; Walter S. Massey, treas.; R. K. Polk, mgr.; John Hagedobler, supt. North Branch, hot blast, 1 stack 43x13 feet and 1 stack 61x16 feet, 30,000 tons, foundry, Bessemer and mill pig iron.
Emporium... Cameron Ry. 533.	Shamamoning Iron & Coal Co. E. M. Parrott, pres.; Wm. H. Allen, secy. Hot blast coke furnace, pig iron. Idle at present.
Etna... Allegheny Ry. 563, 592.	Isabella Furnace Co. H. Kennedy, supt. Isabella, coke, 3 stacks, two 75x20, one 75x16 feet, 180,000 tons, pig. Brands "Isabella," "Bessemer." Foundry and Mill Iron.
Everett... Bedford Ry. 317.	Joseph E. Thrupp, Philadelphia, Pa., 119 S. Fourth st. Room 44. Chas. Forney, supt. Everett, hot blast, 1 stack 18x75 feet, 42,000 tons, foundry pig iron. Brand "Everett." Selling agents, Jerome Keeley & Co., Philadelphia, Pa., 303 Walnut st.
Harrisburg... Dauphin Ry. 199, 529, 563, 578.	McCormick & Co., 223 Market st. Cap. \$300,000. Paxton, anthracite and coke blast, 2 stacks 60x13 and 75x14 feet, 56,000 tons, pig. Brand "Paxton."
" " " " "	McCormick Estate, 223 Market st. Cap. \$40,000. Swatara, Anthracite and coke blast, 1 stack 50x11 feet, 8,000 tons, pig.
Lebanon... Lebanon Ry. 189, 191, 578.	I. & R. Melly. Lebanon Valley. Hot blast, 1 stack; 24,000 tons, pig. Brand "Lebanon Valley."
Maconigo... Lehigh Ry. 578.	Crane Iron Co., Philadelphia, Pa., 224 S. Fourth st. H. W. Hazard, pres.; Jas. M. Hodge, secy. and treas.; Leonard Poekitt, supt. Cap. stk. \$1,500,000. Maconigo, hot blast, 1 stack 56x16 feet, 17,000 tons, foundry and Bessemer pig iron. Selling agents, Geo. T. Barvis & Co., 333 Walnut st., Philadelphia, Pa.
Mont Alto... Franklin Ry. 468.	Mont Alto Iron Works. Edw. Weistling, supt. Hot blast charcoal, 1 stack, 12,000 tons, pig iron. Brand "Mont Alto."
New Castle... Lawrence Ry. 271, 503, 583, 591, 592, 845.	Crawford Iron & Steel Co. Wm. Patterson, pres.; W. E. Reis, secy. and mgr.; J. A. Crawford, treas. Pd.-up cap. \$150,000. Neshannock, blast, 1 stack 78x17 feet, 75,000 tons, Bessemer pig. Brand "Neshannock."
" " " " "	Etna Iron Works, Ltd., Edwin N. Ohl, chairman; A. W. Thompson, secy. and treas. Cap. stk. \$550,000. Etna, hot blast, 2 stacks 18x75 feet, 70,000 tons, pig iron. Brand "Etna."

## PENNSYLVANIA (CONTINUED)

LOCATION, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE WHEN DIFFERENT FROM LOCATION OF WORKS, NAMES OF OFFICERS, PAID-UP CAPITAL STOCK, KIND OF FURNACE, NUMBER AND SIZE OF STACKS, ANNUAL CAPACITY IN TONS OF 2,000 POUNDS, NATURE OF OUTPUT, BRANDS, AND SELLING AGENTS.
TOWNS AND COUNTY.	
New Castle..... Lawrence (Continued.)	Raney & Berger Iron Co., 150 Furnace st., L. Raney, prest.; Geo. B. Berger, secy. and treas. Cap. stk. \$200,000. Hot blast, 2 stacks 17x80 feet, 60,000 tons, Bessemer pig iron. Brands "Norway," "Hecla," "Crown." Selling agent, Henry A. Adams, 177 Broadway, New York City.
Newport..... Perry Ry. 563.	Juniata Furnace & Foundry Co., Philadelphia, Pa., Bench and Marlborough sts. Alfred Marshall, prest.; P. Hiestand, supt.; W. P. Young, chemist. Marshall, hot blast, 1 stack 60x13 feet, 20,000 tons, foundry pig iron. Brand "Marshall." Selling agent, C. T. Holbrook, Bench and Marlborough sts., Philadelphia, Pa.
Perryville..... Carbon Ry. 118, 393.	Carbon Iron & Steel Co., Ltd., Manch Chunk, Pa., M. S. Kemmerer, chairman; H. H. Butler, secy. and treas.; H. R. Hall, mgr. and supt. Carbon, coke blast, 3 stacks 52x13, 52x16 and 65x16 feet, 75,000 tons, pig iron. Brands "Viking," "Parry" and "Carbon."
Pittsburg..... Allegheny Ry. 11, 42, 43, 175, 563, 583, 584, 585, 590, 591.	Moorhead-McLeane Co., Geo. S. Griseom, prest.; M. K. Moorhead, v.-prest.; Chas. R. Dallas, secy.; W. J. Moorhead, treas. Soho, hot blast, 1 stack 80x20 feet, 80,000 tons, pig iron. Brand "Soho."
"....."	Shoenberger, Speer & Co., Fifteenth and Etna sts. Shoenberger, coke, 2 stacks 75x15½ and 75x14½ feet, 113,400 tons, Bessemer pig.
Port Kennedy..... Montgomery Ry. 563, 578.	Montgomery Iron Co., Abraham S. Patterson, prest.; Joseph S. Patterson, secy., treas. and mgr. Pd.-up cap. \$150,000. Montgomery, charcoal blast, 1 stack 65x13½ feet, 25,000 tons, pig. Brands "Anon Bessemer" and "Montgomery." Selling agents, Pilling & Crane, Philadelphia, Pa., Bullitt Bldg.
Reading..... Berks Ry. 563, 578, 820.	Reading Iron Co., 518 Washington st. Geo. F. Baer, prest.; Thomas Yarrington, secy.; F. C. Smink, treas. and gen. mgr.; Albert Broden, supt. Keystone and Reading, charcoal, 4 stacks, two 55x15, one 50x15 and one 65x14½ feet, 100,000 tons, foundry and mill iron. Brands "Bashong" and "Reading."
Ridlesburg..... Bedford Ry. 317.	Kemble Iron Co., Alex. Nimick, prest.; C. H. Scott, secy. and treas.; Wm. Lander, mgr. Hot blast, 2 stacks 60x13 feet, 30,000 tons, pig iron. Brand "Kemble."
Rittenhouse Gap..... Berks (P. O. Allentown) Ry. 110.	Hartzell Concentrating Co., Ltd., Philadelphia, Pa., Bullitt Bldg. W. K. Hartzell, chairman; F. I. Crane, prest.; W. S. Pilling, treas. Pd.-up cap. \$30,000. Bull-Norton Separator, 40,000 tons, high grade iron. Brand "Hartzell." Selling agents, Pilling & Crane, Philadelphia, Pa., Bullitt Bldg.
Rockhill Furnace..... Huntingdon Ry. 235.	Rockhill Iron & Coal Co., Philadelphia, Pa., 320 Walnut st. Wm. A. Inglish, prest.; Edw. Roberts Jr., v.-prest.; J. E. Haverstick, secy. and treas.; A. W. Sims, mgr.; Charles Conner, supt. Pd.-up cap. \$1,500,000. Nos. 1 and 2, hot blast coke, 2 stacks 65x17 and 65x15 feet, 30,000 tons, forge and foundry pig. Brand "Rockhill."
Scranton..... Lackawanna Ry. 118, 200, 213, 505.	Lackawanna Iron & Steel Co., New York City, 72 Wall st. E. F. Hatfield, prest.; C. F. Maltzer, 2d v.-prest.; H. V. Vulture, secy. and asst. treas.; E. S. Moffatt, gen. mgr.; A. H. Lee, supt. Lackawanna, hot blast, 1 stack 73x20½ feet, 1 stack 65x17 feet, 1 stack 70x18 feet, 1 stack 75x17 feet, 1 stack 75x18½ feet, 125,000 tons, pig iron. Brand "Lackawanna."
Sharpsville..... Mercer Ry. 251, 503, 668.	Perkins & Co., Ltd., S. Perkins, chairman and mgr.; L. C. Hanna, secy. and treas.; George D. Devitt/supt. Pd.-up cap. \$350,000. Mabel, charcoal, 2 stacks each 65x15 feet, 60,000 tons, pig. Brand "Mabel." Selling agents, M. A. Hanna & Co., Cleveland, Ohio.
South Bethlehem..... Northampton Ry. 118, 578.	Bethlehem Iron Co., Robt. F. Linderman, prest.; Robt. H. Sayre, v.-prest. and gen. mgr.; A. S. Schropp, secy.; C. O. Brunner, treas.; John Fritz, gen. supt.; R. W. Davenport, asst. supt. Cap. stk. \$3,000,000. Bethlehem, hot blast, 3 stacks 70x16 feet, 1 stack 61x15½ feet, 1 stack 70x19 feet, 1 stack 65x17 feet, 1 stack 65x14 feet, 1 stack 65x15 feet, 200,000 tons, pig iron. Brand "Bethlehem."
Steelton..... Dauphin Ry. 543, 578.	Pennsylvania Steel Co., Philadelphia, Pa., Luther S. Bent, prest.; F. W. Wood, mgr.; E. C. Felton, supt.; Edw. E. Knapp, asst. supt. Nos. 1, 2, 3 and 4, spiegel and Bessemer, 4 stacks, two 70 feet, one 55, and one 80 feet, 150,000 tons. Brand "Spiegel & Bessemer Pig."
Snedeland..... Montgomery Ry. 578.	Richard Hecksecker & Sons, Philadelphia, Pa., 238 S. Third st. Suede, charcoal blast, 2 stacks 72x14 and 80x15½ feet, 30,000 tons, mill and foundry pig. Brand "Suede."
Temple..... Berks (P. O. Reading) Ry. 563, 578.	Temple Iron Co., Reading, Pa. George F. Baer, prest.; Thos. Yarrington, secy.; F. C. Smink, treas.; Albert Broden, mgr. Temple, charcoal, 1 stack 55x13½ feet, 25,000 tons, pig. Brand "Temple."

## TENNESSEE

Chattanooga..... Hamilton Ry. 125, 240, 430, 482, 612.	Georgia Mining, Manufacturing & Improvement Co., Atlanta, Ga., 38 Wall st. J. S. Brown, prest.; J. M. Brown, v.-prest.; E. A. Brown, secy. and treas.; F. M. Connor, gen. mgr. Hot blast, 12,000 tons, pig iron.
Citico..... Monroe Ry. 612.	Citico Furnace Co., Chattanooga, Tenn., Montague Bldg. H. S. Chamberlain, prest.; Wm. E. Raht, secy.; O. E. Wells, supt. Pd.-up cap. \$200,000. Citico, coke blast, 1 stack 68x16 feet, 40,000 tons, foundry pig. Brand "Citico."
Rockwood..... Roane Ry. 612, 636.	Roane Iron Co., Chattanooga, Tenn., Montague Bldg. H. S. Chamberlain, prest.; Orion L. Hurlbut, secy.; Willard Warner Jr., supt. John Patton, furnace supt. Pd.-up cap. \$1,000,000. Rockwood, coke blast, 2 stacks 65x14 and 65x15 feet, 45,000 tons, mill and foundry pig. Brand "Rockwood." Selling agents, Warren, Wood & Co., New York City, 29 Broadway; Hosford & Pletcher, Cincinnati, Ohio; Dunham, Reedy & Co., Chicago, Ill.; Matthew Addy & Co., St. Louis, Mo.

## TEXAS

New Birmingham..... Cherokee Ry. 400.	The New Birmingham Iron & Improvement Co., Richard L. Coleman, prest. and gen. mgr.; Samuel D. Mills, supt. Pd.-up cap. \$3,500,000. Tassie Belle, charcoal blast, 1 stack 68x11 feet, 15,000 tons, ear wheel and foundry pig. Brand "Tassie Belle."
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## VIRGINIA

LOCATION, RAILWAYS, WATER ROUTES AND SHIPPING POINT.			NAME OF COMPANY OR INDIVIDUAL LOCATION OF PRINCIPAL OFFICE WHEN DIFFERENT FROM LOCATION OF WORKS. NAMES OF OFFICERS, PAID-UP CAPITAL STOCK, KIND OF FURNACE, NUMBER AND SIZE OF STACKS, ANNUAL CAPACITY IN TONS OF 2,000 POUNDS, NATURE OF OUTPUT, BRANDS, AND SELLING AGENTS.
TOWN	AND	COUNTY	
Big Stone Gap, Ry. 408, 687.	Wise		Appalachian Steel & Iron Co. E. J. Bird jr., prest.; E. J. Bird, v.-prest. and gen. mgr.; M. T. Ridenour, secy. and treas.; Pd.-up cap. \$150,000. Appalachian, coke blast, 2 stacks 75x16 feet, 60,000 tons, foundry pig. Brand "B.S.G." Selling agents, Bacon, Flato & Co., Cincinnati, Ohio.
Buena Vista, Ry. 132, 523.	Rockbridge		Buena Vista Iron Co. C. M. Clark, prest.; A. T. Barclay, v.-prest.; G. F. Baker, secy. and treas.; F. B. Richards, mgr. Buena Vista, coke blast, 1 stack 70x16 feet, 42,000 tons, pig. Brand "Buena Vista." Selling agents, Jere Abbott & Co., New York City; Ed. D. Smith & Co., Philadelphia, Pa.
Glen Wilton, Ry. 132.	Botetourt		D. S. Cook, Wrightsville, Pa. T. D. Kamlet, supt. Pd.-up cap. \$90,000. Princess, coke, hot blast, 1 stack 68x12 $\frac{1}{2}$ feet, 16,000 tons, pig. Brand "Princess." Selling agent, Wilton Cook, Wrightsville, Pa.
Goshen, Ry. 132, 789.	Rockbridge		Virginia Iron & Railway Co. H. D. Turney, prest.; Lee Chamberlain, v.-prest.; C. J. Johnston, secy. and treas.; W. B. J. Mahoney, supt. Rockbridge, hot blast, 1 stack 55x18 feet, 55,000 tons, pig iron. Brand "Rockbridge." Selling agents, Chamberlain, Turney & Baird, Columbus, Ohio; St. Louis, Mo.; Chicago, Ill., and Philadelphia, Pa.
Iron Gate, Ry. 132.	Alleghany		Alleghany Iron Co., New York City, 29 Broadway. T. C. Jones, mgr. Alleghany, hot blast, 1 stack 13x65 feet, 25,000 tons, pig iron. Brand "Alleghany." Selling agent, Meriwether Jones, Richmond, Va.
Low Moor, Ry. 132.	Alleghany		Low Moor Iron Co. of Virginia. E. C. Means, prest.; Frank Lepman, vice-prest.; N. M. Bell, secy.; E. A. Low, treas.; N. G. Merry, mgr. Cap. stk. \$600,000.
Lynchburg, Ry. 132, 523, 622.	Campbell		E. Bird Grubb, Edward P. Lee, mgr. Lynchburg, hot blast, 1 stack 12x60 feet, 18,000 tons, pig iron. Brand "Lynchburg." Selling agents, Edmund D. Smith & Co., Philadelphia, Pa.
Newport, Ry. 523.	Giles		J. Willcox Brown, owner, E. P. Williams, supt. Cap. \$93,000. Sinking Creek, charcoal blast, 1 stack 35x9 feet, 2,500 tons, pig. Brand "Sinking Creek."
Roanoke, Ry. 523.	Roanoke		Roanoke Iron Co. Joseph H. Sands, prest.; James F. Porter, secy. and treas.; Henry King, mgr. Pd.-up cap. \$140,000. Roanoke, charcoal blast, 1 stack 80x16 feet, 30,000 tons, pig. Brand "Roanoke." Selling agents, Crocker Bros., New York City, 32 Cliff st.

## WASHINGTON

Trondale, Ry. 532.	Jefferson		Puget Sound Iron Co., San Francisco, Cal., 722 Montgomery st. Geo. W. Prescott, prest.; John T. Merrill, v.-prest.; Abraham H. Levy, secy. and treas.; Pd.-up cap. \$500,000. Trondale, charcoal blast, 1 stack 50x16 feet, 12,000 tons, pig. Brand "Texada."
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## WEST VIRGINIA

Benwood, Ry. 42, 531.	Marshall		Riverside Iron Works, Wheeling, W. Va., 1394 Main st. J. N. Vanover, prest.; John D. Culbertson, secy. and treas.; F. J. Hearne, mgr.; Wm. Crookard, supt. Cap. stk. \$1,500,000. Riverside, hot blast, 1 stack 75x16 feet, 70,000 tons, pig iron. Brand "Riverside."
Trondale, P. O. and Ry. Independence 42.	Preston		F. Nemegey. Cap. \$280,000. Trondale, hot blast, 1 stack 68x14 feet, 20,000 tons, pig iron.
Wheeling, Ry. 42, 175, 533, 534, 584, 808.	Ohio		Wheeling Steel & Iron Co. Cap. stk. \$1,800,000. Belmont, hot blast, 1 stack 16x70 feet, 50,000 tons, Bessemer pig iron. Brand "Belmont."

## WISCONSIN

Ashland, Ry. 143, 449, 523, 827.	Ashland		Ashland Iron & Steel Co., Minneapolis, Minn., Chamber of Commerce Bldg. A. H. Hinkle, prest.; Frank B. Foote, v.-prest.; W. H. Hinkle, secy. and treas.; Noah W. Gray, mgr.; L. E. Dunham, asst. mgr.; Pd.-up cap. \$250,000. Hinkle, charcoal blast, 1 stack 68x12 feet, 40,000 tons, pig. Brand "Hinkle." Selling agents, Rogers, Brown & Co., Cincinnati, Ohio; Rogers, Brown & Merwin, Chicago, Ill.
De Pere, Ry. 130, 451.	Brown		National Furnace Co. Henry D. Smith, prest.; H. S. Pickands, v.-prest.; Eugene Smith, secy. and mgr.; Pd.-up cap. \$500,000. Mayville, hot blast, 1 stack 67x14 feet, 40,000 tons, pig. Brand "National." Selling agents, Pickands, Brown & Co., Chicago, Ill.; Rookery Bldg., Chicago, Ill.
Fond du Lac, Ry. 141, 150, 827.	Fond du Lac		Wisconsin Furnace Co., Chicago, Ill., 70 Dearborn st. E. A. Hyde, prest.; J. F. Forsyth, secy. and treas.; W. H. Nelson, mgr. and supt. Pd.-up cap. \$85,000. Fond du Lac, charcoal blast, 1 stack 50x13 feet, 15,000 tons, malleable and ear wheel pig. Brand "Wisconsin." Selling agents, Forsyth, Hyde & Co., Chicago, Ill., 68 and 70 Dearborn st.
Ironton, Ry. 150.	Sauk		Iron Mountain Ore & Furnace Co. G. W. Andrews, prest.; H. C. Gridley, secy.; J. C. O. Gorman, treas.; G. W. Andrews, mgr. Sauk, charcoal blast, 1 stack 30x8 $\frac{1}{2}$ feet, 2,000 tons, pig. Brand "Sauk."
Mayville, Ry. 141.	Dodge		Northwestern Iron Co., Milwaukee, Wis., 67 New Insurance Bldg. Irving M. Bean, prest. and mgr.; J. C. Spencer, v.-prest.; W. K. Packman, secy.; C. H. F. Tisley, treas.; Chas. A. Grimes, supt. Cap. stk. \$500,000. Mayville, hot blast, 1 stack 67x14 feet, 40,000 tons, pig iron. Brand "Saliney." Selling agents, Chas. W. Goodrich & Co., The Rookery Bldg., Chicago, Ill.
Milwaukee, Ry. 141, 150, 449, 451, 380.	Milwaukee		Illinois Steel Co., Chicago, Ill., Rookery Bldg., Adams and La Salle sts. J. C. Morse, prest.; W. R. Stirring and H. S. Smith, v.-prest.; H. A. Gray, secy.; J. C. Stirling, treas. Milwaukee, 2 stacks, hot blast, 100,000 tons, Bessemer pig, foundry and mill pig and spiegel. Selling agents, Pickands, Brown & Co., tenth floor Rookery Bldg., Chicago, Ill.

## NOVA SCOTIA

LOCATION, RAILWAYS, WATER ROUTES AND SHIPPING POINT.			NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE WHEN DIFFERENT FROM LOCATION OF WORKS, NAMES OF OFFICERS, PAID-UP CAPITAL STOCK, KIND OF FURNACE, NUMBER AND SIZE OF STACKS, ANNUAL CAPACITY IN TONS OF 2,000 POUNDS, NATURE OF OUTPUT, BRANDS, AND SELLING AGENTS.
TOWN	AND	COUNTY	
Bridgeville Ry. 325.	Pictou	Pictou	Pictou Charcoal Iron Co., Ltd., New Glasgow, Nova Scotia. W. B. Moore, pres.; D. R. Grant, secy. and trans.; E. A. Sjostedt, mgr. Pd.-up cap. \$50,000. Pictou, charcoal blast, 1 stack 59x11 ft. 7,000 tons, ear wheel and malleable pig.

## MEXICO

Durango (Local).	Durango	Durango	Durango Steel & Iron Co., Des Moines, Iowa. James Callahan, pres.; Geo. Crane, v. pres.; Geo. W. Baker, secy.; A. Holland, treas. and registrar; Hon. L. Lopez Negrete, atty.; J. S. McCaughon, gen. mgr. Pd.-up, cap. \$3,000,000. Durango, charcoal blast, 1 stack and 3 puddling furnaces, 2,000 tons, pig and bar. Selling agents, Schalknecht & Co., Durango, Mex.
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# SMELTERS.

## REDUCTION AND SAMPLING WORKS

### ARIZONA

LOCATION, RAILWAYS, WATER ROUTES AND SHIPPING POINT.			NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE WHEN DIFFERENT FROM LOCATION OF WORKS, NAMES OF OFFICERS, PAID-UP CAPITAL STOCK, KIND OF FURNACE, NUMBER AND SIZE OF STACKS, ANNUAL CAPACITY IN TONS OF 2,000 POUNDS, BRANDS, AND NATURE OF OUTPUT.
TOWNS	AND	COUNTY.	
Prescott Ry. 604.	Navajo	Arizona Ore Co., Foster S. Dennis, pres., J. M. W. Moore, v.-pres.; M. C. Foote, secy.; W. B. Jones, treas.; H. D. Derwin, supt. Pd.-up cap. \$2,500. Samplers and buyers of gold, silver, lead and copper ores.	
Tucson Ry. 602.	Pima	Tucson Sampling Works. Chas. R. Wores, propr. and mgr. Sampler of gold, silver, lead and copper ores.	

### CALIFORNIA

Drytown Ry. 602.	Amador	Phoenix Reduction Works. Aarheis & Barney, own'rs. Reverberatory furnace, 1 stack 3x30 inches, 1,000 tons, bullion, silver and gold.
Grass Valley Ry. 499.	Nevada	T. Pettitjen, P. O. Box 361. Plathner, two-story furnace, 1 stack, gold, silver, lead and copper ores.
Needles Ry. 26.	San Bernardino	Needles Reduction Co., Denver, Colo., 521 McPho Block, cor. Seventeenth and Glenarm sts. Isaac E. Blake, pres.; Warren G. Purdy, v.-pres.; Geo. C. Mundy, secy.; Walter F. Crosby, treas.; F. L. Morgan, mgr. and supt. Cap. stk. \$1,000,000. Under construction.
Nevada City Ry. 499.	Nevada	Pioneer Reduction Works Co. Benj. Hall, Wm. Black, J. Northey and J. G. Northey, owners. Benj. Hall, supt. Cap. \$10,000. Reverberatory furnace, 2 stacks, 2,500 tons, gold, silver and copper bullion.
"	"	Pioneer Sampling Works. Benj. Hall, Wm. Black, J. Northey and J. G. Northey, owners. Benj. Hall, supt. Cap. \$10,000. Samplers of gold, silver and copper ores.
Sutters Creek Ry. 602.	Amador	Amador Reduction Works. E. C. Voorheis, supt. Reverberatory and chlorination process, 1 stack 36x60 inches hearth area, 1,500 tons, bullion gold and silver.
Vallejo (in P. O. Solby) Ry. 602.	Contra Costa	Solly Smelting & Lead Co., San Francisco, Cal., 116 Montgomery st. A. J. Ralston, pres.; H. B. Underhill Jr., secy.; Bank of California, treas. Alfred Ropp, supt. Pd.-up cap. \$690,000. 8-iby, refined gold and silver, lead, bluestone. Selling agent, B. Haxton, New York City, 170 Center st. (See adv., page 10.)

### COLORADO

Aspen Ry. 26, 215.	Pitkin	Holden Smelting & Milling Co., Edw. R. Holden, pres.; Richard Cline, v.-pres. and treas.; J. L. Jerome, secy.; Willard S. Morse, genl. mgr. Cap. stk. \$30,000. Lixivation process, 30,000 tons, silver bullion.
"	"	Taylor & Branton Sampling Works Co., I to av. F. M. Taylor, pres. and mgr.; D. W. Branton, v.-pres.; L. H. Kemble, secy. Cap. stk. \$25,000. Samplers of gold, silver, lead and copper ores.
Boulder Ry. 776.	Boulder	W. J. Chamberlain & Co, samplers and buyers of precious ores. (See Denver, Colo.)
Denver Ry. 26, 112, 215, 600, 776.	Arapahoe	W. J. Chamberlain & Co., 1315 Sixteenth st. Samplers and buyers of precious ores. (See also Boulder, Georgetown and Idaho Springs, Colo., Austin and Carlin, Nev.) (See adv., page 10.)
"	"	Denver Public Sampling Works Co., Brown Palace Hotel. M. E. Smith, pres.; J. Moenig, secy.; P. S. Baily, supt. Cap. stk. \$50,000. Samplers of gold, silver, copper and lead ores, 150,000 tons.
"	"	Llewellyn Smelting & Refining Co., 509 and 510 Mining Exchange. H. S. Harle, pres.; H. A. Lewis, secy.; Howard Evans, treas.; J. O. Hoeg, mgr.; E. F. Planner, supt. Cap. stk. \$1,000,000. Newly incorporated.
"	"	Omaha & Grant Smelting Co., Gny 1, Barton, pres.; J. B. Grant, v.-pres.; E. W. Nash, secy. and treas.; Edward Eddy, mgr.; W. H. James, supt. Pd.-up cap. \$2,500,000. Blast and reverberatory furnaces, 10 stacks 35x100 inches, 150,000 tons. Lead, bullion, copper matte. Brand "Grant Smelting Co."
"	"	Union Ore Sampling Co., 1310 Eighteenth st. Herman C. Joy, pres. and mgr.; Chas. Butler, v.-pres. and treas.; Chas. H. Toll, secy.; Felix Walter, supt. Cap. stk. \$50,000. Samplers of gold, silver, copper and lead ores, 150,000 tons.
Durango Ry. 215.	La Plata	The San Juan Smelting & Mining Co., New York City, 10 Wall st. Henry Amy, pres.; J. A. Davidson, secy. and treas.; E. J. H. Amy, mgr. Lead blast furnaces, 6 stacks 36x92 inches, 55,000 tons, base bullion, gold, silver, lead and copper.
Georgetown, Ry. 776.	Clear Creek	W. J. Chamberlain & Co., ore buyers and samplers. (See Denver, Colo.)
Idaho Springs, Ry. 776.	Clear Creek	W. J. Chamberlain & Co., ore buyers and samplers. (See Denver, Colo.)
Leadville Ry. 26, 215, 776.	Lake	American Smelting Works, J. B. Arnold, pres.; Wm. H. Van Arsdale, v.-pres.; H. J. Higgins, 2d v.-pres.; John A. Knapp, secy.; H. H. De Loss, treas.; E. F. Eulich, mgr. Cap. stk. \$2,000,000. Shaft furnaces, 100,000 tons, gold, silver, pig lead and copper matte. Brands "Aurora Refined," "Aurora" and "Chicago." (See Aurora and Chicago, Ill.)
"	"	Consolidated Kansas City Smelting & Refining Co., Kansas City, Mo., 231 Exchange Bldg. Aug. B. Meyer, pres. and treas.; S. Wetherell, v.-pres.; R. D. Everett, secy.; H. Huber, genl. mgr.; R. D. Rhodes, supt. Pd.-up cap. \$2,500,000. Blast furnace and water jackets, 24 stacks, 40,000 tons, bullion and copper matte refinery, gold, silver, lead and copper. Brands "Kansas," "Refined Lead" and "Kansas City." New York office, 20 Nassau st.; Chicago office, The Rookery. (See also El Paso, Texas, and Argentine, Kan.)
"	"	The Elgin Smelting Co., A. Sherwin, pres., treas. and mgr. H. W. Lake, v.-pres.; Saml. D. Wilder, secy. and supt. Pd.-up cap. \$1,500,000. Blast furnaces, 3 stacks, 36,000 tons, lead, bullion and copper matte. Brand "Elgin Smelting Co."

## COLORADO—(CONTINUED)

LOCATION, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE WHEN DIFFERENT FROM LOCATION OF WORKS, NAMES OF OFFICERS, PAID-UP CAPITAL STOCK, KIND OF FURNACE, NUMBER AND SIZE OF STACKS, ANNUAL CAPACITY IN TONS OF 2,000 POUNDS, BRANDS AND NATURE OF OUTPUT.
TOWN AND COUNTY.	
Leadville ..... Lake (Continued.)	Harrison Reduction Works, smelters of gold, silver, lead and copper ores. (See St. Louis Smelting & Refining Co., St. Louis, Mo.)
" " " "	Public Sampling Works, H. H. Norton, mgr.; P. P. Seltzer, supt. Samplers and buyers of gold, silver, lead and copper ores.
Pueblo ..... Pueblo Ry. 26, 142, 215, 460, 776.	The Colorado Smelting Co. A. Eilers, pres. and gen. mgr.; K. W. Raymond, v.-pres.; H. C. Cooper, secy.; W. S. Gurnee, secy.; A. S. Dwight, supt. Pd-up cap. \$509,000. Shaft furnace process, with roasting furnaces, 5 stacks 42x36 inches, hearth area, 85,000 tons, base bullion and copper matte.
" " " "	Philadelphia Smelting & Refining Co. M. Guggenheim jr., pres.; Wm. Guggenheim, v.-pres.; S. Guggenheim, treas.; Benj. Guggenheim, mgr.; A. Rabl, supt. Pd-up cap. \$1,250,000. Blast furnace, lead smelter, 8 stacks, 42x120 inches, 150,000 tons, base bullion. (See also Monterey, Mex.)
" " " "	The Pueblo Smelting & Refining Co. M. D. Thatcher, pres.; W. F. Havemeyer, v.-pres.; S. R. Ritchie, secy. and treas.; E. W. Allen, gen. mgr.; E. P. Matherson, supt. Pd-up cap. \$1,078,500. Blast furnaces, 12 stacks, 250,000 tons, base bullion, silver, gold, lead and copper.
Wallace ..... Shoshone Ry. 529, 776.	Northwestern Sampling & Milling Co., Spokane, Wash., Rooms 30 and 40 Zeigler Bldg. Jos. E. Boss, pres.; Geo. D. Potter, v.-pres.; Ernest C. Arnold, secy. and treas.; Geo. D. Potter, mgr. Cap. stk. \$100,000. Pioneer Sampling Works, samplers of gold, silver, lead and copper ores.

## IDAHO

Wallace ..... Shoshone Ry. 529, 776.	Northwestern Sampling & Milling Co., Spokane, Wash., Rooms 30 and 40 Zeigler Bldg. Jos. E. Boss, pres.; Geo. D. Potter, v.-pres.; Ernest C. Arnold, secy. and treas.; Geo. D. Potter, mgr. Cap. stk. \$100,000. Pioneer Sampling Works, samplers of gold, silver, lead and copper ores.
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## ILLINOIS

Aurora ..... Kane Ry. 135, 148, 150, 245.	Chicago & Aurora Smelting & Refining Co., Chicago, Ill., The Temple, 184 La Salle st. J. B. Arnold, pres.; Wm. H. Van Arsdale, v.-pres.; H. I. Higgins, 2d v.-pres.; John A. Knapp, secy.; H. H. De Loss, treas.; E. F. Ulrich, mgr. Cap. stk. \$2,000,000. Shaft, furnaces, 50,000 tons, gold, silver, pig lead and copper matte. Brands of lead "Aurora Refined," "Aurora" and "Chicago." (See adv., page 11.)
Chicago ..... Cook Ry. 142, 146, 383, 26, 135, 145.	Chicago & Aurora Smelting & Refining Co., The Temple, 184 La Salle st. J. B. Arnold, pres.; Wm. H. Van Arsdale, v.-pres.; H. I. Higgins, 2d v.-pres.; John A. Knapp, secy.; H. H. De Loss, treas.; E. F. Ulrich, mgr. Cap. stk. \$2,000,000. Shaft, furnaces, 25,000 tons, gold, silver, pig lead and copper matte. Brands of lead "Aurora Refined," "Aurora," "Chicago." (See adv., page 11.)
" " " "	Chicago Copper Refining Co., 621 Phenix Bldg. Smelters and refiners of copper matte. (See adv., page 11.)
" " " "	National Smelting & Refining Co., 520 and 521 Phenix Bldg. Barton Sewell, pres. and treas.; Marshall F. Holmes, v.-pres. and secy.; F. B. F. Rhodes, supt. Smelters and refiners of ore and base bullion. (See adv., page 546.)
" " " "	Walburn-Swenson Co., 1520 Monandnock Block. A. W. Walburn, pres.; M. Swenson, secy. Experimental concentration works and assay laboratory. (See adv., page 537.)
La Salle ..... La Salle Ry. 135, 142, 319.	Mathiessen & Hegeler Zinc Co. E. C. Hegeler, pres.; F. W. Mathiessen, secy. Pd-up cap. \$426,000. Zinc furnace, 13,000 tons, spelter. Brand "M. & H. Zinc Co."

## KANSAS

Baker ..... Crawford, (P. O. Pittsburg) Ry. 26, 348, 460, 730.	W. & J. Lanyon, Pittsburg, Kan. Six furnaces, 3,000 tons, zinc spelter. Brand "W. & J. Lanyon."
Galena ..... Cherokee Ry. 348, 720.	American Smelter Co., St. Louis, Mo., 322 Pine st. L. B. Stephenson, pres.; E. W. Humphrey, v.-pres. and mgr.; F. F. Espenscheid, secy. and treas.; Richard Baker, supt. Pd-up cap. \$300,000. Zinc smelter, 6 blocks, 1,344 rotorts, 6,000 tons, zinc spelter. Brand "American Eagle." Selling agents, John Wahl Commission Co., St. Louis, Mo.

## MISSOURI

Old Mines ..... Washington Ry. 460.	Union Mining & Smelting Co., St. Louis, Mo. C. B. Burnham, pres.; C. A. Davis, secy.; G. W. Chaddock, treas.; Alex. Harrison, supt. Pd-up cap. \$80,000. Blast furnaces, 2 stacks 12x15 feet, 20,000 tons, pig lead. Brand "Old Mines Lead Co."
St. Louis ..... St. Louis Ry. 720, 460, 348, 145.	St. Louis Sampling & Testing Works, 1225 and 1227 Spruce st. Complete plant for sampling and testing ores. (See adv., page 546.)
" " " "	St. Louis Smelting and Refining Co., Howard Station. Cap. stk. \$2,000,000. Smelters and producers of gold, silver, lead and electrolytic copper. Branches, Harrison Reduction Works, Leadville, Colo., and Rio Grande Smelting Works, Socorro, N. M. (See adv., page 10.)

## MONTANA

Castle ..... Mengher Ry. Townsend 529.	Cumberland Mining & Smelting Co. Chas. E. Severance, pres.; Arthur Young, vice-pres.; R. H. Minty, secy.; J. L. Fraser, treas.; A. J. Humeke, mgr. Cap. stk. \$5,000,000. Water jackets, 1 stack 48x36 inches, 1 stack 30x80 inches, 4,800 tons, lead and silver bullion. Brand "C. M. & S. Co."
East Helena, Lewis & Clarke Ry. 295, 529.	United Smelting & Refining Co. A. S. Hewitt, pres.; Wm. N. Cromwell, v.-pres.; H. C. Cooper, secy.; W. S. Gurnee, treas.; A. Eilers, gen. mgr.; H. Suhr, mgr.; A. L. Dean, supt. Cap. stk. \$1,330,000. Samplers of gold, silver, lead and copper ores.
" " " "	United Smelting & Refining Co. A. S. Hewitt, pres.; Wm. N. Cromwell, v.-pres.; H. C. Cooper, secy.; W. S. Gurnee, treas.; A. Eilers, gen. mgr.; H. Suhr, mgr.; A. L. Dean, supt. Cap. stk. \$1,530,000. East Helena, 4 stacks 36x36 inches, 73,000 tons, base bullion and copper matte. Brand "United Sm. & Ref. Co." Selling agents, National Smelting & Refining Co., Chicago, Ill.

## MONTANA (CONTINUED)

LOCATION, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL. LOCATION OF PRINCIPAL OFFICE WHEN DIFFERENT FROM LOCATION OF WORKS. NAMES OF OFFICERS, PAID-UP CAPITAL STOCK, KIND OF FURNACE, NUMBER AND SIZE OF STACKS. ANNUAL CAPACITY IN TONS OF 2,000 POUNDS, BRANDS, AND NATURE OF OUTPUT.
TOWN AND COUNTY.	
Glendale . . . . .Heavenerhead Ry. 529.	Hecla Consolidated Mining Co., Indianapolis, Ind., John Thomas, pres.; W. H. Talbott, v.-pres.; John McCutcheon, secy.; John C. Wright, treas.; B. Knippenberg, gen. mgr. Pd.-up cap. \$1,500,000. Water jackets, 3 stacks, base bullion, gold, silver and lead. Samuel A. Barber, supt.
Great Falls . . . . .Cascade Ry. 292, 293.	United Smelting & Refining Co., A. S. Hewitt, pres.; Wm. N. Cromwell, v.-pres.; H. C. Cooper, secy.; W. S. Gurnee, treas.; A. Eilers, gen. mgr.; H. Suhr, mgr.; A. L. Dean, supt. Cap. stk. \$1,530,000. Samplers of gold, silver, lead and copper ores.
" . . . . ."	United Smelting & Refining Co., A. S. Hewitt, pres.; Wm. N. Cromwell, v.-pres.; H. C. Cooper, secy.; W. S. Gurnee, treas.; A. Eilers, gen. mgr.; H. Suhr, mgr.; A. L. Dean, supt. Cap. stk. \$1,530,000. Great Falls, 4 stacks 42x36 inches, 73,000 tons, base bullion and copper matte. Brand "United Sm. & Ref. Co." Smelting agents, National Smelting & Refining Co., Chicago, Ill.
Helena . . . . .Lewis and Clarke Ry. 293, 329.	U. S. Public Sampling Co., Power Bldg. S. Braden, pres. and mgr.; E. D. Edgerton, secy. and treas.; E. B. Braden, supt. Pd.-up cap. \$25,000. Samplers and buyers of gold, silver, lead and copper ores, 60,000 tons.

## NEVADA

Austin Ry. 489.	Lander W. J. Chamberlain & Co., ore buyers and samplers. (See Denver, Colo.)
Carlin . . . . .	Elko W. J. Chamberlain & Co., ore buyers and samplers. (See Denver, Colo.)
Springhead Ry. 692.	Elko Juniper Consolidated Mining & Smelting Co., J. F. Lemmick, pres. and mgr.; W. M. Beal, v.-pres.; W. N. Beal, secy. and treas. Pd.-up cap. \$50,000. Water jacket, smelting furnace, 2 stacks, 22,000 tons, base bullion.

## NEW MEXICO

Deming Ry. 26, 692.	Grant Deming Ore Co., Theo. F. Van Wageningen, pres. and mgr.; J. C. Lewis, v.-pres.; W. B. Lewis, secy. and treas.; J. A. Martin, supt. Cap. stk. \$52,000. Samplers of gold, silver, lead, copper and zinc ores, 30,000 tons.
Hillsboro Ry. 26.	Sierra Standard Gold Mining & Milling Co., Minneapolis, Minn., 26 Century Block, Jas. C. Stout, pres.; H. D. Stocker, v. pres.; Geo. L. Matellan, secy.; M. F. Schofield, treas.; Nicholas Gallo, mgr.; Wm. Kemp, supt. Pd.-up cap. \$2,000,000. Matte furnace, smelter, 15,000 tons, copper matte, gold, silver and copper. Brand "Standard." (See also Pueblo Smelting & Refining Co., Pueblo, Colo.)
Socorro. Ry. 26.	Socorro Rio Grande Smelting Works, smelters of precious ores. (See St. Louis Smelting & Refining Co.)

## NEW YORK

Lockport Ry. 501, 513.	Niagara Cowles Electric Smelting & Aluminum Co., F. W. Matthiessen, pres.; A. H. Cowles, v. pres.; H. W. Power, secy.; A. T. Osborn, treas.; F. J. Davis, supt. Products, silicon and aluminum. Brand "Cowles" aluminum.
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## SOUTH DAKOTA

Deadwood. Ry. 88, 208, 274.	Lawrence Deadwood & Delaware Smelting Co., Wilmington, Del., W. H. Swift, pres.; W. G. Pennybaker, secy.; Joseph Swift, treas.; Franklin R. Carpenter, mgr. Pd.-up cap. \$30,000. Blast furnace, 3 stacks, matte and lead bullion, gold, silver, lead and copper.
Rapid City Ry. 274.	Pennington Black Hills Milling & Smelting Co., Robt. H. Thorburn, pres. and mgr.; Wm. Dunn, v.-pres. and treas.; A. W. Bell, secy.; Donald Jennes, supt. Cap. stk. \$30,000. Chlorination process, 35,000 tons, gold ores.

## OREGON

Timton Ry. 529.	Multnomah Portland Smelting & Refining Works, Portland, Ore., corner First and Oak sts., John McCracken, pres.; Chas. Hegele, v.-pres.; W. A. Buchanan, secy.; Bank of British Columbia, treas.; S. Chase, supt. Pd.-up cap. \$300,000. Lead smelter, water jacket, 2 stacks 40x50 inches, base bullion, gold, silver and lead.
Portland Ry. 529, 547, 692, 776.	Multnomah Washington Reduction Co., Box 14, D. P. Thompson, pres.; Fred V. Hulman, v.-pres.; Jonathan Bourne, secy.; H. C. Stratton, treas.; Luther Waggoner, mgr. Pd. up cap. \$100,000. Silver concentrates for smelting.

## PENNSYLVANIA

LOCATION, RAILWAYS, WATER ROUTES AND SHIPPING POINT.	NAME OF COMPANY OR INDIVIDUAL, LOCATION OF PRINCIPAL OFFICE WHEN DIFFERENT FROM LOCATION OF WORKS, NAMES OF OFFICERS, PAID-UP CAPITAL STOCK, KIND OF FURNACE, NUMBER AND SIZE OF STACKS, ANNUAL CAPACITY IN TONS OF 2,000 POUNDS, BRANDS, AND NATURE OF OUTPUT.
Chesler ..... Delaware Ry. 42, 577.	Crown Smelting Co., Geo. N. Grumbrock, pres't, mgr. and supt.; Frank Burts, v.-pres't.; Henry T. Davis, secy. and treas. Cap. stk. \$100,000. Pd-up cap. \$75,000. Reverberating and crucible furnaces, 2 stacks 29x30 inches x 45 feet, 1,200 tons, Crown and Phosphor bronze and brass. Brand "Crown."
Mansfield ..... Allegheny Ry. 583, 584.	Pennsylvania Lead Co., Pittsburg, Pa., 600 Wood st. J. E. Schwartz, pres't.; B. W. Doyle, v.-pres't.; J. L. Schwartz, secy.; H. E. Anderson, treas.; Geo. Fanner, supt. Cap. stk. \$1,000,000. Blast and reverberatory furnaces, 4 stacks 38x100 inches, 30,000 tons, pig lead, copper and fine gold and silver. Brands "Penn'a Ref'd" and "Penn'a Lead Co."
New Kensington Westmoreland Ry. Fairfield H.	Pittsburg Reduction Co., Pittsburg, Pa., 116 Water st. Alfred E. Hunt, pres't.; Chas. M. Hall, v.-pres't.; Geo. H. Clapp, secy.; W. S. Mitchell, treas.; A. V. Davis, supt. Electrolytic smelter, 6 pots, 6x4x3 feet, 75 tons, metallic aluminum.

## TEXAS

El Paso ..... El Paso Ry. 26, 494, 622, 756.	Mexican Ore Co., Sheldon Block, H. A. True, mgr. Samplers and buyers of gold, silver, lead and copper ores, bullion and furnace products.
Laredo ..... Webb Ry. 326, 436, 629.	Mexican Ore Co. H. A. True, mgr. Samplers and buyers of gold, silver, lead and copper ores, bullion and furnace products.

## UTAH

Park City ..... Summit Ry. 776.	R. Mackintosh, Salt Lake City, Utah, Box 1135. Pd-up cap. \$25,000. Park City Sampling Mill, samplers of gold, silver, lead and copper ores.
St. George ..... Washington Ry. 776.	The Dixie Mining & Smelting Co., John Pymer, pres't.; R. C. Lund, v.-pres't. and mgr.; S. A. Pymer, secy. and treas. Pd-up cap. \$125,000. Dixie, water jackets, 1 stack 36 inches, copper, 325 tons.
Sandy ..... Salt Lake Ry. 213.	R. Mackintosh, Salt Lake City, Utah, Box 1135. A. J. Cushing, mgr. and supt. Cap. \$25,000. Pioneer Sampling Mill, gold, silver, lead and copper, 182,500 tons. (See also Park City Sampling Mill.)
Salt Lake ..... Salt Lake Ry. 620, 776, 777.	The Conklin Sampling Works, F. O. Harn, pres't. and treas.; C. B. Markland, secy. and supt. Pd-up cap. \$14,000. Samplers of gold, silver, lead and copper ores.
" " " " " "	Mingo Smelting Co., J. E. Schwartz, pres't.; Wm. Reid, secy.; F. H. Officer, treas.; Fritz Wolf, supt. Cap. stk. \$200,000. Blast, 7 stacks 36x120 inches, 110,000 tons, pig lead and copper and fine gold and silver.

## WASHINGTON

Everett ..... Snohomish Ry. 529, 666.	Puget Sound Reduction Co., Joseph L. Coffey, pres't. and treas.; Charles F. Rand, secy.; Alton L. Dickerman, consulting engineer; Wm. C. Butler, gen. mgr. Pd-up cap. \$900,000. Water jacket, 3 stacks, 42x120 inches, 75,000 tons. Base bullion.
Ruby ..... Okanogan Ry. Conlee City 529 (89 miles).	Washington Reduction Co., Portland, Ore., 267; Morrison St. D. P. Thompson, pres't.; Jonathan Bournejm, secy.; H. C. Stratton, treas.; Luther Wagoner, mgr. and supt. Cap. stk. \$100,000. Gold, silver, lead, water, 10 stamps and concentrator.
Tacoma ..... Pierce Ry. 529.	Tacoma Smelting & Refining Co., Geo. Browne, pres't.; Paul Schulze, v.-pres't.; Richard Briggs jr., secy.; Walter Oakes, treas.; W. R. Rust, mgr.; F. W. Clark, supt. Pd-up cap. \$1,000,000. Blast furnace, 2 stacks 33x84 inches, 40,000 tons. Lead bullion and copper matte.

## BRITISH COLUMBIA

Revel-stoke West Kootenay	Kootenay Smelting & Trading Syndicate, Ltd., London, Eng., 31 Lombard st. L. R. C. Boyle, pres't.; William Bailey, secy.; F. Roeser, mgr. Cap. stk. \$300,000. Shaft furnace, water jacket, 1 stack 36x72 inches, 15,000 tons, lead, silver, bullion, copper matte. Kootenay.
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## MEXICO

Jamenez ..... Chihuahua Ry. 434.	St. Louis & Zacatecas Ore Co., St. Louis Mo., P. O. Box 605. Geo. J. Wanless, agent. Samplers of gold, silver, lead and copper ores. (See St. Louis Smelting & Refining Co., St. Louis.)
Monterrey ..... Nuevo Leon Ry. 436, 470.	Compania Minera Fundidora Almadora, Patriello Milmo, pres't.; Francisco Arneudatz, v.-pres't.; Adolfo Zambrano, secy.; Reinoldo Berardi, treas.; Newton R. Wilson, mgr.; Elwood J. Wilson, supt. Pd-up cap. \$1,000,000. Cap. M. F. y A. "Monterrey" silver and lead, 6 stacks, 150,000 tons, bullion. Brand "C. M. F. y A. M." Selling agents, Eugene Kelly & Co., New York City.
" " " " " "	The Great National Mexican Smelting Co., City of Mexico, Calle San Juan de Letran No. 13. Apartado Postal No. 792. Sol. Guggenheim, pres't.; Simon Guggenheim, v.-pres't.; W. Guggenheim, secy. and treas.; A. H. Danforth, general manager; T. S. Austin, supt. Geo. D. Barron, general agent. City of Mexico. Cap. stk. \$1,000,000. La Gran Fundicion Nacional Mexicana, blast and roasting furnaces, 6 roasters 36x36 inches, 4 roasters 40x120 inches, 200,000 tons, base bullion, silver, gold, copper and lead. Brand "G. N. M. S. Co." Selling agents, M. Guggenheim's Sons, 45 to 49 Cedar st., N. Y.
S. Luis Potosi S. Luis Potosi Ry. 434, 436.	Compania Metalurgica Mexicana, New York City, 44 Pine st. X. Witherell, pres't.; R. S. Towne, v.-pres't.; A. Foster Higgins, treas.; D. C. Brown, mgr.; F. Cozen, supt. Water jacket furnace, 10 stacks 40x120 inches, 185,000 tons, lead bullion.

# MINING, MECHANICAL <sup>AND</sup> ELECTRICAL ENGINEERS, ASSAYERS, GEOLOGISTS, METALLURGISTS, MINE INSPECTORS <sup>AND</sup> MINERAL LAND SURVEYORS

## ALABAMA

TOWN AND COUNTY	NAME
Aldrich Shelby	W. F. Aldrich, mining engineer
Anniston Calhoun	William Makenson, analytical chemist and assayer.
" "	G. S. Patterson, cor. Noble and Eleyenth sts., mining and civil engineer.
Birmingham Jefferson	Alfred F. Brainerd, 57 <sup>1</sup> / <sub>2</sub> N. Twentieth st., mining engineer and chemist.
" "	N. B. Smith, chemist.
" "	Edward A. Uehling, 110 N. Twenty-fourth st., M. E. and furnace mkr.
Blossburg Jefferson	E. M. Tutwiler, mining engineer.
Coalburg Jefferson	Priestley Tomlin, mining engineer, S. L. & S. Co.
Ironaton Talladega	Thos. Goko King, mining engineer and superintendent.
Piedmont Calhoun	A. M. Loyd, M. S., chemist, Southern Ravine Mining Co.
Pratt Mines Jefferson	Chas. E. Bowron, mining engineer.
" "	Andrew J. Reilly, C. E. and M. E.
University Tuscaloosa	C. Willard Hayes, assistant geologist U. S. Geological Survey.
" "	Henry McAlley, assistant state geologist and chemist.
" "	Wm. B. Phillips, Ph. D., professor of chemistry and metallurgy.
" "	Eugene A. Smith, state geologist.

## ALASKA

Juneau	<b>WINTHROP W. FISK</b> , B. S., mining engineer and geologist. Eastern of the 257 Washington st., Boston, Mass. Gold properties a specialty; mines examined and reported on; advice given on proper development of mines and machinery needed.
Sitka	Oryelle T. Potter, U. S., marshal and ex-officio surveyor-general.

## ARIZONA

Campbell Via Kingman Yavapai	John H. Campbell, mining engineer and chemist.
Copper Basin Yavapai	F. D. Chase, mining engineer.
Florence Pinal	<b>ALBERT T. COLTON</b> , M. E., U. S. deputy mineral surveyor; civil engineer and topographer; chief engineer of Florence Canal Co.
Globe Gila	Arthur L. Walker, mining engineer.
Harrisburg Yuma	<b>JOHN MCCASEY</b> , metallurgist, mining and mechanical engineer; mines examined and reported on.
Mammoth Pinal	<b>GEORGE H. BARNHART</b> , mining engineer and metallurgist, mines examined and reported on; specialty, mine management.
Oro Blanco Pinal	<b>C. W. KEMPTON</b> , mining engineer.

## TOWN AND COUNTY

## NAME

Prescott Yavapai	<b>F. B. JACOBS</b> , C. E., U. S. mineral surveyor; mines examined and reported on; desirable mining property for sale.
Tombstone Cochise	Wm. F. Staunton, mining engineer.
Tucson Pima	<b>THEO. B. COMSTOCK</b> , mining and metallurgical engineer, reports furnished, acts as consulting engineer; specialty, electric applications.
" "	R. A. Johnson, U. S. surveyor-general.

## ARKANSAS

Batesville Independence	<b>W. S. ABBOT</b> , mining engineer.
Coal Hill Johnson	<b>E. A. KLINE</b> , mining engineer, supt. Omita Coal Co.
Jenny Lind Sebastian	E. P. Sealey, mining and consulting engineer.
Little Rock Pulaski	John C. Branner, state geologist.
" "	Frank W. Gibb, 314 <sup>1</sup> / <sub>2</sub> Markham st., mining engineer, assayer and chemist.

## CALIFORNIA

Alameda Alameda	Alfred Arents, 541 Railroad av., mining engineer and metallurgist.
" "	J. W. Huggsbottom, mining engineer.
Auburn Placer	<b>R. L. DUNN</b> , civil and mining engineer, field assistant geological survey of California, state mining bureau.
Berkeley Alameda	Samuel B. Crisly, Piedmont av., professor mining and metallurgy, California University.
Churne Camp Tuolumne	<b>C. A. J. WATERMAN</b> , mining engineer.
French Gulch Shasta	Wm. T. St. Auburn, mining engineer.
Garvanza Los Angeles	Wilbur F. McClure, C. E., U. S. deputy mineral surveyor.
Grass Valley Nevada	Thos. L. Lockhart, analytical chemist and assayer.
" "	E. A. Willsee, mining engineer.
Knoxville Napa	A. McMillan, mining engineer.
Los Angeles Los Angeles	<b>FRANK ALDERMAN CARBUTT</b> , 244 Ohio st., mining engineer and mining contractor. Specialty, gold quartz; mines examined, ores tested, processes recommended, contracts undertaken, estimates furnished.
" "	John Goldsworthy, M. E., Room 73 Temple Block, assayer, U. S. deputy mineral surveyor.
" "	John E. Plater, M. E., Temple Block.
" "	Alfred R. Street, M. E., 120 S. Spring st., U. S. mineral surveyor.

TOWN AND COUNTY	NAME	TOWN AND COUNTY	NAME
Lower Lake, Lake	L. Evans, U. S. deputy mineral surveyor.	S. Francisco, S. Francisco (Continued.)	<b>HORACE B. CALE</b> , 40 California st., consulting, mechanical and electrical engineer; formerly professor of mechanical engineering at the Stanford University. Specialties, steam engineering, electric lighting and power transmission.
Nevada City, Nevada	W. F. Englebright, mining engineer.	" " "	L. Gibson, 211 Sansome st., mining engineer and mine manager.
" " "	<b>CARL HESSE</b> , assay office of J. J. Ott, mining engineer; mgr. Odin Gold & Silver Mining Co., Cal.; late supt. of the Royal Saxon Smelting Works, Friedberg, Germany; Pericles Lead Smelting Co., Greece; Ca'rhina Nickel Co., Ltd., and Collars del Lobo Mines, Spain; Old Telegraph Smelting Works, Utah; Gregory Consolidated Mining Co. and Clark's Copper Smelter, Montana; La Trinidad, Id., Mexico. Examination and management of mines and reduction-works a specialty.	" " "	<b>JOHN H. HAMMOND</b> , 124 Sansome st., civil and mining engineer.
" " "	W. W. Wagoner, U. S. deputy mineral surveyor.	" " "	Eugene Hoefler, 1712 Stockton st., mining engineer and metallurgist.
" " "	James J. Ott, 30 Main st., assayer.	" " "	<b>CHAS. F. HOFFMANN</b> , 307 Sansome st., mining engineer, superintendent for the Mines d'Or du Forest Hill Divide; Mines de Golden River.
Newcastle, Placer	Wm. B. Gester, civil engineer.	" " "	<b>WM. J. IRELAN JR.</b> , Masonic Bldg., state mineralogist State Mining Bureau.
Nimshew, Butte	George C. Higgins, superintending engineer.	" " "	<b>MARK B. KERR</b> , 402 Front st., mines examined and construction of railroads.
Oakland, Alameda	<b>E. W. ROBERTS</b> , 924 Moss av., mining engineer; supt. Carson's Creek Mining Co.	" " "	<b>W. S. KEYES</b> , Pacific Union Club, mining engineer, metallurgist, consulting expert.
Ogilby, San Diego	H. W. Blaisdell, mining engineer.	" " "	<b>JOHN LEECHMAN</b> , 708 California st., gold mine management and investigations.
Oplid, Placer	Francis H. La Vallee, practical mining expert.	" " "	<b>C. A. LUCKHARDT</b> , 23 Stevenson st., mining engineer, assayer and metallurgist; mines examined and reported upon; practical tests made; establishing the proper treatment of all ores a specialty. Established 1869. Laboratory and works, 23 Stevenson st.
" " "	James Oliver, mining engineer.	" " "	D. Ernest Melliss, A. M., Ph. D., 524 Sacramento st., C. and M. E.
Oroville, Butte	Thos. W. Beece, U. S. deputy mineral surveyor.	" " "	Wm. H. Pratt, U. S. surveyor-general.
Redding, Shasta	J. M. Gleaves, Fairview Farm, mine superintendent and civil engineer.	" " "	<b>THOS. PRATT &amp; SON</b> , 524 Sacramento st., assayers, mining and metallurgical engineers.
" " "	R. G. Hart sr., mining engineer.	" " "	Chas. J. Rhoads, 610 Commercial st., consulting engineer.
" " "	Wm. M. James, mining superintendent and engineer.	" " "	C. A. Stetefeldt, care of L. Falkeman, Safe Deposit Bldg., mining engineer and metallurgist.
" " "	E. A. Zoellin, cor. North and Court, civil and mining engineer, assayer.	" " "	Robert Stevenson, 207 Larkin st., civil and mining engineer.
San Ardo, Monterey	<b>MARTIN A. LATHROP</b> , mining engineer and metallurgist.	" " "	<b>R. B. SYMINGTON</b> , 337 Seventeenth st., mining engineer and assayer; engineer Black Diamond Coal Co.
San Bernardino, San Bernardino	Burr Bassell, 529 E st., U. S. deputy mineral surveyor.	Shelby, Contra Costa	H. H. Webb, mining engineer and metallurgist.
San Diego, San Diego	Raylins Cadwallader, 732 Boston av., U. S. deputy mineral surveyor.	Sulphur Creek, Colusa	<b>GEORGE V. NORTHEY</b> , mining and mechanical engineer.
" " "	Frank Robbins, 961 Fourth st., mining engineer and metallurgist.		
" " "	Clarence D. Spriggs, 361 Fourth st., assayer.		
S. Francisco, S. Francisco	J. Murray Bailey, 18 Post st., mining engineer.		
" " "	M. P. Boss, 369 California st., mining and milling engineer.		
" " "	<b>ROSS E. BROWNE</b> , 307 Sansome st., Room 14, mining and hydraulic engineer.		
" " "	<b>CONNOR &amp; CRANT</b> , 303 California st., millwrights and engineers. (See adv., page 9.)	Amethyst, Saguache	<b>FIELD &amp; MACNUTT</b> , P. O. Box 563, engineers and assayers, U. S. deputy mineral surveyors.
" " "	A. Archie Cunningham, 14 Chroville Bldg., analytical and consulting chemist.	" " "	Ingolfsby & Arnold, 417 Main st., civil and mining engineers.
" " "	<b>W. C. DODD</b> , Union Iron Works, hydraulic engineer; specialty, water power.	Aspen, Pitkin	Chas. E. Anderson, mining engineer.
" " "	<b>L. N. DOUCHERTY</b> , 434 California st., Rooms 3 and 7, practical miner and mining engineer. Twenty-eight years' experience. Investors' confidential agency.	" " "	Alouzo F. Bardwell, M. E., 318 Cooper av., assayer and chemist.
" " "	<b>W. R. ECKART</b> , Rooms 2 and 3, 217 Sansome st., mechanical engineer.	" " "	C. Leonard Brown, 14 Keene Block, deputy mineral surveyor.
" " "		" " "	Edward F. Browne, 232 Lake av., mining engineer.
" " "		" " "	David W. Brumton, 339 W. Main st., mining engineer.

## COLORADO



TOWN AND COUNTY	NAME	TOWN AND COUNTY	NAME
Aspen, Pitkin (Continued.)	<b>FRANK BULKLEY</b> , mining engineer, gen. mgr. Bushwacker Mining Co.	Denver, Arapahoe (Continued.)	E. C. Burlingame, 1736 Lawrence st., assayer and chemist.
"	<b>FREDERICK C. BULKLEY</b> , 200 W. Main st., mining engineer, gen. mgr. The Aspen Mining & Smelting Co., gen. mgr. The Roaring Fork Mining Co.	"	<b>ARTHUR CHANUTE</b> , v.-pres., Globe Smelting & Refining Co.
"	Stuart Crowsdale, 600 W. Main st., chemist and assayer.	"	<b>C. D. CHANUTE</b> , 1114 Eighteenth st., assayer; samples sent by mail will receive prompt and careful attention.
"	Josef Kiehlhorn, 420 and 422 Durant av., assayer and chemist.	"	<b>CHASE &amp; RANK</b> , 516 Mining Exchange Bldg., mining engineers and U. S. deputy mineral surveyors; location, patent and underground surveys, etc.
"	W. J. Elmendorf, 420 and 422 Durant av., assayer and chemist.	"	<b>FRED A. COX</b> , 355 Club Bldg., mining engineer.
"	Phil. C. Galtabor, P. O. Box 344, chemist and assayer.	"	Wm. C. Davis, 1818 Grant av., mechanical engineer.
"	<b>A. W. HARE</b> , 412 E. Hopkins st., chemist and assayer.	"	<b>GEORGE K. FISHER</b> , 61 Tabor Block, consulting mechanical engineer; specialties, mining, milling and smelting construction. Denver references, Globe Smelting & Refining Co., Omaha & Grant Smelting & Refining Co., Denver Public Sampling Works, Tabor Investment Co., Colorado Iron Works.
"	<b>HAYES &amp; WILCOX</b> , Aspen Block, mining engineers, U. S. mineral surveyors.	"	H. Van F. Furman, 510 People's Bank Bldg., M. E. and metallurgist.
"	George Henry Hewitt, mining engineer.	"	<b>HARDING &amp; CO.</b> , 1732 Curtis st., P. O. Box 144, assayers; western agents for eastern and foreign copper smelters.
"	<b>GEORGE W. LLOYD</b> , Keene Block, mining engineer.	"	G. C. Hewett, 614 Boston Bldg., mining engineer.
"	Charles W. Miller, P. O. Box 401, U. S. deputy mineral surveyor.	"	E. C. Humphrey, U. S. surveyor-general.
"	<b>W. E. NEWBERRY</b> , mining engineer.	"	<b>JONES &amp; JONES</b> , 1821 Arapahoe st., assayers and chemists.
"	<b>J. M. B. PARRY</b> , 234 Hyman av., metallurgy and mining engineering.	"	<b>KELLOGG, WARNER &amp; CO.</b> , mining engineers and brokers, mines and mining stocks bought and sold, companies organized and promoted, reports furnished and radiographed. Correspondence solicited. Cable address, "Kokionga, Denver."
"	Henry Paul, M. E., mgr. Aspen mine.	"	Edmund B. Kirby, 9 Windsor Hotel Block, M. E. and metallurgist.
"	J. W. Richards, 635 S. Monarch st., assayer and analytical chemist.	"	Charles F. Lacombe, cor. Seventeenth and Glenarin, electrical and mining engineer.
Canon City, Fremont	Charles Wells, U. S. deputy mineral surveyor.	"	Benj. B. Lawrence, Duff Block, consulting mining engineer.
Colorado Springs, El Paso	<b>A. D. JONES</b> , mining engineer.	"	Chas. H. Livingstone, 3555 Marion st., metallurgist Omaha & Grant Smelting Co.
"	Richard Newell Jr., mgr. Matoa Gold Mining Co.	"	John McNeil, inspector of mines and mining engineer.
"	Giles Otis Pearce, 515 Huerfano st., mining engineer and assayer.	"	<b>ORLANDO METCALF</b> , M. E., 602 Blando Bldg., anthracite coal, roofing slate.
Creede, Saguache	Fleld & Macmit (see Amethyst).	"	<b>DAVID C. MILLER</b> , 1336 Gaylord st., mining engineer.
Cripple Creek, El Paso	<b>CRAIGUE &amp; KEITH</b> , mining engineers, U. S. deputy mineral surveyors; patent work a specialty. P. O. Box 108, Cripple Creek Mining District.	"	<b>PACE &amp; NOBLE</b> , P. O. Box 2689, mining engineers; examinations and reports on mines. Also Box 228, Leadville, and Box 228, Cripple Creek, Colo.
"	Albert D. Freeman, cor. Bennett av. and Second st., surveyor.	"	<b>ALFRED RICARD</b> , 1279 Pearl st., mining engineer; mines examined and reported on, superintendence and management of mines and reduction works, advice on mining, hoisting, pumping and concentrating plants. Correspondents in England and France.
"	Freeman, Sperry & Co., cor. Second st. and Bennett av., surveyors and civil engineers.	"	<b>THEO. E. SCHWARZ</b> , seventeenth and Arapahoe sts., Room 4 Bank Block, mining engineer; specialty, mine management, mining operations planned and directed, expert investigations; represents non-resident mine owners. Cable address, "Schwarz," Denver.
"	Irryng & Co., 306 S. Bennett av., surveying and mines.	"	
"	<b>PAGE &amp; NOBLE</b> , P. O. Box 228 (see Denver), mining engineers; examinations and reports of mines.	"	
"	Edward R. Warren, United States deputy mineral surveyor.	"	
Delta, Delta	John A. Curtis, civil and hydraulic engineer and surveyor.	"	
Denver, Arapahoe	William S. Ackerman, 1561 Emerson av., mechanical engineer.	"	
"	<b>PHILIP ARCALL</b> , 519 Boston Bldg., mining and mechanical engineer; examination of mines, designs for mining plants and ore dressing works, mine management, etc. Cable address, "Argall," Denver.	"	

TOWN AND COUNTY	NAME	TOWN AND COUNTY	NAME
Denver (Continued.)	Arapahoe <b>SHEPARD &amp; SEARINC</b> , Mining Exchange, mechanical and electrical engineers; expert work in both branches.	Leadville (Continued.)	Lake George Holland, 108 E. Fourth st., U. S. deputy mineral surveyor.
"	" Edward S. Suell, 2352 Race st., U. S. chief examiner mineral surveys.	"	" Taylor Holt, 229 W. Ninth st., assayer and chemist Elgin Smelting Co.
"	" P. H. Van Diest, 1230 Washington av., mining engineer.	"	" Charles J. Moore, 591 Harrison av., U. S. mineral surveyor.
"	" Theo. F. Van Wageningen, 50 Montana av., mining engineer.	"	" <b>SEELEY W. MUDD</b> , P. O. Box 554, mining engineer and metallurgist; mgr. Small Hopes Consolidated Mining Co., Leadville Consolidated Mining Co. and Boreed Mining Co.
"	" <b>HENRY A. VEZIN</b> , 51 Tabor Block, mining and mechanical engineer; examination of mines; designs for mining plants, and for smelting and dressing works.	"	" Louis S. Noble, P. O. Box 228, mining engineer.
"	" Vonschudz & Low, 1633 Larimer st., assayers.	"	" <b>PACE &amp; NOBLE</b> , P. O. Box 228 (see Denver), mining engineers; examinations and reports of mines.
"	" <b>WATERS BROS.</b> , Sheridan Bldg., mining and mechanical engineers. (See adv., page 9.)	"	" W. F. Patriek, 114 E. Eighth st., mining engineer.
"	" <b>F. H. WHITING</b> , 33 Jacobson Bldg., mechanical engineer; steam and electric plants and railways a specialty. Correspondence solicited.	"	" Howard Platt, U. S. deputy mineral surveyor.
"	" <b>HENRY E. WOOD</b> , 1744 Arapahoe st., assayer; established in 1878; specialty, gold and silver ores.	"	" Henry M. Post, 111 E. Fourth st., assayer and chemist.
"	" <b>W. C. WYNKOOP</b> , 307 Mining Exchange, mining engineer. Reference, Union National Bank, Denver.	"	" Robert D. Rhodes, supt. Arkansas Valley Smelting Works.
Durango	La Plata <b>ERNEST J. H. AMY</b> , mining engineer.	"	" <b>JAMES A. SHINN</b> , mining engineer.
Fulford	Eagle Glenn & Fletcher, assayers.	"	" W. L. G. Smith, 113 E. Fifth st., U. S. deputy surveyor.
Georgetown	Clear Creek A. E. Chase, U. S. mineral surveyor.	"	" <b>EUCENE STEVENS</b> , 110 E. Fourth st., assayer and chemist; samples by mail or express receive prompt attention.
"	" Ernest Le Neve Foster, mining and consulting engineer.	"	" <b>TINLEY S. WOOD</b> , mining engineer and mine operator.
"	" Geo. E. Marsh, mining engineer.	Marble City	Gunnison A. J. Mitchell, civil and mining engineer.
"	" Frank A. Maxwell, 400 Eighth st., mining engineer.	Ouray	Ouray F. L. Biddlecom, civil and mining engineer.
"	" <b>PORTER P. WHEATON</b> , civil engineer, U. S. deputy mineral surveyor; examines and reports upon mines.	"	" G. E. Kedzie, mining engineer and slate geologist.
Golden	Jefferson W. B. Milliken, mining and metallurgical engineer.	"	" George Mills, mining engineer.
"	" M. T. Morrell, U. S. deputy mineral surveyor.	Pueblo	Pueblo W. H. Aldridge, P. O. Box 80, metallurgist and mining engineer.
"	" School of Mines, Regis Chauvenet, pr.	"	" P. B. de Schweinitz, 211 Broadway, mechanical engineer.
Granite	Chaffee <b>B. STANLEY REVETT</b> , M. E., gen. mgr. Twin Lakes Hydraulic Gold Mining Syndicate.	"	" Albert J. Goodell, M. E., 720 Santa Fe av., assayer and chemist.
Guston	Ouray Herbert Warme, mining engineer and assayer.	"	" <b>VICTOR C. HILLS</b> , 205-207 Central Bk., mining engineer; specialties, mining and hydraulic engineering; U. S. deputy mineral surveyor.
Idaho Springs	Clear Creek Walter H. Wiley, mining engineer.	"	" E. P. Matthewson, 120 E. Eighth st., mining engineer and metallurgist.
Ironton	Ouray Geo. W. Gates, P. O. Box 13, mining engineer.	"	" H. D. Williams, 1003 Spruce st., chemist and metallurgist.
Leadville	Lake Max Boehmer, P. O. Box 765, mining engineer.	"	" <b>J. HOWARD WILSON</b> , assayer and chemist, 306 Santa Fe av.; assays given and treatment of ores furnished.
"	" William Braden, 204 W. Fifth st., engineer.	Rico	Dolores Frank D. Allen, mining engineer, metallurgist and chemist.
"	" S. E. Bretherton, P. O. Box 234, metallurgist.	Robinson	Summit Jesse F. McDonald, mining engineer.
"	" Thomas Jay Cox, 13 Quincey Bk., U. S. mineral surveyor.	Romley	Chaffee J. H. Seek, mining engineer and metallurgist.
"	" Francis T. Freeland, P. O. Box 23, mining and mechanical engineer.	San Bernardo	San Miguel <b>ARTHUR B. LITCHFIELD</b> , mine manager and mining chemist; mines examined and reported on; eighteen years' experience; specialty, mine and mill management.
"	" Edwin S. Hawkins, mining engineer and metallurgist.	San Luis	Costilla Edmund C. Van Diest, mining and civil engineer.
"	" Clarence Hersey, 110 E. Fifth st., assayer and chemist.	Silver Cliff	Custer August Koppe, U. S. deputy mineral surveyor.

TOWNS AND COUNTYS	NAME	TOWN AND COUNTY	NAME
Silver Cliff, ..... Custer (Continued.)	<b>CARL WULSTEN</b> , P. O. Box 53, civil and mining engineer and assayer; manager Hassick Contract Mining Co.	De Lamar ..... Owyhee	<b>J. A. PACK</b> , mining engineer, De Lamar Mining Co., Ltd.
Silverton ..... San Juan	Thomas H. Kane, mining engineer.	Halley ..... Alturas	<b>F. C. MANDELL</b> , mining and civil engineer, United States deputy mineral surveyor.
" ..... "	Edward G. Stoiber, P. O. Box 129, mining engineer Silver Lake Mines.	Horseshoe Bend ..... Boise	A. J. Rinearson, civil and irrigation engineer.
Telluride ..... San Miguel	George L. Andrus, mill superintendent Sheridan Mining Co.	Liberty ..... Bear Lake	Edwin N. Austin, U. S. deputy mineral surveyor.
" ..... "	F. J. Kramer, mining engineer.	Mountain Home ..... Elmore	Samuel G. Rhoades, U. S. deputy mineral surveyor.
" ..... "	Henry C. Lay, civil and mining engineer.	Pond d'Oreille ..... Kootenai	<b>JAMES E. DYKE</b> , mining engineer.
		Rathdrum ..... Kootenai	A. D. Robinson, civil and mining engineer.
		Silver City ..... Owyhee	Lincoln Taylor, surveyor.
		Wallace ..... Shoshone	George A. Trask, Cedar st., U. S. deputy mineral surveyor.
		" ..... "	<b>N. WITTNER</b> , Box 222, mining engineer.
		Waldport ..... Shoshone	F. W. Bradley, M. E., assistant mgr. Timber Hill Sullivan mines.
		" ..... "	Victor M. Clement, mining engineer and metallurgist.
		" ..... "	W. Clayton Miller, mining engineer, deputy mineral surveyor.

## CONNECTICUT

New Haven ..... New Haven	William P. Blake, geologist, mineralogist and mining engineer.
" ..... "	A. J. Du Bois, professor civil engineering, Sheffield Scientific School.
" ..... "	H. S. Williams, professor of geology, Yale College.

## DISTRICT OF COLUMBIA

Washington ..... D. C.	<b>DAVID T. DAY</b> , geologist, in charge mining division, U. S. Geological Survey.
" ..... "	Frederic P. Dewey, 621 F st. N. W., chemist and metallurgist.
" ..... "	<b>CEO. H. ELDRIDGE</b> , U. S. Geological Survey, economic geologist.
" ..... "	<b>FRANCIS R. FAVA</b> , mining engineer.
" ..... "	<b>STORY B. LADD</b> , mining engineer.
" ..... "	F. H. Newell, mining engineer and geologist U. S. Geological Survey.
" ..... "	E. W. Parker, 1340 F st. N. W., statistician U. S. Geological Survey.
" ..... "	Clair A. O. Rosell, 133 Ninth st. N. W., examiner U. S. patent office.

## FLORIDA

Bronson ..... Levy	<b>CHARLES P. TURNER</b> , chemist, mineralogist, mining engineer and phosphate expert, gen. supt. of Suwannee River Phosphate Co., phosphate lands examined, pitted and reported upon.
Gainesville ..... Alachua	B. L. Baldwin, mining engineer.
Palatka ..... Putnam	J. Hopley Venton, P. O. Box 521, C. E.
Phosphoria ..... Polk	<b>W. S. WARNER</b> , mining engineer, Florida Phosphate Co., Ltd.
Tallahassee ..... Leon	John C. Shoem, U. S. surveyor-gen.

## GEORGIA

Atlanta ..... Fulton	J. D. Caldwell, 14 Kimball House, mineralogist and mining engineer.
" ..... "	Hall Brothers, 67 Gate City National Bank Building, civil, mining and hydraulic engineers.

## IDAHO

Boise City ..... Ada	John B. Hastings, C. E. and M. E.
" ..... "	W. H. Pettit, U. S. surveyor-general.
Burke ..... Shoshone	<b>F. R. CULBERTSON</b> , mining engineer.
Clayton ..... Custer	H. M. Pease, mining superintendent.

## ILLINOIS

Alton ..... Madison	Wilton Rutledge, inspector of mines, fourth district.
Alto Pass ..... Union	<b>HENRY C. FREEMAN</b> , civil and mining engineer and metallurgist, reports on mines and treatment of ores.
Aurora ..... Kane	<b>E. F. ENRICH</b> , mining and metallurgical engineer.
" ..... "	<b>WM. H. VAN ARSDALE</b> , M. E., Asst. Prof. Chicago-Aurora Smelting Co.
Blue Island ..... Cook	<b>H. L. BRIDGEMAN</b> , E. M., supt. Chicago Copper Refining Co.
Braidwood ..... Will	Ogden Clark, inspector of mines, first district.
Chicago ..... Cook	<b>ASKEW &amp; RUSSELL</b> , P. O. Box 38, 39, electrical engineers, mining engineers and metallurgists.
" ..... "	<b>WM. BARACWANATH &amp; SON</b> , 73 West Division st., mining engineers.
" ..... "	<b>PROF. P. D. BARNHART</b> , Sara 5024 Hotel, mining engineer and metallurgist.
" ..... "	Joseph C. Bartlett, M. E., 200 Adams st.
" ..... "	Samuel L. Brown, Ninety-fourth and Lake Shore, asst. supt. National Smelting & Refining Co.
" ..... "	<b>J. S. CAREY</b> , 1539 Unity Bldg., chemist, sampling and analysis of ores and metals, qualitative and quantitative analysis of metals, fertilizers, waters, fuels, products and technical materials, etc. Graduate of Sheffield and Associates chemical laboratory, Weybaden, Ger. Reports to W. J. Battle, mining engineer, Cleveland, Ohio.
" ..... "	<b>GEORGE CUTTER</b> , 129 The Rock, 273, electrical engineer. (See adv., page 12.)
" ..... "	Townsend V. Church, Rookery, chemist Illinois Steel Co.
" ..... "	Theodore Douglar, 51 Webster av., mining and civil engineering.
" ..... "	<b>FRANK DRAKE</b> , 4 Sherman st., mining engineer Silver Lake Mining Co.

TOWN AND COUNTY	NAME	TOWN AND COUNTY	NAME
Chicago, Cook (Continued.)	<b>J. W. EDWARDS</b> , 87 Washington st., 212, 213, 314 U. S. Express Bldg., mining engineer.	Petersburg, Menard	Frank V. Aikre, First and Market, mining and civil engineer.
"	F. H. Foote, 5815 Madison av., supt. Illinois Steel Co.'s furnaces.	South Chicago, Cook	Geo. T. Dougherty, Ninety-fourth st. and Lake Shore, chemist and assayer.
"	<b>CILBERT H. COODHUE</b> , Room 1017 Chamber of Commerce Bldg., analytical chemist and mining engineer.	"	F. B. F. Rhodes, M. E., Ninety-fourth st. and Lake Shore, metallurgist and superintendent.
"	Fred A. Gritzner, 145 Loomis st., chemist, assayer and mining engineer.	"	Jasper Whiting, metallurgist.
"	<b>ALFRED CUILLAUME</b> , 215 Dearborn st., electrical and mining engineer, assayer and analytical chemist. (See adv., page 11.)	Springfield, Sangamon	John Keay, 1417 S. Grand av., mining engineer.
"	Victor C. Helkes, 4619 Ellis av., assayer and chemist.	"	Joshua Lindahl, state geologist.
"	<b>WILLIAM HOSKINS</b> , 81 S. Clark st., assayer, analytical chemist, mining engineer. (See adv., page 11.)	"	A. H. Worthen, director geological survey of Illinois.
"	J. M. Howells, 171 La Salle st., hydraulic engineer.	Streator, La Salle	E. A. Graves, M. E., 308 East Main st.
"	<b>E. E. JOHNSON</b> , C. E. and M. E., S. E. cor. Canal and Randolph sts., hydraulic and mechanical engineer.	Wilmington, Will	<b>A. A. CHARLTON</b> , mining engineer.
"	Karl L. Lehmann, 113 Adams st., civil engineer and architect.	<b>INDIANA</b>	
"	John S. MacGinniss, 108 and 110 E. Randolph st., mining engineer.	Brazil, Clay	P. J. Mooney, mining engineer Brazil Block Coal Co.
"	<b>MANN &amp; TATARIAN</b> , assayers and mining experts. Laboratory and office 106 and 107, 163 Randolph st. Mines examined and reports made for owners or purchasers; estimates for improvements.	"	Oliver Wilkins, 10 Meridian st., mining and civil engineer.
"	<b>MARINER &amp; HOSKINS</b> , 81 S. Clark st., assayers, chemists and mining engineers. (See adv., page 9.)	Cannelton, Perry	Geo. Minto, civil and mining engineer.
"	<b>MILTON MOSS</b> , 4619 Ellis av., mining engineer, metallurgist; mines examined.	Evansville, Vanderburg	Jas. D. Saindlers, Court House Bldg., civil and mining engineer.
"	Nelson W. Perry, 823 Monadnock Bldg., electrical and mining engineer.	Indianapolis, Marion	Maurice Thompson, state geologist.
"	John N. Pott, 224 N. Union st., civil and mining engineer.	Oakland City, Gibson	John R. Troutman, Lock Box 43, mining and mechanical engineer.
"	<b>RATTLE, NYE &amp; HOLLIS</b> , 1232 The Rookery, analytical chemists and mining engineers (also Cleveland, O.).	<b>IOWA</b>	
"	<b>JOHN A. ROEBLING'S SONS CO.</b> , 171 Lake st., mining engineers.	Des Moines, Polk	Thomas Binks, mine inspector, first district.
"	C. H. Rose, 125 S. Sangamon st., mining engineer.	"	Floyd Davis, E. M., Ph. D., state chemist and mining engineer.
"	Frank A. Ross, Fulton and Union sts., mining engineer.	"	James Gildroy, mine inspector, second district.
"	John K. Seifert, 124 Dearborn st., civil and mining engineer.	"	Morgan G. Thomas, mine inspector, third district.
"	Wm. L. Smith, 100 Washington st., civil engineer and contractor.	Ottumwa, Wapello	J. T. Beard, P. O. Box 318, mining and civil engineer.
"	<b>GEORGE W. STURTEVANT JR.</b> , 814 Chamber of Commerce Bldg., civil and hydraulic engineer; special attention given to development of water powers for hydraulic mining, city water supplies, etc.	<b>KANSAS</b>	
"	Jacob T. Wainwright, P. O. Box 434, metallurgical engineer.	Argentine, Wyandotte	<b>CURTIS ALEXANDER</b> , mining engineer and metallurgist. Permanent address, Maryville, Nodaway Co., Mo.
"	<b>WALBURN-SWENSON CO.</b> , 1520 Monadnock Bldg., assay laboratory for testing ores. (See adv., page 547.)	"	John H. Allen, supt. Kansas City Smelting & Refining Co.
Galva, Henry	Thompson Hudson, inspector of mines, second district.	Galena, Cherokee	John B. Hodgdon, Main st., Stone's Bldg., civil and mining engineer.
Marissa, St. Clair	John G. Massie, inspector of mines, fifth district.	Lyons, Rice	<b>JESSE AINSWORTH</b> , M. E., supt. Lyons Rock Salt Co.
Peoria, Peoria	James Freer, inspector of mines, third district.	Scammon, Cherokee	John T. Stewart, state inspector of coal mines.
<b>KENTUCKY</b>			
"	"	Ashland, Boyd	W. H. Kemler, chemist Ashland Steel Co.
"	"	"	<b>MEYER SCHAMBERG</b> , analytical chemist and mining engineer.
"	"	Central City, Muhlenberg	T. C. du Pont, M. E.
"	"	Frankfort, Franklin	C. J. Norwood, inspector of mines.
"	"	Frenchburg, Menifee	W. T. Dennis, M. E., Indian Creek Coal Mines.

TOWN AND COUNTY		NAME	TOWN AND COUNTY		NAME
Grand Rivers	Livingston	<b>WM. B. PHILLIPS</b> , metallurgist and mining engineer.	Boston	Suffolk	Henry J. Williams, 161 Tremont st., chemical engineer.
Middlesboro	Bell	J. C. McK. Richardson, mining engineer.	(Continued.)		
"	"	<b>JOHN SANDERSON</b> , analytical chemist and assayer.	Dorchester	Suffolk	<b>EDWARD D. PETERS JR.</b> , Percival av., mining engineer and metallurgist; specialty, copper.
"	"	A. R. Strachan, mining engineer and metallurgist.	Reading	Middlesex	W. H. Nash, mining engineer, assayer and metallurgist.
Olympia	Bath	Winchester Dickerson, mining engineer.	<b>MICHIGAN</b>		
Owensboro	Daviess	Alsop & Griswold, Fourth and Fredricka sts., civil and mining engineers.	Ann Arbor	Washtenaw	Wm. H. Petter, M. E., professor in University of Michigan.
Peach Orchard	Lawrence	H. H. Chamberlayne, mining engineer.	Bay City	Bay	John Kanall, 822 Wilson st., mining engineer.
Pineville	Bell	F. E. Jackson, civil engineer and surveyor.	Bessemer	Gogebic	Clarence M. Boss, mining engineer, district mine inspector.
Whitesville	Daviess	Charles Wilkey, mining engineer and metallurgist.	Cadumet	Houghton	Frederick N. Bosson, mining and electrical engineer.
<b>LOUISIANA</b>			Champion	Marquette	G. S. Barber, chemist, Champion Iron Co.
New Orleans	Orleans	<b>LAFAYETTE D. CARROLL</b> , 47 Carondelet st., mechanical and electrical engineer; gravity planes; wire rope haulage.	Crystal Falls	Iron	Julius Kellerschon, mining engineer and chemist.
"	"	F. F. Claussen, U. S. mint, assayer.	Detroit	Wayne	<b>J. V. CAMPBELL &amp; CO.</b> , 27 Larned st., mining engineers.
"	"	Chas. B. Wilson, U. S. surveyor-gen.	"	"	<b>COURTIS &amp; SMITH</b> , 27 Larned st., W., mining and metallurgical engineers.
Opelousas	St. Landry	George O. Elms, civil engineer.	"	"	Jesse M. Smith, 36 Mollat Block, mechanical and electrical engineer.
<b>MARYLAND</b>			"	"	D. Torrey, 66 Washington av., mining engineer.
Baltimore	Baltimore	William Glenn, 1348 Block st., mining engineer and chemist.	Houghton	Houghton	F. W. Denton, M. E., professor of mining, Michigan School of Mines.
"	"	Milnor P. Paret, 210 E. Lexington st., civil engineer.	"	"	<b>GEORGE A. KOENIG</b> , Ph. D., care of Michigan School of Mines, professor of chemistry. Chemical-mineralogical examination of drill-cores and sands, all kinds of analyses.
Lonaconing	Allegany	Duncan Suckler, mining engineer.	"	"	Fred T. Sharpless, Michigan School of Mines, metallurgical chemist.
Oakland	Garrett	R. T. Browning, state mine inspector.	"	"	M. E. Wadsworth, state geologist and director, Michigan School of Mines.
Sparrows' Point	Baltimore	David Baker, mining engineer.	Iron Mountain	DeKalbon	E. R. Brewster, 908 W. Brown st., analytical chemist.
"	"	Francis T. Penock, P. O. Box 77, mechanical engineer.	"	"	Arthur Uddenberg, 110 E. Brown st., analytical chemist and assayer.
"	"	Arnold K. Reese, 408 East B st., mining engineer.	Ironwood	Gogebic	<b>E. P. JENNINGS</b> , McLeod st., analytical chemist and mining engineer; reports on Lake Superior iron properties; sampling of ore; organ's a specialty.
"	"	Nathaniel G. Robertson, mining engineer.	"	"	<b>N. O. LAWTON</b> , care of Curry Hotel, mining engineer, Penock & Gogebic Consolidated Mines.
"	"	Morris Weis, mining engineer.	Isipeming	Marquette	E. F. Bradt, 115 W. Terrace st., mining engineer and chemist.
<b>MASSACHUSETTS</b>			"	"	Ralph B. Green, 432 S. Pine st., analytical chemist.
Boston	Suffolk	<b>ARTHUR B. BROWNE</b> , 119 Water st., mining engineer, assayer and chemist.	"	"	S. A. Mintz, 600 E. High st., analytical chemist and assayer.
"	"	Davenport & Williams, 161 Tremont st., chemical engineers.	Lawton	Van Buren	Charles D. Lawton, commissioner of mineral statistics.
"	"	<b>WINTHROP W. FISK</b> , B. S., 257 Washington st., mining engineer and geologist. Western office and laboratory, Juneau, Alaska. Gold properties a specialty; mines examined and reported on; advice given on proper development of mines and machinery needed.	Marquette	Marquette	James E. Jopling, civil and mining engineer.
"	"	A. W. & F. B. Locke, 53 State st., mining engineers.	"	"	Richard A. Parker, consulting mining engineer.
"	"	<b>CHARLES O. PARSONS</b> , 77 State st., mining engineer.	Negaunee	Marquette	Frank Drake, P. O. Box 36, mining engineer.
"	"	Stephen P. Sharpless, S. R., 13 Broad st., assayer and analytical chemist.			
"	"	George F. Swain, care of Institute of Technology, civil engineer.			

TOWN AND COUNTY	NAME	TOWN AND COUNTY	NAME
Negaunee ... Marquette (Continued.)	Wm. E. Saunders, mining and civil engineer.	Chadwick ... Christian	<b>EUCENE M. COLE</b> , F. G. S., mining and mechanical engineer; consulting engineer Easley Mines, etc.
Ontonagon ... Ontonagon	Alex. P. Meads, mining engineer and assayer.	Desloge ... St. Francois	John M. Desloge, mining engineer.
Red Jacket ... Houghton	R. M. Edwards, mining engineer.	Jefferson City ... Cole	James D. Robertson, E. M., assistant Missouri geological survey.
Schewauing ... Huron	Lewis Stockett, mining engineer.	" " " "	Arthur Winslow, State Capitol, state geologist of Missouri.
" " " "	" " " "	" " " "	C. C. Woodson, state mine inspector.
" " " "	" " " "	Joplin ... Jasper	W. P. Cleveland, A. C., cor. Fourth and Joplin sts., chemist.
" " " "	" " " "	" " " "	A. F. Downan, Herald Bldg., C. E.
" " " "	" " " "	" " " "	<b>F. C. FLORANCE</b> , 408 Joplin st., mining engineer.
" " " "	" " " "	" " " "	<b>ERIC HEDBURG</b> , Box 591, practical engineer, mining, mechanical, electric; plans and erection of mining plants; distance transmission; properties examined and reported on.
" " " "	" " " "	" " " "	<b>J. R. HOLIBAUCH</b> , 310 Moffet av., mining engineer; complete maps of the Joplin mining district.
" " " "	" " " "	" " " "	<b>JAMES P. MEAD</b> , mining engineer.
" " " "	" " " "	Maryville ... Nodaway	<b>CURTIS ALEXANDER</b> , mining engineer and metallurgist. (See also Argentine, Chile.)
" " " "	" " " "	Mendota ... Putnam	Bernard H. Johnston, M. E.
" " " "	" " " "	Mine la Motte ... Madison	J. T. Monell, metallurgist to Mine la Motte.
" " " "	" " " "	Palmer ... Washington	Joseph W. Belfield, mining engineer.
" " " "	" " " "	Rolla ... Phelps	School of Mines of the University of Missouri, Richard H. Jesse, prest.; Thos. L. Itzky, secy.
" " " "	" " " "	St. Louis ... St. Louis	<b>JOSEPH P. CAZZAN</b> , P. O. Box 695, mining engineer and metallurgist.
" " " "	" " " "	" " " "	H. Aug. Humieke, 1219 Mississippi av., mining engineer and chemist.
" " " "	" " " "	" " " "	Philip X. Moore, 55 Laclede Bldg., geologist and mining engineer.
" " " "	" " " "	" " " "	<b>J. W. NIER</b> , M. E., Room 3 Equitable Bldg., engineer and designer of milling and mining plants.
" " " "	" " " "	" " " "	Hiram Phillips, 810 Olive st., consulting civil and mining engineer.
St. Paul ... Ramsey	<b>C. BRINKERHOFF</b> , 342 Cedar st., civil and mining engineer.	" " " "	W. B. Potter, 1225 and 1227 Spruce st., mining engineer and metallurgist.
" " " "	" " " "	" " " "	<b>OTTO RISSMAN</b> , 1225 Spruce st., mining engineer St. Louis Sampling & Testing Works.
" " " "	" " " "	" " " "	Albert F. Schneider, 3883 Washington av., civil and mining engineer, metallurgist.
" " " "	" " " "	" " " "	Thos. R. Stockett Jr., Fourth and Olivets, mining engineer.
" " " "	" " " "	" " " "	<b>HERBERT STRICKLAND</b> , 1321 Garrison av., consulting mining engineer and metallurgist.
" " " "	" " " "	" " " "	<b>ARTHUR THACHER</b> , 1227 Spruce st., mining engineer and metallurgist.
" " " "	" " " "	" " " "	<b>B. B. THAYER</b> , care E. M. Tesson, West Forest Park, mining engineer.
" " " "	" " " "	" " " "	H. A. Wheeler, Washington University, consulting mining engineer.
West Duluth ... St. Louis	<b>JOHN H. W. A. KREY</b> , Silver Bldg., civil engineer; city engineer West Duluth; opportunities for investments in mining and timber lands.	Webb City ... Jasper	O. Rees, civil engineer and mine surveyor.

## MINNESOTA

Duluth ... St. Louis	H. B. Crowl, 631 Chamber of Commerce Bldg., chemist and assayer.	" " " "	" " " "
" " " "	<b>CHARLES F. HOWE</b> , consulting and mining engineer. Office and laboratory, Chamber of Commerce, Duluth, Minn. References: D. H. Bacon, prest. Minnesota Iron Co., Chicago, Ill.; Joseph S. Fay Jr., prest. Lake Superior Iron Co., Boston, Mass.; Marine National Bank, Duluth, Minn.	" " " "	" " " "
" " " "	<b>T. L. LAMMERS</b> , 431 Chamber of Commerce, analytical and consulting chemist; ores sampled and assayed; mining properties examined and reported on.	" " " "	" " " "
" " " "	<b>W. C. LA RUE</b> , M. E., 307 Barrows Bldg., mining and gangster quarrying.	" " " "	" " " "
" " " "	<b>FRANK TEDFORD</b> , 610 Lyceum Bldg., mining engineer.	" " " "	" " " "
Merritt ... St. Louis	E. J. Longyear, explorer and M. E.	" " " "	" " " "
Minneapolis ... Hennepin	<b>WM. R. APPELBY</b> , 911 Fifth st. S. E., professor of mining and metallurgy in the College of Engineering, Metallurgy and the Mechanic Arts.	" " " "	" " " "
" " " "	James A. Dodge, 813 Fifth st. S. E., professor of chemistry in State University.	" " " "	" " " "
" " " "	Christopher W. Hall, 803 University av. S., dean College of Engineering and Metallurgy.	" " " "	" " " "
" " " "	<b>HORACE V. WINCHELL</b> , 1396 S. E. Seventh st., geologist, chemist and mining expert.	" " " "	" " " "
" " " "	X. H. Winchell, state geologist.	" " " "	" " " "
St. Paul ... Ramsey	<b>C. BRINKERHOFF</b> , 342 Cedar st., civil and mining engineer.	" " " "	" " " "
" " " "	James Compton, U. S. surveyor-gen.	" " " "	" " " "
" " " "	<b>N. LEHMEN</b> , Ph. D., 133 E. Fifth st., analytical and technical chemist.	" " " "	" " " "
West Duluth ... St. Louis	<b>JOHN H. W. A. KREY</b> , Silver Bldg., civil engineer; city engineer West Duluth; opportunities for investments in mining and timber lands.	" " " "	" " " "

## MISSISSIPPI

Vicksburg ... Warren	R. S. Buck Jr., civil and mining engineer.	" " " "	" " " "
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## MISSOURI

Aurora ... Lawrence	E. J. Slattery, engineer of Bonanza mines.	Webb City ... Jasper	O. Rees, civil engineer and mine surveyor.
Bonne Terre ... St. Francois	C. B. Parsons, mining engineer.	" " " "	" " " "
" " " "	Gust Setz, mining engineer.	" " " "	" " " "
Cartersville ... Jasper	T. J. Shelton, W. Main st., mining engineer.	" " " "	" " " "
Carthage ... Jasper	W. H. Seamon, Regan pl., mining engineer.	Boulder ... Jefferson	A. P. Smith, mining engineer.
" " " "	" " " "	Bozeman ... Gallatin	C. M. Thorpe, C. E., City Hall, U. S. deputy mineral surveyor.

## MONTANA

TOWN AND COUNTY	NAME	TOWN AND COUNTY	NAME
Butte, Silver Bow	Baker & Harper, civil and mining engineers.	Helena, Lewis and Clarke	Jerry Kingman, 14 1/2 S. Main st., chemist and assayer.
" "	F. W. Blackford, City Hall, mining and civil engineer.	" "	Arthur G. Lombard, C. E., 48 Montana National Bank Bldg., U. S. deputy mineral surveyor.
" "	Robert G. Brown, S. W. cor. Broadway and Main st., mining engineer.	" "	<b>W. T. MENDENHALL</b> , mining engineer, investigation and reporting on mines throughout the west, and estimates furnished with promptness and fidelity. Twenty years' experience in the mining sections throughout the west and Old Mexico. Correspondence solicited.
" "	Baron R. de Batz, mining engineer.	" "	A. Neustaedter, mining and civil engineer.
" "	<b>B. C. W. EVANS</b> , 16 N. Main st., mining engineer.	" "	John S. O'Brien, 110 Grand st., mining engineer.
" "	<b>C. W. COODALE</b> , mining engineer.	" "	Roeder & Helmick, Pittsburg Block, civil and mining engineers.
" "	<b>F. AUC. HEINZE</b> , M. E., P. O. Box 428, near Montana Ore Purchasing Co., and of the Liquidator Co. contracting and Stamping Works Co.	" "	Frank L. Sizer, Atlas Block, mining and hydraulic engineer.
" "	Hermann A. Keller, P. O. Box 231, mining engineer.	" "	<b>C. C. SWALLOW</b> , M. E., 19 1/2 Main st., mines reported and negotiated. State mine inspector, and twenty-nine years' experience in mines of Montana.
" "	Wm. H. Keller, P. O. Box 233, mining engineer.	" "	A. B. Wood, mining engineer.
" "	Albert B. Knight, P. O. Box 211, U. S. deputy mineral surveyor.	Livingston, Park	Harvey L. Glenn, Yellowstone, assayer and chemist.
" "	G. A. Kohnberg, 20 W. Granite st., civil and mining engineer.	" "	Charles Tappan, U. S. deputy mineral surveyor.
" "	<b>JAMES MACFARLANE</b> , Anaconda mine office, civil and mining engineer; chief engineer Anaconda Mining Co.	Marysville, Lewis & Clarke	James H. Henley, mining engineer.
" "	Albert Moog, mining engineer.	Missoula, Missoula	Fairchild & Dickenson, First National Bank Bldg., mining engineers.
" "	<b>JOHN B. STEICER</b> , M. E., U. S. deputy mineral surveyor; expert examination and reports of mines and reduction works.	Noblet, Meagher	<b>ROBERT M. RAYMOND</b> , M. E., supt. Raymond "R" Mining Co.
" "	Chas. Wade Stiekney, mining engineer.	Polio, Madison	J. M. Page, M. E., U. S. deputy mineral surveyor.
Cooke, Park	Geo. A. Paekard, M. E., metallurgist.	Phillips, Deer Lodge	Frank Ringeling, P. O. Box 301, mining engineer.
Deer Lodge, Deer Lodge	V. M. Ryan, professor, Mining and Engineering College of Montana.	Pony, Madison	C. W. Mead, M. E., U. S. deputy surveyor and assayer.
" "	F. W. Trappenzon, Ph. D., F. C. S., Montana School of Mines, analytical chemist, assayer and metallurgist.	Radiation, Jefferson	Wm. S. Ten Eyek, assayer.
E. Helena, Lewis & Clarke	Walter H. Aldridge, mining engineer and metallurgist.	Raymond, Madison	John K. Turner, mining engineer and chemist.
Elkhorn, Jefferson	<b>C. A. MOLSON</b> , mining engineer.	Yogo, Meagher	<b>LOUIS PEPIN</b> , mining engineer.
" "	R. T. Wolfston, metallurgist, chemist and mining expert.		
Empire, Lewis and Clarke	Frank Longmaid, M. F. and assayer.		
Granite, Deer Lodge	J. C. Pyle, assayer and M. E.		
Great Falls, Cascade	William E. Kern, 301 Central av., mining engineer.		
	<b>FRANK KLEPETKO</b> , metallurgist and mining engineer; supt. Great Falls Works and of Boston & Montana Consolidated Copper & Silver Mining Co.	Austin, Lander	<b>T. H. GEORGE</b> , U. S. deputy mineral surveyor, practical mining engineer. Mines examined and reported on.
Helena, Lewis & Clarke	John R. Barty, 810 Getchell st., assayer.	" "	James H. Tolson, U. S. deputy mineral surveyor.
" "	<b>BAYLISS &amp; ROBINSON</b> , mining engineers, mining and consulting engineers, mining engineers for the Northern Pacific Ry., consulting engineers for the Montana Co. Ltd., Marysville, Mont., 54 Old Broad st., London, E. C., Helena, Montana. Report on mines for London or America.	Battle Mountain, Lander	<b>JAMES F. DENNIS</b> , mining engineer.
" "	<b>MILES J. CAVANAUGH</b> , Room 9 Bailey Block, mining engineer.	Belmont, Nye	George Ernst, M. and C. E.
" "	<b>MICHAEL COONEY</b> , P. O. Box 263, mining engineer.	Chandler, Esmeralda	Wm. H. Shockley, mining engineer.
" "	Geo. O. Eaton, U. S. surveyor-general.	Eureka, Eureka	Walter S. Long, Main st., C. E.
" "	Hovey & Bickel, Merchants' National Bank Bldg., civil and mining engineers.	" "	John Farby, M. E., Main st., U. S. deputy mineral surveyor.
" "	Walter S. Kelley, mining engineer.	Lovelocks, Humboldt	<b>H. H. HUTCHINS</b> , analytical chemist and mining engineer, mineral property examiner; reducing and refining; testimony a specialty; engineer and mgr. of Sutherland Antimony Mines and Reduction Works, Lovelocks, Nev.
		Pioche, Lincoln	E. L. Godbe, metallurgist and assayer.
		" "	F. P. Swindler, U. S. deputy mineral surveyor.
		Washoe, Washoe	Geo. F. Turrittin, U. S. surveyor-gen.

## NEVADA

TOWNS AND COUNTY	NAME	TOWNS AND COUNTY	NAME
<b>NEW HAMPSHIRE</b>			
East Nottingham Rockingham	Samuel L. Hills, mining engineer.	Mogollon..... Socorro	<b>P. KIRKCAN</b> , mining and mechanical engineer; specially, mining and reduction low grade gold, silver and tin ores.
Exeter..... Rockingham	H. C. Spaulding, P. O. Box 694, electric mining engineer.	Organ..... Dona Ana	B. A. Hoopes, assayer and miner.
<b>NEW JERSEY</b>			
Arlington..... Hudson	C. G. Buchanan, mining engineer.	Santa Fe..... Santa Fe	Rev. Bro. Amian, F. S. C., St. Michael's College, chemist, mineralogist, editorial geologist.
Bridgeton..... Cumberland "Lochwood."	Oberlin Smith, mining engineer.	"....."	Edward F. Hobart, U. S. surveyor-gen.
Cranford..... Union	Wm. C. Clarke, mining engineer, mineralogist, assayer and surveyor.	Silver City..... Grant	<b>JAMES S. FIELDER</b> , mining engineer.
Dover..... Morris	Frederick A. Canfield, Blackwell St., mining engineer.	"....."	<b>WM. H. NEWCOMB</b> , mining engineer.
"....."	George E. Jenkins, C. E., civil and mining engineer.	"....."	<b>RICARD L. POWEL</b> , M. E., U. S. deputy mineral surveyor; mineral properties for sale.
Hoboken..... Hudson	F. M. F. Cazin, 230 Hudson st., consulting mining engineer and metallurgist.	Socorro..... Socorro	Leonard M. Brown, mining engineer, U. S. surveyor.
"....."	Thomas B. Stillman, Ph. D., T. C. S., Stevens Institute of Technology, assayer and analytical chemist.	White Oaks..... Lincoln	Morris B. Parker, M. E. and surveyor.
Jersey City..... Hudson	Otto F. Hordt, 308 Sherman av., mining engineer and metallurgist.	<b>NEW YORK</b>	
Kenvil..... Morris	<b>W. S. AYRES</b> , civil and mining engineer; formerly supt. of mines for the Musconetcong Iron Works; examinations, reports and estimates of cost made.	Albany..... Albany	James T. Gardiner, 21 Elk st., mining engineer.
Newark..... Essex	Geo. C. Stone, N. J. Zinc & Iron Co., mining engineer.	"....."	Martin L. Griffin, 18 S. Hawk st., analytical chemist and engineer.
"....."	<b>W. J. B. WALKER</b> , care Babcock S. & R. Co., mining engineer.	"....."	Prof. James Hall, state geologist.
New Brunswick, Middlesex	Albert H. Chester, 39 College av., mining engineer; professor Rutgers College.	"....."	John C. Smock, department of mineralogy and economic geology.
"....."	Robert A. Cook, 7 Bleeker pl., mining engineer.	Brooklyn..... Kings	<b>E. S. GODFREY</b> , C. E., 974 Bergen st., mine surveys, maps, mining machinery, drawings, estimates, superintendence, experimental mining machinery.
"....."	Frank L. Nason, assistant geologist, geological survey.	"....."	Peter E. Nostrand, 25 Palmetto st., mining and civil engineer.
"....."	Irving S. Upson, geologist, geological survey.	Buffalo..... Erie	Bassett Bros., 298 Main st., mining and civil engineers.
Orange..... Essex	<b>THOS. A. EDISON</b> , electrical and mechanical engineer.	"....."	<b>HERBERT M. HILL</b> , 830 Main st., assayer and chemist; reports and advice in all departments of sanitary, industrial and legal chemistry; expert on minerals.
"....."	<b>S. C. BUEN</b> , electrical engineer.	"....."	John A. Miller, Ph. D., 233 Ellicott st., consulting chemist.
Stanhope..... Sussex	I. P. Pardee, mining engineer.	"....."	Maurice R. Patch, M. E., 1 Austin st., superintendent smelting works.
Trenton..... Mercer	C. W. Coman, assistant geologist, geological survey.	"....."	Charles Platt, A. C., 31-34 Lewis Bldg., chemical engineer and consulting chemist.
<b>NEW MEXICO</b>			
Albuquerque..... Bernalillo	<b>WILLIAM JENKS</b> , 408 W. Lead av., mining engineer, metallurgist; invites correspondence.	"....."	<b>F. P. VANDENBERCH</b> , 31-34 Lewis Bldg., chemical engineer, assayer and analytical chemist.
"....."	W. O. Secor, civil and mining engineer.	"....."	<b>THE VANDENBERCH LABORATORY OF CHEMICAL INDUSTRY</b> , F. P. Vandenberg, B. S., M. D.; R. A. Witthaus, A. M., M. D.; Charles Platt, A. C.; chemical engineers, analytical and consulting chemists; mining properties thoroughly prospected, analyses and advisory reports rendered. Laboratory 31-34 Lewis Block, Buffalo, N. Y.
Cerrillos..... Santa Fe	John Crosby, mining engineer.	Corning..... Steuben	Stephen T. Hoyt, jr., civil and mining engineer.
Chloride..... Sierra	L. J. Otto, U. S. deputy mineral surveyor.	Mineville..... Essex	C. H. Cady, mining engineer.
"....."	<b>JAMES P. BLAINE</b> , mining engineer.	New York..... New York	Henry A. Bang, 1214 Broadway, mechanical engineer.
Gold Hill..... Grant	<b>JAMES B. CREOREY</b> , mining engineer.	"....."	Alfred L. Beebe, 42 Bleecker St., chemist New York Health Department.
Lake Valley..... Sierra	Ellis Clark, mining engineer and metallurgist.		
Lordsburg..... Grant	J. W. Hamilton, mining engineer.		



TOWN AND COUNTY	NAME	TOWN AND COUNTY	NAME
New York .....New York (Continued.)	<b>W. DE L. BENEDICT</b> , 18 Broadway, consulting mining engineer and metallurgist; specialties, tin and phosphate mines.	New York .....New York (Continued.)	Axel Sahlin, 1 Broadway, mining engineer.
" " " " " "	Joseph R. Bien, 140 and 142 Sixth av., civil and topographic engineer.	" " " " " "	E. J. Schmitz, 164 E. Eightieth st., mining engineer and metallurgist.
" " " " " "	Robert E. Boorman, 74 Broadway, mining engineer.	" " " " " "	<b>D. McN. STAUFFER</b> , Tribune Bldg., mining engineer.
" " " " " "	Walter S. Church, 140 Nassau st., consulting mining engineer.	" " " " " "	Joseph Struthers, Columbia College, chemistry, metallurgy and mineralogy.
" " " " " "	Frederick G. Corning, 15 Broad st., mining engineer and metallurgist.	" " " " " "	Wm. Van Slooten, C. E., 74 Wall st., mining engineer and metallurgist.
" " " " " "	J. James R. Croes, 13 William st., consulting engineer.	" " " " " "	<b>LEO VON ROSENBERG</b> , 35 Broadway, mining engineer.
" " " " " "	Courtenay De Kalb, 18 Broadway, Room 812, mining engineer and metallurgist.	" " " " " "	Walter H. Weed, 50 Pine st., mining engineer.
" " " " " "	Algernon Del Mar, 703 E. One Hundred and Forty-first st., mining engineer, assayer and surveyor.	" " " " " "	Woodbridge & Turner Engineering Co., Times Bldg., 41 Park row, electrical and mechanical engineers.
" " " " " "	<b>WM. P. DEWEY</b> , 180 Fifth av., mining engineer.	" " " " " "	Arthur F. Wondt, 127 E. Ninety-first st., mining engineer and metallurgist.
" " " " " "	P. P. Dickinson, 45 Broadway, civil and mining engineer.	" " " " " "	Young & Park, 2 Wall st., mechanical and mining engineers.
" " " " " "	<b>THOS. ECLESTON</b> , Ph. D., cor. Forty-ninth and Fourth av., professor of mineralogy and metallurgy, School of Mines, Columbia College, consulting mining engineer and metallurgist.	Niagara Falls .....Niagara	Wm. S. Humbert, E. M., P. O. Box 286, civil and mining engineer.
" " " " " "	Geo. L. English & Co., 733 Broadway, mineralogists.	Pelham Manor .....Westchester	Wm. A. Smith, mining engineer; lecturer on mining, Columbia College.
" " " " " "	T. Graham Gribble, 76 Broad st., civil, mechanical and hydraulic engineer.	Port Henry .....Essex	N. M. Langdon, N. Main st., mining and mechanical engineer.
" " " " " "	W. A. Hooker, E. M., 145 Broadway, consulting mining engineer.	Poughkeepsie .....Dutchess	<b>A. E. TOWER &amp; BRO.</b> , mining engineers.
" " " " " "	F. R. Hutton, Ph. D., 12 West Thirty-first st., mechanical engineer and expert.	Rochester .....Monroe	Geo. W. Rafter, 134 Clifton st., civil engineer.
" " " " " "	C. W. Keimpton, 61 Broadway, mining engineer.	Rome .....Oneida	The Stanwix Engineering Co., mining and hydraulic engineers.
" " " " " "	William Kent, 125 Times Bldg., mechanical and metallurgical engineer.	Spragueville St. Lawrence	<b>GREGORY P. HARTE</b> , M. E., mgr. Rossie Iron Works.
" " " " " "	Geo. F. Kunz, M. E., 11-15 Union Square, gem expert and gem mining.	Syracuse .....Onondaga	W. B. Cogswell, mining engineer.
" " " " " "	Lodux & Co., 9 Cliff st., assayers, metallurgists and mining engineers.	" " " " " "	<b>ENGINEERING EMPLOYMENT BUREAU</b> , 8 Granger Block, supplying employers with engineers, superintendents, chemists and draftsmen free of charge.
" " " " " "	<b>E. A. LEWALD</b> , 69 Wall st., civil and mining engineer, examinations, reports and management of mines.	" " " " " "	W. L. Nell, care of Solvay Process Co., mining engineer.
" " " " " "	Orleans Languere, Twenty-sixth st. and Eleventh av., mining and contracting engineer.	Tarrytown .....Westchester	Francis N. Holbrook, mining engineer.
" " " " " "	<b>CEO. W. MAYNARD</b> , 75 Cedar st., mining and metallurgical engineer.	Troy .....Rensselaer	Charles McCreery, mining engineer.
" " " " " "	Spencer Miller, 96 Liberty st., mining engineer.	" " " " " "	John M. Sherrerd, 116 First st., metallurgist and analytical chemist.
" " " " " "	Dr. Gideon E. Moore, 221 Pearl st., analytical chemist and assayer.	" " " " " "	Enrique A. Tonesla, Troy Steel & Iron Co., civil engineer and chemist.
" " " " " "	Eben E. Oblett, 18 Broadway, mining engineer and metallurgist.	Warsaw .....Wyoming	Cassius C. Peck, mining engineer.
" " " " " "	H. Hobart Porter Jr., 120 Broadway, mining and mechanical engineer.	<b>NORTH CAROLINA</b>	
" " " " " "	<b>R. W. RAYMOND</b> , Ph. D., M. E., 13 Bowling slip, secretary American Institute of Mining Engineers.	Brindletown .....Burke	Frank W. Boyd, mining engineer.
" " " " " "	Jesse W. Reno, Mills Bldg., mining engineer and metallurgist.	Chapel Hill .....Orange	<b>HENRY B. C. NITZE</b> , assistant state geologist, North Carolina.
" " " " " "	<b>RICKETTS &amp; BANKS</b> , M. E., 104 John st., mill tests, sampling, assays and analyses. (See adv., page 11.)	" " " " " "	Geo. B. Hanna, geologist and mineralogist, geological survey.
" " " " " "	<b>RICHARD P. ROTHWELL</b> , C. E., M. E., 27 Park pl., editor of The Engineering and Mining Journal.	" " " " " "	Prof. J. A. Holmes, acting state geologist.
		Charlotte .....Mecklenburg	C. Ad. Metzger, M. E., P. O. Box 147, mining and metallurgical engineer.
		" " " " " "	United States Assay Office, assayers and mineralogists.
		" " " " " "	John Wilkes, mining engineer.

TOWN AND COUNTY	NAME	TOWN AND COUNTY	NAME
Charlotte.....	Moeklenburg J. Frank Wilkes, mining engineer.	Cleveland.....	Cuyahoga <b>CHARLES H. POTTER &amp; CO.</b> , 104 Superior st., mining engineers.
".....	" (Continued.) Paul Wilkes, 508 N. Trade st., mining engineer.	".....	" (Continued.) <b>RATTLE, NYE &amp; HOLLIS</b> , 807 Western Reserve Bldg., analytical chemists and mining engineers. (Also Chicago, Ill.)
Gold Hill.....	Rowan <b>RICHARD EAMES JR.</b> , mining engineer and assayer. Experience in California, Colorado, India, Honduras.	".....	" " Wm. J. Rattle, 155 St. Clair st., mining engineer and analytical chemist.
Salisbury.....	Rowan <b>FRANK R. WILLIAMS</b> , mining engineer; examines and reports.	".....	" " Robert M. Haseltine, chief state inspector of mines.
".....	" <b>J. T. WYATT</b> , 140 Main st., mining engineer; gold-grinders, portable mills, rubble-stone, curbing, granite, also Belgian blocks.	Columbus.....	Franklin Edward Orton, 190 Twentieth st., mining engineer.
South Toe.....	Yancey Jasper Autrey, surveyor; mines and mining.	Congo.....	Pickaway <b>FRANK A. RAY</b> , mining engineer.
Wilmington, New Hanover	H. A. Whiting, mining engineer.	Glen Roy.....	Jackson Andrew Roy & Son, mining geologists and engineers.

## NORTH DAKOTA

Grand Forks.....	E. J. Babcock, department chemistry and mineralogy University of North Dakota.
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## OHIO

Akron.....	Summit <b>STEPHEN H. PITKIN</b> , 104 Park st., gen. mgr. Webster, Camp & Lane Co.
Armstrongs Mills, Belmont	Frank B. Armstrong, surveyor.
Buchtel.....	Athens <b>CHARLES C. SHARP</b> , civil and mining engineer; chief engineer Columbus & Hocking Coal & Iron Co.
Cambridge.....	Guernsey Wm. J. Hester, 132 N. Sixth st., mining engineer.
".....	" C. W. H. Kreienbaum, mining engineer and superintendent.
Canal Dover.....	Tuscarawas J. L. Morris, mining engineer.
Carbon Hill.....	Hocking Eph. Shaw, civil, mining and mechanical engineer.
Cincinnati.....	Hamilton G. Bonscaren, 39 W. Fourth st., consulting engineer.
".....	" <b>THOMAS J. CREACHEAD</b> , 296 Plum st., mining and electrical engineer.
".....	" Jas. R. Maxwell, M. E., 75 E. Front st., consulting engineer.
Cleveland.....	Cuyahoga <b>CLEVELAND ENGINEERING CO.</b> , Room 46 Mercantile Bank Bldg., mining, mechanical and electrical engineers.
".....	" <b>J. H. CREMER</b> , 24 Superior st. (duct), mining engineer, chemist and metallurgist.
".....	" N. B. Dare, 57 and 59 Wade Bk., mining engineer.
".....	" <b>JOHN J. DATE</b> , Perry-Payne Bldg., mining engineer.
".....	" Robert N. Dickman, 18 Johnson st., chemist and mining engineer.
".....	" <b>L. A. DRYFOOS</b> , Ph. C., Ph. D., 155 St. Clair st., Room 55, consulting, technical and analytical chemist.
".....	" <b>W. J. HILANDS</b> , 108 Superior st., mining engineer.
".....	" <b>KNIFFLER MANUFACTURING CO.</b> , 50 Euclid av., analytical chemists.
".....	" John W. Langley, Ph. D., care of Case School of Applied Science, electrical and metallurgical engineer.
".....	" <b>HENRY M. MORRISON</b> , M. E., Sims Bldg., rope haulage, wire rope.

Staubenville.....	Jefferson Joe M. Wilson, 224 N. Fourth av., chemist and metallurgist.
Stewartville.....	Belmont Isaiah Nichol, surveyor, civil and mining engineer.
Youngstown.....	Mahoning E. D. Haseltine, E. Wilson av., civil and mining engineer.

## OREGON

Haines.....	Baker J. J. Taylor, mining engineer.
La Grande.....	Union Arthur Philbrick, C. E., Slater Block, U. S. deputy mineral surveyor.
Millers.....	Linn E. T. T. Fisher, M. E., U. S. deputy mineral surveyor.
Pendleton.....	Umatilla John W. Kimbrell, M. E., 5 Savings Bank Bldg., U. S. deputy mineral surveyor.
Portland.....	Multnomah W. H. Byars, U. S. surveyor-general.
".....	" Wm. H. Hampton, metallurgical chemist and mining engineer.
Prairie City.....	Grant J. W. Mack, M. E., U. S. deputy mineral surveyor.
Salem.....	Marion E. J. McCaustland, 320 Liberty st., hydraulic and mining engineer.
Sparta.....	Union <b>FRANK C. SMITH</b> , M. E. (see Courtis & Smith, Detroit, Mich.).

## PENNSYLVANIA

Allegheny.....	Allegheny J. M. Camp, 131 Rebecca st., analytical chemist and metallurgist.
Allentown.....	Lehigh Edward T. Clymer, 940 N. Front st., mining engineer.
".....	" Joseph Hunt, cor. Third and Walnut sts., mining engineer.
Altoona.....	Blair <b>W. M. FRASER</b> , 1903 Eleventh av., civil and mining engineer; coal and ore properties examined and reported on in any part of the state.
".....	" William Hogg, First National Bank Bldg., civil and mining engineer.
Ashtand.....	Schoykill Wm. McMurtrie, inspector of mines, sixth anthracite district.
".....	" Henry L. Manley, 150 Centre st., mining engineer.
".....	" Samuel M. Riley, civil and mining engineer.

TOWN AND COUNTY	NAME	TOWN AND COUNTY	NAME
Audensiefed . . . Carbon	Theodore Stevens, care of H. E. Stout, mining engineer and metallurgist.	Philadelphia, Philadelphia (Continued.)	E. V. d'Avalliers, 711 Walnut st., geologist and mining engineer.
" " "	R. Paul Stout, mechanical engineer for L. & W. B. Coal Co.	" "	Dr. Persifor Frazer, 102 Drexel Bldg., geologist and chemist.
Bethlehem . . . Northampton (See also South Bethlehem.)	Edward H. Williams Jr., F. O. S. A., 117 Church st., professor of mining and geology, Lehigh University.	" "	Wm. C. Gatzmer, 132 S. Delaware av., general engineering.
Blossburg . . . Tioga	James N. Patterson, inspector of mines, fourth bituminous district.	" "	Edward B. Harden, 424 N. Thirty-third st., geologist and mining engineer.
Cornellsville . . . Fayette	S. M. Foush, cor. Main and Prospect, mining and civil engineer.	" "	James T. B. Ives, 1455 N. Twenty-ninth st., mining engineer and geologist.
East Brady . . . Clarion	John D. Hagerty, mining engineer.	" "	Ambrose E. Lehman, 711 Walnut st., mining, civil engineer and geologist.
Easton . . . Northampton	Edward Hart, Lafayette College, analytical chemistry.	" "	George M. Lehman, 711 Walnut st., civil and topographical engineer.
" " "	Clemens Jones, M. E., 433 Northampton st., chemist.	" "	Benj. S. Lyman, 708 Locust st., mining engineer, geologist and topographer.
Erie . . . Erie	<b>W. S. CRESLEY</b> , State st., Scott's Block, mining engineer; specially, coal mines; advises on improved methods of mining; "Longwall" specialist. Twenty-three years' practical experience in U. S. and Great Britain. Holds state mine manager's certificate of competency.	" "	<b>PENROSE &amp; BARRINGER</b> , Bullitt Bldg., 3rd 14th & Fourth sts., geologists and mining experts. R. A. F. Penrose and Daniel M. Barringer.
Hastings . . . Cambria	<b>C. F. FRASER</b> , civil and mining engineer; resident engineer Bimbaker Coal Co.; special attention given to reports on coal properties.	" "	<b>R. A. F. PENROSE JR.</b> , Ph. D., 1331 Spruce st., mining engineer and geologist.
Hazleton . . . Luzerne	L. O. Emmerlich, civil and mining engineer.	" "	Frederick Prime, 1008 Spruce st., geologist and metallurgist.
" " "	John M. Lewis, inspector of mines, fourth anthracite district.	" "	Frank C. Roberts, 328 Chestnut st., mechanical engineer.
" " "	<b>THOS. S. McNAIR</b> , 154 N. Church st., civil and mining engineer.	" "	C. Henry Roney, 110 S. Fourth st., consulting engineer and architect.
" " "	<b>A. S. VAN WINKLE</b> , mining engineer, supt. Berwind-White Coal Co.	" "	A. D. W. Smith, Post office Bldg., Room 18, assistant geologist, Pennsylvania Geological Survey.
Horatio . . . Jefferson	Thomas Fisher, M. E.	" "	<b>WALTER M. STEIN</b> , 325 Walnut st., metallurgical engineer.
Houtzdale . . . Clearfield	Austin King, inspector of mines, eighth bituminous district.	" "	John A. Wilson, Drexel Bldg., civil engineer.
Huntingdon . . . Huntingdon	W. A. P. Wilson, 115 Washington st., civil and mining engineer.	" "	H. H. Yard, 415 Drexel Bldg., mining engineer.
Idlewood . . . Allegheny	James Bilek, inspector of mines, seventh bituminous district.	Phillipsburg . . . Center	P. E. Womelsdorf, Gray Bldg., mining engineer.
Irwin . . . Westmoreland	Wm. Jenkins, inspector of mines, second bituminous district.	Pittsburgh . . . Allegheny	<b>C. BRINKERHOFF</b> , 342 Cedar st., mining engineer.
Johnstown . . . Cambria	J. T. Evans, inspector of mines, sixth bituminous district.	" "	R. Nelson Clark, Thirty-second and Smallman sts., mining engineer.
" " "	Marshall G. Moore, 244 Morris st., mining engineer.	" "	Gram Curtis, 62 and 613 Lewis Block, consulting mechanical engineer.
" " "	George E. Thackeray, Cambria Chb., civil, mechanical and metallurgical engineer.	" "	R. Stuart D. Hartick, 134 Water st., civil and mining engineer.
" " "	Frank Williams, 221 Main st., mining engineer and metallurgist.	" "	<b>HUNT &amp; CLAPP</b> , 116 Water st., inspecting and metallurgical engineers and chemists, agents' spatter's magnesite refractories. Cable address, "Testing," Pittsburg.
Lebanon . . . Lebanon	S. G. Valentine, Ph. D., mining engineer.	" "	Chas. E. Judd, Room 44 Westinghouse Bldg., mining engineer.
" " "	Asa A. Welmer, mechanical engineer.	" "	<b>JULIAN KENNEDY</b> , Vandergrift Bldg., mining engineer.
McKeesport . . . Allegheny	Wm. S. Gibson, 5 Fifth av., civil and mining engineer.	" "	F. A. McDonald, Room 811 Penn Bldg., civil and mining engineer.
Mercer . . . Mercer	Thomas K. Adams, inspector of mines, third bituminous district.	" "	McDonald & Chalmers, Penn Bldg., Room 811, mining and civil engineers.
Miekleys . . . Lehigh	Edwin Micklely, Main st., mining engineer.	" "	Geo. R. MacKenzie, 77 Fourth av., mining engineer.
Monongahela City . . . Washington	Henry Louttit, inspector of mines, first bituminous district.	" "	George Francis Myers, Penn Bldg., electrical mining engineer.
Monroeton . . . Bradford	P. E. Alden, civil and mining engineer.	" "	<b>S. D. OLIPHANT</b> , 150 First av., mining engineer.
Oseola Mills . . . Clearfield	Geo. M. H. Good, mining engineer.	" "	
Philadelphia, Philadelphia	Amos P. Brown, E. M., care of University of Pennsylvania, instructor in mineralogy and metallurgy.	" "	

TOWN AND COUNTY	NAME	TOWN AND COUNTY	NAME
Pittsburgh, Allegheny (Continued.)	<b>PITTSBURGH TESTING LABORATORY</b> , 16 Water st., inspecting and metallurgical engineers and chemists.	Uniontown, Fayette	Wm. Duncan, inspector of mines, fifth anthracite district.
" " "	<b>ROBINSON &amp; ORR</b> , 419 Wood st., mining engineers.	Wayne, Delaware	<b>H. BIRKINBINE</b> , hydraulic and mechanical engineer.
" " "	<b>M. V. SMITH</b> , Tomes Bldg., Room 706, metallurgical engineer and contractor.	Wellshoro, Tioga	Anton Harat, mining engineer.
" " "	S. Stutz, 706-710 Penn av., mining and mechanical engineer.	Wilkes Barre, Luzerne	James H. Bowden, 37 Park av., mining engineer, anthracite expert.
" " "	Selwyn M. Taylor, Room 420 Bissell Block, mining engineer.	" " "	<b>W. J. RICHARDS</b> , 98 Public Square, mining engineer Lehigh & Wilkes Barre Coal Co.
Pittston, Luzerne	H. McDonald, inspector of mines, second anthracite district.	" " "	G. M. Williams, inspector of mines, third anthracite district.
Pottstown, Montgomery	J. S. Robeson, metallurgist.	<b>RHODE ISLAND</b>	
Pottsville, Schuylkill	Samuel Gay, Inspector of mines, seventh anthracite district.	Providence, Providence	L. B. Darling, 34 Sablin st., mining engineer.
" " "	Bard Wells, cor. Second st. and Schuylkill av., mining engineer.	<b>SOUTH CAROLINA</b>	
Punxsutawney, Jefferson	H. S. Smith, civil and mining engineer.	Beaufort, Beaufort	C. W. Jewell, P. O. Box 197, machinist, engineer, draftsman.
Reading, Berks	Wm. H. Dechant, 536 Penn st., mining and civil engineer.	<b>SOUTH DAKOTA</b>	
Reynoldsville, Jefferson	Fremont M. Brown, Grant st., civil and mining engineer.	Central City, Lawrence	<b>RICHARD BLACKSTONE</b> , chief engineer Homestake Mining Co.
Scranton, Lackawanna	James Archbald jr., mining engineer.	Custer, Custer	S. D. Porter, assayer and mining engineer.
" " "	Geo. F. Barnard, 923 Mulberry st., mining and mechanical engineer.	Deadwood, Lawrence	<b>RICHARD C. ANDERSON</b> , mining engineer, United States deputy mineral surveyor for South Dakota and Wyoming.
" " "	<b>EDMUND A. BARTL</b> , 404 Lackawanna av., civil and mining engineer and architect.	" " "	P. Danckwardt, metallurgical chemist.
" " "	Patrick Blewitt, inspector of mines, first anthracite district.	" " "	Geo. S. Hopkins, deputy U. S. mineral surveyor.
" " "	<b>ALEXANDER DICK</b> , mining engineer; assistant editor Colliery Engineer.	" " "	Geo. H. Sharpe, civil and mining engineer.
" " "	<b>RUFUS J. FOSTER</b> , mining engineer; editor Colliery Engineer.	" " "	<b>WAITE &amp; ANKENY</b> , mining engineers.
" " "	<b>WILLIAM CRIFFITH</b> , Room 16 Coal Exchange, civil and mining engineer and geologist.	" " "	Thomas H. White, mining engineer, surveyor, inspector, contractor.
" " "	Edward S. Moutat, 306 Quiney av., mining engineer.	" " "	A. D. Wilson, Ph. D., civil and mining engineer.
" " "	Jeremiah J. Phillips, 205 S. Main av., civil engineer and surveyor.	Hill City, Pennington	Charles M. Caton, C. E., U. S. deputy mineral surveyor.
" " "	Francis A. Pocock, Wyoming av., mining and electrical engineer.	Lead, Lawrence	Titus E. Corkhill, state inspector of mines.
" " "	<b>C. H. SCHARAR</b> , 2073 North Main av., civil and mining engineer; mining engineer Delaware & Hudson Canal Co.	" " "	Burdett Moody, M. E., engineer Homestake Mining Company.
" " "	Alex. H. Sherrerd, 423 Jefferson av., mining engineer and chemist.	Rapid City, Pennington	<b>SAMUEL SCOTT</b> , mining engineer; mining investments; mines examined; advice given.
" " "	<b>H. P. SIMPSON</b> , Republic Bldg., mining engineer.	" " "	<b>MYRON WILLISIE</b> , civil and mining engineer.
Sharpsville, Mercer	Walter A. Barrows, analytical chemist.	Souix Falls, Minnehaha	D. C. Rice, 219 S. Dubuth av., civil engineer.
Sheuandoah, Schuylkill	Wm. Stein, inspector of mines, fifth anthracite district.	Sisseton, Roberts	Monroe Warner, C. E., U. S. deputy mineral surveyor.
Slatington, Lehigh	Robert G. Davies, mining engineer.	Vermillion, Clay	Carl Gundersen, C. E., U. S. deputy mineral surveyor.
South Bethlehem, Northampton (See also Bethlehem.)	W. H. Jacques, M. E., Fountain Hill, ordnance and consulting engineer.	" " "	Elbert D. Hawkins, C. E., U. S. deputy mineral surveyor.
" " "	W. S. Maharg, 16 W. Fourth st., chemist and assayer.	Watertown, Codington	Geo. W. Carpenter, cor. Spruce and Huron sts., surveyor and engineer.
" " "	M. D. Sohn, Lehigh University, analytical and consulting chemist.		
" " "	H. H. Stock, instructor in mining and geology, Lehigh University.		
Steelton, Dauphin	<b>EDWARD E. KNAPP</b> , M. E., asst. supt. blast furnace department, Pennsylvania Steel Co.		
Sweleland, Montgomery	Jacob Lychenheim, M. E., analytical chemist.		

## TENNESSEE

TOWN AND COUNTY		NAME	TOWN AND COUNTY		NAME
Chattanooga	Hamilton	<b>CUILD &amp; WHITE</b> , 20, 21 and 22 Key-Stone Block, mining engineers and analytical chemists.	Park City	Summit	Wm. A. Wilson, mining engineer and metallurgist.
"	"	<b>GEORGE W. WARE</b> , 103 W. Ninth st., mining engineer; mineral properties, coal, iron, manganese, etc.; Nothing but first-class properties and securities handled or offered.	Provo	Utah	H. H. Bendershot, Excelsior Block, mining engineer and assayer.
Clarksville	Montgomery	H. G. Woodward, mining engineer.	St. George	Washington	Isaac C. MacFarland, civil engineer and surveyor.
Harriman	Ronne	Louis E. Bryant, mining engineer.	Salt Lake City	Salt Lake	Bannister & Burch, 49 S. Main st., civil and mining engineers.
Jellico	Campbell	<b>DAVID C. BARKER</b> , mining and consulting engineer. Experience in England, South Wales, South Africa and United States. Diplomas of honor.	"	"	<b>BEWICK, MOREINC &amp; HOOPER</b> , Room 29 Central Block, mining engineers.
Knoxville	Knox	J. W. Steum, 152 Gay st., analytical chemist and assayer.	"	"	J. W. Currie, 159 Main st., assayer.
Nashville	Davidson	Wm. L. Dudley, M. E., care of Vanderbilt University, professor of chemistry.	"	"	Ellsworth Dagget, U. S. surveyor-general, mining engineer and metallurgist.
"	"	Gov. W. Ford, Inspector of mines and commissioner of labor.	"	"	Wythe Denby, M. E., Rooms 406 and 407 Progress Bldg., U. S. deputy mineral surveyor.
"	"	<b>OLIN H. LANDRETH</b> , M. E., Vanderbilt University, professor mechanical engineering, technical expert.	"	"	<b>M. S. HANAUR</b> , 131 S. Main st., assayer and chemist.
South Pittsburg	Marion	F. P. Clute, civil and mining engineer.	"	"	A. P. Hanson, Room 517 P. O. Block, civil and mining engineer.
Whitwell	Marion	James J. Ormsbe, mining engineer.	"	"	A. Jesson, 558 E. Fourth Temple st., civil and mining engineer.
			"	"	Jones & Jacobs, 47 Main st., mechanical and contracting engineers.
			"	"	<b>C. LAVACINIO</b> , 76 W. Second South st., Rooms 19 and 20, mining and consulting engineer. Cable address, "Lavacino," Salt Lake.
			"	"	Simon F. Mackle, 115 Main st., civil engineer and mineral surveyor.
			"	"	<b>J. McVICKER</b> , P. O. Box 1044, assayer.
			"	"	<b>R. H. OFFICER &amp; CO.</b> , 160 S. W. Temple st., assayers, chemists and ore buyers.
			"	"	<b>RICHARD H. TERHUNE</b> , 417 W. Temple st., mining engineer and metallurgist; gen. supt. Hamauer Smelting Works.

## TEXAS

Austin	Travis	E. T. Dumble, state geologist.			
Eagle Pass	Maverick	<b>BERNARD F. HECKELMAN</b> , P. O. Box 35, U. S. assayer and chemist.			
El Paso	El Paso	Salem T. Chapin, assayer and ore purchasing agent.			
"	"	F. W. Edelsten, M. E., cor. Chihuahua and San Francisco sts.			
"	"	A. H. Parker, mining and civil engineer.			
Llano	Llano	<b>JAMES A. WOOD</b> , M. E., P. O. Box 165, mining property examined, reported upon; agent for Wakelield Iron & Coal Land Improvement Co., Llano, Texas.	Bedford City	Bedford	H. B. Colburn, mining engineer and metallurgist.
Shafter	Presidio	<b>WM. S. NOYES</b> , mining engineer, supt. Presidio Mining Co. and Idaho Creek Mill & Mining Co.	Big Stone Gap	Wise	James M. Hodge, geologist and engineer.
Weatherford	Parker	W. Hamon, P. O. Box A, mining engineer.	Covington	Alleghany	Graham B. Bell, mining engineer.
			Fineastle	Botetourt	Frank G. Daggett, civil engineer and architect.
			Harrisonburg	Rockingham	Robert B. Allen, mining and civil engineer.
			Longdale	Alleghany	Guy R. Johnson, civil, mining and furnace engineer.

## UTAH

American Fork	Utah	Andrew Adamson, U. S. deputy mineral surveyor.	Mineral City	Louisa	W. L. Bishop, Mineral av. and First st., civil and mining engineer.
Beghun City	Box Elder	N. P. Anderson, U. S. deputy mineral surveyor.	Newbern	Pulaski	Edward Shelley, mineral expert.
Castle Gate	Emery	Robt. Forrester, geologist, mine surveyor and inspector.	Pulaski City	Pulaski	<b>THOMAS J. JONES</b> , M. E., care Bortha Zinc & Mineral Co., metallurgist and analytical chemist.
Duchesne	Utah	<b>BERT SEABOLDT</b> , M. E., gen. supt. mines Gibson Asphaltum Co.	Richmond	Henrico	<b>DR. HENRY FROELING</b> , 17 S. Twelfth st., analytical and consulting chemist, assayer and mining engineer. Mines and mineral property in the south examined.
Eureka	Junah	Bridges & Nelson, Bank Bldg., mining engineers.	Ogden	Weber	Washington Jenkins, 2678 Washington town av., U. S. deputy mineral surveyor.
			Roose	Roose	August A. Miller, M. E., P. O. Box 277, analytical chemist and assayer.

## VIRGINIA

Bedford City	Bedford	H. B. Colburn, mining engineer and metallurgist.
Big Stone Gap	Wise	James M. Hodge, geologist and engineer.
Covington	Alleghany	Graham B. Bell, mining engineer.
Fineastle	Botetourt	Frank G. Daggett, civil engineer and architect.
Harrisonburg	Rockingham	Robert B. Allen, mining and civil engineer.
Longdale	Alleghany	Guy R. Johnson, civil, mining and furnace engineer.
Low Moor	Alleghany	E. S. Campbell jr., mining engineer and chemist.
Mineral City	Louisa	W. L. Bishop, Mineral av. and First st., civil and mining engineer.
Newbern	Pulaski	Edward Shelley, mineral expert.
Pulaski City	Pulaski	<b>THOMAS J. JONES</b> , M. E., care Bortha Zinc & Mineral Co., metallurgist and analytical chemist.
Richmond	Henrico	<b>DR. HENRY FROELING</b> , 17 S. Twelfth st., analytical and consulting chemist, assayer and mining engineer. Mines and mineral property in the south examined.
Roose	Roose	August A. Miller, M. E., P. O. Box 277, analytical chemist and assayer.

TOWN AND COUNTY	NAME
Roanoke.....Roanoke (Continued.)	<b>EDMUND C. PECHIN</b> , M. E., will report on iron properties.
"....."	Oscar Saabye, Campbell st., opp. post-office, consulting civil engineer.
Stanleyton.....Page	C. B. Foote, mining engineer.

## WASHINGTON

Anacortes.....Skagit	Amos Bowman, cor. Fifth av., geologist, transportation, coal and power.
Colfax.....Whitman	E. H. Hendsch, mining and mechanical engineer.
Colville.....Stevens	J. C. Cobaugh, assayer and mineralogist.
Durham.....King	<b>ROBERT YOUNG</b> , civil and mining engineer; specialist on iron, coal, fireclay, firebricks for furnace heads, coal washing, coke, coke making and fire-brick plant.
Fairhaven.....Whatcom	R. E. Helms, mining engineer.
New Whatcom.....Whatcom	M. Muir Picken, P. O. Box 781, U. S. deputy mineral surveyor.
Olympia.....Thurston	Amos F. Shaw, U. S. surveyor-general.
Ruby.....Okanogan	<b>LUTHER WACONER</b> , M. E., manager Washington Reduction Co.
Seattle.....King	C. E. Bogardus, 60 Columbia st., assayer and chemist.
"....."	<b>ANDREW F. BURLEICH</b> , mining engineer.
"....."	Alexander M. Reynolds, M. E., 63 Squire-Latimer Bldg., min. surveyor.
Sedro.....Skagit	A. G. Mosier, C. E., U. S. deputy mineral surveyor.
Snohomish.....Snohomish	Elmer Leufest, C. E., U. S. deputy mineral surveyor.
Spokane.....Spokane	B. C. Riblet, Rooms 23 and 24 Eagle Bldg., U. S. deputy mineral surveyor.
"....."	<b>LEONARD SIVYER</b> , mining engineer, mine owner, operator; carefully reports on mines anywhere.
"....."	Charles Trumbull, mining engineer.
Tacoma.....Pierce	<b>WILLIAM BREDEMAYER</b> , Ph. D., 301 1/2, A st., Lawrence Bldg., Rooms 3, 4 and 5, mining engineer, assayer, U. S. mineral surveyor. Thirty-four years' experience in Europe, Asia and America.
"....."	<b>DR. WILLIS E. EVERETT</b> , 1318 E. St. South, mining geologist, assayer and mining lawyer.

## WEST VIRGINIA

Charleston.....Kanawha	<b>ALBERT M. CAMPBELL</b> , Charleston National Bank Bldg., civil and mining engineer; the opening of coal, iron and gold mines a specialty.
Clarksburg.....Harrison	G. B. Chorpensing, civil and mining engineer.
Dego.....Kanawha	<b>OSCAR A. VEAZEY</b> , civil and mining engineer.
Dunlow.....Wayne	<b>THOMAS NICHOL</b> , mine supt. and mining engineer.
Elk Garden.....Mineral	Henry Cunningham, mine inspector.
Elkhorn.....McDowell	Harris & Lincoln, mining and civil engineers.
"....."	Eugene B. Wilson, mining engineer.
Fairmont.....Marion	J. Perry Thompson, Main st., civil and mining engineer.
Moundsville.....Marshall	J. F. Hurley & Bro., La Fayette av., civil and mining engineer.
Powellton.....Fayette	C. Schalz, mining engineer and surveyor.

TOWN AND COUNTY	NAME
Rush Run.....Fayette	Horace D. Gast, mining engineer.
Wellsburg.....Brooke	Millard E. Boyd, cor. Commerce and Liberty sts., mining and civil engineer.
Wheeling.....Ohio	C. Q. Hawling, 1520 Market st., analytical chemist.

## WISCONSIN

Beloit.....Rock	<b>ERASTUS C. SMITH</b> , Ph. D., Beloit College, chemical laboratory, analytical and consulting chemist.
Florence.....Florence	C. S. Simpson, civil and mining engineer.
Hurley.....Ashland	<b>CEO. H. ABEEL</b> , M. E., iron mines and blast furnaces.
Livingston.....Grant	John Green, mining engineer.
Madison.....Dane	D. C. Jackson, electrical engineer.
Milwaukee.....Milwaukee	Davenport Fisher, 334 Broadway, analytical chemist.
"....."	A. S. Mitchell, 436 Milwaukee st., chemist and assayer.
"....."	Theo. W. Robinson, care of Illinois Steel Co., mining engineer.
"....."	Harry E. Smith, 133 Twenty-sixth st., chief chemist C. M. & St. P. Ry.
Trempealeau.....Trempealeau	G. H. Squires, geologist.

## WYOMING

Cheyenne.....Laramie	Wm. A. Richards, U. S. surveyor-gen.
Lander.....Fremont	J. E. Hill, U. S. deputy min. surveyor.
Red Bank.....Big Horn	A. L. Coleman, U. S. deputy mineral surveyor.
Rock Springs Sweetwater	M. S. Knight, civil and mining engineer.
"....."	<b>FRANK A. MANLEY</b> , mining engineer.
Welcome.....Crook	R. G. Anderson, civil and mining engineer.

## BRITISH COLUMBIA

Golden, Yale and Kootenay	<b>FOWLER &amp; FISHBURN</b> , mining engineers and metallurgists.
Kootenay.....Yale	Arthur W. Jenks, mining engineer.
Xanaimo.....Vancouver	Archibald Dick, M. E., inspector coal mines British Columbia.
"....."	Joseph Hardy, Rosewell Cottage, mining engineer and expert.
"....."	E. Priest, Stewart av., C. E., provincial land and mine surveyor.
Vancouver.....New Westminster	John Robson, provincial secretary.
Victoria.....Victoria	Herbert Carmichael, government analyst and assayer.

## NEW BRUNSWICK

Fredericton.....York	L. J. Tweedie, surveyor general.
St. John.....St. John	Alfred Markham, Sun Bldg., mining engineer and mineral expert.

## NOVA SCOTIA

Ferrona.....Pictou	R. E. Chambers, mining engineer.
Halifax.....Halifax	John E. Hardman, 129 Hollis st., mining and consulting engineer.

TOWN AND COUNTY OR STATE	NAME	TOWN AND STATE OR COUNTY	NAME
Middleton.....Annapolis	R. G. E. Leekie, American House, mining and civil engineer.	City of Mexico .....	<b>RICHARD E. CHISM</b> , 3a Independencia No. 1, Avenida Poniente 6, No. 47, Mining expert and patent agent, National School of Mines of Mexico. Publishes El Minero Mexicano, the only mining journal of Mexico; established 1873. Organ of the richest class of Mexicans and Spaniards. Advertising very effective. Rates low. Subscription \$3.00 a year. El Minero Mexicano Patent, Trade Mark and Copyright Agency. Lowest rates, quickest time.
Oxford.....Cumberland	J. M. Reid, Musquodoboit Harbor, mining engineer.	Durango .....	<b>WILLIAM VICIGERS</b> , mining and mechanical engineer, superintendent of the Durango Steel & Iron Co., Durango, Mexico.
Sherbrooke...Gaysboro	<b>C. F. MONCKTON</b> , mining engineer, dealer in mining properties, gold, coal and iron.	La Noria .....	Zacatecas <b>Frank H. Seamon</b> , mining engineer and chemist.
Sydney.....Cape Breton	Joseph W. Revere, mining engineer.	Magdalena .....	Sonora Ygnacio Bonillas, M. E., government mining expert Magdalena District.

## ONTARIO

Kingston.....Kingston	Geo. A. Spotswood, 46 Clarence st., C. E., mining engineer.	MonteMorelos/NuevoLeon	Dr. H. B. Butcher, mining engineer.
Marmora.....Hastings	G. L. Woodworth, mining engineer.	Monterey .....	Nuevo Leon T. S. Austin, metallurgist.
Ottawa.....Ottawa	<b>ROBERT BELL</b> , geologist, assistant director Geological survey, Canada.	" .....	" .....
" .....	Geo. M. Dawson, geologist.	" .....	" .....
" .....	Elfric D. Ingrassia, mining engineer to geological survey of Canada.	" .....	" .....
" .....	Albert P. Lowe, Geological Survey, geologist and mining engineer.	" .....	" .....
" .....	Alfred R. C. Selwyn, C. M. E., LL. D., F. R. S., director geological survey of Canada.	Pachuca .....	Hidalgo <b>FRED. W. BOWDEN</b> , 57 Hidalgo st., mining engineer, surveyor and assayer.
" .....	J. Laimson Wills, M. E., 206 Albert st., mining expert, chemist and assayer.	Parral .....	Chihuahua Thomas F. Doyle, mining engineer.
Port Arthur ..Algoma	A. Longheed, civil and mining engineer.	San Felipe .....	Coahuila Edward G. Tuttle, mining engineer.
" .....	<b>WALPOLE ROLAND</b> , C. E., M. E., Arthur st., topographical surveyor.	<b>AUSTRALIA</b>	
" .....	Russell & Co., Cameron st., mining engineers and land surveyors.	Dundas .....	Tasmania <b>B. P. EKBERG</b> , mining engineer.
Sudbury.....Algoma	James B. Gordon, civil and mining engineer.	<b>ENGLAND</b>	
" .....	James B. Hammond, Cedar st., chemist and metallurgist.	London.....Middlesex	<b>BAYLISS &amp; ROBINSON</b> , 54 Old Broad st., E. C., mining and consulting engineers. See Marysville, Mont.
" .....	Louis V. Rorke, Elm st., surveyor, mining and civil engineer.	" .....	" .....
" .....	<b>A. D. MACDONELL</b> , mining engineer.	" .....	" .....
Sydenham ..Addington	James Foxton, William st., mining and mechanical engineer.	<b>FRANCE</b>	
Toronto.....Toronto	Wm. Hamilton Merritt, 15 Toronto st., mining engineer and metallurgist.	Paris .....	J. M. Bel, 110 Boulevard Malesherbes, civil and mining engineer.
" .....	W. Thos. Newman, 75 Oxford st., mining engineer.	" .....	<b>EMILE COLLINS</b> , 10 Me Auber, mining engineer.

## QUEBEC

Black Lake.....Megantic	<b>A. M. EVANS</b> , M. E., specialty, coal, bituminous, asbestos and copper.
Montreal ..Montreal	J. T. Donald, 124 St. James st., mining engineer and assayer.
Quebec.....Quebec	J. Obalski, government mining engineer.
Sherbrooke ..Sherbrooke	F. A. Halsey, mining engineer.

## MEXICO

Alamos.....Sonora	Frank W. Breach, mining engineer.
Catorce ..San Luis Potosi	<b>FRANCISCO M. COCHLAN</b> , mining engineer.
Cerralvo ..Nuevo Leon	H. C. Harrison, mining engineer, Santa Anita Mining Co.

Durango ..Durango	<b>WILLIAM VICIGERS</b> , mining and mechanical engineer, superintendent of the Durango Steel & Iron Co., Durango, Mexico.
La Noria ..Zacatecas	Frank H. Seamon, mining engineer and chemist.
Magdalena ..Sonora	Ygnacio Bonillas, M. E., government mining expert Magdalena District.
MonteMorelos/NuevoLeon	Dr. H. B. Butcher, mining engineer.
Monterey ..Nuevo Leon	T. S. Austin, metallurgist.
" .....	Arthur K. Brewer, assayer and chemist.
" .....	<b>ELWOOD J. WILSON</b> , E. M., mining engineer and metallurgist, metallurgist Compania Minera Fundidora y Almadora, Monterrey.
Pachuca ..Hidalgo	<b>FRED. W. BOWDEN</b> , 57 Hidalgo st., mining engineer, surveyor and assayer.
Parral ..Chihuahua	Thomas F. Doyle, mining engineer.
San Felipe ..Coahuila	Edward G. Tuttle, mining engineer.

## AUSTRALIA

Dundas ..Tasmania	<b>B. P. EKBERG</b> , mining engineer.
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## ENGLAND

London.....Middlesex	<b>BAYLISS &amp; ROBINSON</b> , 54 Old Broad st., E. C., mining and consulting engineers. See Marysville, Mont.
" .....	R. J. & Wm. Frocheville, 33 Broad Street av., mining engineers.

## FRANCE

Paris .....	J. M. Bel, 110 Boulevard Malesherbes, civil and mining engineer.
" .....	<b>EMILE COLLINS</b> , 10 Me Auber, mining engineer.

## GUIANA

Paramaribo,Dutch Guiana	<b>J. J. SCHOFIELD</b> , M. E., gold mining expert, specialty, African and South American quartz and placer mines. Open to examine, report, develop and place properties as paying mines, according to report furnished.
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## HONDURAS

Department de Copan ..	J. C. Kingsley, mining engineer Department de Copan.
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## INDIA

Calcutta .....	P. Doyle, 19 Lall Bazar, civil, mining and consulting engineer.
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# BROKERS, BANKERS, INVESTMENT COMPANIES AND MINING EXCHANGES

CALIFORNIA		TOWN AND COUNTY	NAME
		Denver . . . Arapahoe (Continued.)	<b>FRED A. COX</b> , 375 Club Bldg., broker; mines and mineral lands.
Los Angeles	Los Angeles	" "	Denver Mining Exchange, Mining Exchange Bldg.
San Francisco	San Francisco	" "	<b>D. I. EZEKIEL</b> , Room 420 Mining Exchange, mining investment broker, member of the Colorado Stock Exchange; dividend stocks a specialty, mining syndicates formed, correspondence solicited. Reference, Colorado National Bank.
"	"	" "	<b>NAT. T. MESSER</b> , 2 and 26 Nevada Block, broker; prest. Hale & Norcross and Andes Silver Mining Cos.
"	"	" "	Pacific Mining Exchange, 45 Merchants' Exchange, 431 California st.
"	"	" "	Horgan D. Randlett, 420 Montgomery st., broker.
		" "	<b>A. P. FENNERTY</b> , 920 Seventeenth st., mining broker, Dealer in Colorado gold mines; mines secured for syndicates; mining companies organized; dividend-paying mines and mining stocks. Your business and correspondence solicited.
COLORADO		TOWN AND COUNTY	NAME
Aspen	Pitkin	" "	<b>ARKELL, MAC MILLAN &amp; STEWART</b> , P. O. Box 653, brokers in mines and mining stocks. Reference, First National Bank, Aspen. (See adv., page 14.)
"	"	" "	<b>STOCKMAN &amp; BOURQUIN</b> , P. O. Box 542, mining and stock brokers and mining stocks. Reference, First National Bank and Bank of J. B. Wheeler & Co., Aspen; Wm. B. Root, Mining Exchange, Denver.
"	"	" "	<b>S. L. VAN AMVINCEN</b> , Hotel Jerome, mining promoter and stock broker.
Boulder	Boulder	" "	Frank Canfield, P. O. Box 703, broker.
Canon City	Fremont	" "	C. F. Turner, mining broker.
Colorado Springs	El Paso	" "	<b>KISSELL, OTIS &amp; CONNOR</b> , brokers, real estate, investments and stocks. (See adv., page 14.)
"	"	" "	W. H. Leonard, Hagerman Block, Room 13, mining stock broker
"	"	" "	<b>PROUDFIT, EDSALL &amp; COFFIN</b> , Hagerman Bk. B., Kiowa st., brokers.
"	"	" "	<b>W. W. WILLIAMSON</b> , 109 1/2 S. Fremont st., mining stock and investment broker.
Denver	Arapahoe	" "	<b>HENRY APPLE</b> , 1637 Champa st., broker in mines, mining and other stocks.
"	"	" "	<b>BAKER &amp; FELT</b> , 1035 Seventeenth st., bankers and brokers.
"	"	" "	<b>SAMUEL P. BEALL</b> , Room 421 Mining Exchange Bldg., P. O. Box 1966, stock broker; member of the Colorado Mining Stock Exchange of Denver.
"	"	" "	Robert Billings & Co., Windsor Hotel Block, ore brokers.
"	"	" "	<b>CHAS. BLEIBEL</b> , 1645 Curtis st., Room 2, broker, mining stocks, bonds, etc.
"	"	" "	<b>CEO. WIRT BOWMAN &amp; CO.</b> , Jacobson Bldg., mining promoters and reporters; proprietors of Colorado Concentrating Co., and managers of the Gold Mint Mining Co.
"	"	" "	Robt. H. Buek, 310 Mining Exchange, investments.
"	"	" "	<b>WM. CELDER &amp; CO.</b> , 207-209 Boston Bldg., mining and general brokers, stocks and bonds bought and sold or handled on commission.
"	"	" "	<b>ERNEST J. HART</b> , 411 Ernest & Cranmer Block, broker.
"	"	" "	<b>W. F. KENDRICK</b> , Room 705 Mining Exchange Bldg., mining investments, official broker for the Extension Gold Mining & Milling Co., of Breckenridge; the Masstotte Gold Mining Co., of Alma, and Beaver Creek Mining & Milling Co., of Cripple Creek and Creede. Reference, Canon National Bank, Denver, Colo. (See adv., page 53.)
"	"	" "	P. J. Medina, 1608 Champa st.
"	"	" "	<b>WM. B. ROOT</b> , Mining Exchange Bldg., stocks and mines; member Colorado Mining Stock Exchange.
"	"	" "	<b>C. F. SCHMIDT</b> , 506 Mining Exchange Bldg., mining stock investments; member Colorado Mining Stock Exchange. Business for non-residents a specialty.
"	"	" "	<b>W. M. TAYLOR &amp; CO.</b> , 16 and 17 Lombard Bldg., mining stock brokers, members of Colorado Mining Stock Exchange. We make a specialty of buying and selling mines and miscellaneous securities. Examinations, reports, etc.
"	"	" "	H. L. Wadsworth & Co., 1631 Curtis st., brokers.
Pueblo	Pueblo	" "	<b>CHAS. E. CHERRINGTON</b> , 347 N. Union av., mining stock broker; mines and mining stocks bought and sold. Special attention paid to orders from non-residents.

## IDAHO

TOWN AND COUNTY	NAME
Wallace..... Shoshone	Cour d'Alene Real Estate and Mining Exchange, brokers.
" .....	<b>NATHAN WITTNER</b> , Bank st., broker; correspondence solicited, good investments secured.

## ILLINOIS

Chicago.....Cook	<b>SIDNEY BOCUE &amp; CO.</b> , 59 Dearborn st., brokers; land in large bodies, mines and mining lands; Missouri and Arkansas made a specialty.
" .....	Ferry & Wright, 175 Dearborn st., brokers.
" .....	<b>HAMILTON, LOWE &amp; CO.</b> (incorporated), Chamber Commerce Bldg., precious metals and ores. (See adv., page 14.)
" .....	<b>KLINC &amp; STRICKLER</b> , 123 La Salle st., brokers, promoters for the sale of mining properties; companies organized and capital secured.
" .....	<b>EDWARD B. STILES</b> , P. O. Box 1234, broker; mining stocks and western investments. Correspondence solicited.

## MICHIGAN

Detroit.....Wayne	<b>LEE BURT</b> , 104 Hammond Bldg., purchase and sell lands, stocks, etc. Specialty, iron. (See adv., page 546.)
" .....	<b>J. V. Campbell &amp; Co.</b> , 27 Larned st. W., bankers and brokers.

## MINNESOTA

Duluth.....St. Louis	<b>JAMES A. BOCCS</b> , 330 Chamber of Commerce Bldg., banker and broker. (See adv., page 14.)
" .....	Duluth Stock Exchange, 325, 327 W. Superior st.
" .....	<b>FRANKLIN PAINE &amp; CO.</b> , 44 Board of Trade, brokers. Correspondence solicited.
" .....	Grant Wyatt 302 Palladio Bldg., broker.
Minneapolis.....Hennepin	<b>J. Russell Jones</b> , 427 Nicollet av., Room 7.
" .....	Minneapolis Mining & Stock Exchange.
" .....	<b>FRANKLIN PAINE &amp; CO.</b> , 44 Chamber of Commerce, brokers. Correspondence solicited.

## MISSOURI

Kansas City.....Jackson	<b>P. W. KLINE &amp; CO.</b> , 400 Keith Bldg., brokers.
" .....	<b>J. M. O'Brien</b> , Room 420 American Bank Bldg.

## MONTANA

Butte.....Silver Bow	<b>J. CHAUVIN</b> , broker in mines and mining stock. (See adv., page 526.)
Butte.....Silver Bow	<b>B. C. W. EVANS</b> , 16 X. Main st., broker; dealer in Montana mining properties; twenty years' experience. Reference, First National Bank of Butte.

## TOWN AND COUNTY NAME

Helena.....Lewis and Clarke	<b>Samuel K. Davis</b> , 26, 27 Bailey Block, broker.
" .....	<b>W. G. Gooding</b> , 12 Main st., broker.
Missoula.....Missoula	<b>Geo. F. Brooks</b> , Higgins Block, broker.

## NEW MEXICO

Chloride.....Sierra	<b>JAMES P. BLAIN</b> , mining, real estate and general broker.
" .....	<b>Edwin F. Holmes</b> , broker.
Socorro.....Socorro	<b>Cheves &amp; Dougherty</b> , mine brokers.
" .....	<b>H. P. Dickinson</b> , broker and assayer.

## NEW YORK

New York.....New York	The American Metal Co., Ltd., 80 Wall st., metal brokers.
" .....	<b>JAMES EDWARDS</b> , 11 Wall st., promoter of mining properties.
" .....	<b>Francis N. Gove</b> , 16 Exchange pl., broker.
" .....	<b>E. K. Grant</b> , 57 Broadway, broker.
" .....	<b>HANDY &amp; HARMON</b> , 24 Nassau st., brokers.
" .....	<b>Wm. L. Patton &amp; Co.</b> , 6 Wall st., bankers and brokers.
" .....	<b>LEO VON ROSENBERG</b> , 35 Broadway, broker; negotiates sales of mines, etc.
" .....	<b>GEORGE R. WOOD</b> , 53 Broadway, mines and investment securities. (See adv., page 546.)

## OHIO

Cleveland.....Cuyahoga	<b>JOHN J. DATE</b> , Room 219 Perry-Tayne Bldg., stock and bond broker; Lake Superior iron stock a specialty.
" .....	<b>WM. J. HILANDS</b> , 108 Superior st., investment securities, mines and railroads.
" .....	<b>CHAS. H. POTTER &amp; CO.</b> , 104 Superior st., stocks and mining investments.
Fostoria.....Seneca	<b>C. C. &amp; E. J. BARND</b> , S. E. cor. Wood and Crocker sts., brokers, organizers and promoters mines, factories, etc.

## PENNSYLVANIA

Philadelphia.....Philadelphia	<b>J. Wesley Pullman</b> , 238 S. Third st., broker.
Pittsburgh.....Allegheny	<b>C. M. CARRISON</b> , 615 and 616 Lewis Block, copper ores, milles, iron and steel. (See adv., page 16.)
" .....	<b>ROBINSON &amp; ORR</b> , 419 Wood st., brokers, iron mining stocks.

## SOUTH CAROLINA

Charleston.....Charleston	<b>Paul C. Trenholm</b> , broker in phosphate rock, etc.
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## SOUTH DAKOTA

Deadwood.....Lawrence	<b>John Baggaley</b> , mining broker.
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## TENNESSEE

TOWN AND COUNTY	NAME
Chattanooga . . . Hamilton	<b>CEO. W. WARE</b> , 103 W. Ninth st., broker; mineral properties strictly first-class.

## TEXAS

El Paso . . . . . El Paso	J. D. Groesbeck, 701 N. Stanton st., broker; purchasing agent El Paso smelting Works.
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## UTAH

Salt Lake City . . . Salt Lake	John J. Cushing, Commercial Block, broker.
" . . . . . "	<b>J. C. DAVIS</b> , 25 Central Block, P. O. Box 1074, mining stock broker and dealer in securities of every description; dividend-paying stocks a specialty. Refer, with permission, to McCormick & Co., bankers.
" . . . . . "	<b>JAMES A. POLLOCK</b> , 77, 78 Commercial Block, bond and stock broker; mining investments.
" . . . . . "	Tansey & Selton, 26, 29 Commercial Block, brokers.
" . . . . . "	J. H. Watts, 47 W. Second South st., broker.

## VIRGINIA

Fredericksburg Spottsylvania	I. G. Johnson, mining broker.
Newbern . . . . . Pulaski	Edward Shelley, broker and mineral expert.

## WASHINGTON

Durham . . . . . King	Pacific Investment Co.
Seattle . . . . . King	J. M. & F. W. Wilmans, Room 620 Bailey Bldg., brokers.
Spokane . . . . . Spokane	<b>JOHN C. FISHER</b> , Mining Exchange, broker.
" . . . . . "	Snow & Armstrong, 406 Riverside av., brokers.

## WISCONSIN

TOWN AND COUNTY	NAME
Milwaukee . . . Milwaukee	<b>CASE &amp; PECK</b> , 19 New Insurance Bldg., brokers; Lake Superior mining properties, mineral and timber lands.

## NEW BRUNSWICK

Millerton Northumberland	John J. Miller, mine dealer.
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## ONTARIO

Rat Portage . . . . . Algoma	John Kerr Bryden, broker.
Sudbury . . . . . Algoma	Jas. B. Hammond, Cedar st., dealer in nickel properties.
Toronto . . . . . York	H. A. Hilyard, 106 King st. W., broker.
" . . . . . "	<b>T. D. LEDYARD</b> , 57 Colborne st., Room 3, dealer in mines and mineral lands. Specialties, asbestos, mica, bessemer iron ores, nickel; English companies organized. Correspondence solicited.
" . . . . . "	C. V. M. Temple, 47 St. George st.

## QUEBEC

Montreal . . . . . Montreal	O. M. Harris, 209, 211 Commissioners st., broker.
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## MEXICO

Mexico . . . . . Mexico	Fco. Javler de L'Ertiz, 14 Calle de Cadena, broker.
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## ENGLAND

London . . . . . Middlesex	<b>JULIUS MATTON</b> , 7 St. Mary ave. E. C., metal merchant and agent for Meeberlech Lead Mining Co., Germany; Bousberg Zinc Mining Co., Berzelius, Germany. Open for other agencies in metal.
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# MINING AND COMMERCIAL ATTORNEYS

## ALABAMA

TOWN AND COUNTY	NAME
Edwardsville ... Cleburne	J. B. Merrill, attorney.
Fort Payne ... De Kalb	Norfleet & Carey, attorneys.
Mobile ... Mobile	<b>PILLANS, TORREY &amp; HANAW</b> , 74 St. Francis st., Rooms 5 and 6, attorneys-at-law; practice in all the courts, state and federal. Reference: Any bank or reputable business house in Mobile. Compilers of Alabama Laws for The Mining Directory. (See card, page 18.)

## ALASKA

Juneau	<b>JOHN C. HEID</b> , attorney at law. Special attention given mining and commercial laws; titles examined; do a general practice.
"	<b>J. F. MALONY</b> , attorney at law; mining titles examined and reported upon.

## ARIZONA

Florence ... Pinal	James Reymert Jr., attorney at law.
Tombstone ... Cochise	William Herring, Tombhat st., near Fourth, attorney and counselor at law.
Tucson ... Pima	<b>FRANCIS J. HENEY</b> , attorney at law, mining and commercial business given special attention, collections promptly attended to. Compiler of laws of Arizona for The Mining Directory. (See card, page 18.)

## ARKANSAS

Greenwood ... Sebastian	R. T. Powell, lawyer.
Little Rock ... Pulaski	<b>C. B. MOORE</b> , attorney at law. Compiler of Arkansas law for The Mining Directory. Commercial and mining business a specialty; collections receive prompt attention. (See card, page 18.)

## CALIFORNIA

Auburn ... Placer	Benj. P. Tabor, Rooms 5, 6 and 7 Stevens Block, mining attorney.
"	F. P. Tuttle, attorney at law.
Crescent City ... Del Norte	<b>L. F. COOPER</b> , 629 H st., attorney; lands, mines and redwood timber.
Grass Valley ... Nevada	A. Barrows, mining lawyer and notary public.
"	Kitts & Bowman, Main st., attorneys and notaries.
Los Angeles ... Los Angeles	Geo. B. Griffin, 714 Downey av., attorney and counselor at law.
"	<b>WELLS, MONROE &amp; LEE</b> , Rooms 11 to 18 Baker Block, attorneys for Union Pacific Ry., National Bank of California, etc.; commercial and mining law specialties.
Marysville ... Yuba	J. H. Craddock, Ellis Block, attorney and counselor at law.
Nevada City ... Nevada	Thomas S. Ford, attorney at law.

## TOWN AND COUNTY

## NAME

Nevada City ... Nevada	Fred Sears, opp. court-house, attorney at law.
Oakland ... Alameda	Geo. E. Dogolla, 957 Broadway, attorney at law.
Placerville ... El Dorado	Irwin & Irwin, attorneys at law.
"	Chas. A. Swisher, attorney at law.
San Bernardino ... San Bernardino	Harris & Gregg, attorneys at law.
"	Chas. J. Perkins, attorney at law.
San Francisco ... San Francisco	Dorn & Dorn, 306 Pine st., attorneys and counselors at law.
"	<b>Geo. A. JOHNSON</b> , 14 Sansome st., attorney and counselor at law. (Ex-attorney-general of California.) special attention given to the law of corporations, commercial law, collections and settlements of decedents' estates. References: The Mining Directory, National Legal Bureau, Tappan, McKillop & Co., J. B. Martindale and Wm. F. Wernise & Co., Chicago, Ill.; Hubbell's Legal Directory and Snow, Church & Co., New York City; Sharp & Albenan, Philadelphia, Pa.; Shriver, Bartlett & Co., Baltimore, Md.; J. A. Graft & Co., Cincinnati, Ohio; Northwest-Corn Collection Agency, Milwaukee, Wis.; Hon. John P. Dunn, ex-controller of state, San Francisco, and Hon. E. F. Colgan, controller of state, Sacramento, Cal. (See card, page 18.)

## COLORADO

Alamosa ... Conejos	Z. T. Brown, attorney at law.
Amethyst ... Saguache	Rueker, Spurgeon & Cassidy, P. O. Box 517, attorneys.
"	Thomas & Thomas, P. O. Box 463, lawyers.
Aspen ... Pitkin	Charles W. Franklin, attorney at law.
"	Aaron Heims, 5, 6 and 7 Hyman Block, attorney at law.
Boulder ... Boulder	Guy D. Duncan, Room 5 National State Bank Block, counselor at law.
Buena Vista ... Chaffee	G. K. Hartenstein, attorney at law.
Central City ... Gilpin	Chase Withrow, attorney at law.
Colorado Springs ... El Paso	Collburn & Dudley, N. Nevada av., attorneys.
"	Harris & Kinsley, 2 and 3 Mullanid Block, attorneys at law.
"	<b>J. E. MCINTYRE</b> , 104 E. Pike's Peak av., attorney at law; mining, commercial and realty law.
Cripple Creek ... El Paso	Charles H. Adams, attorney at law.
"	W. G. Alexander, lawyer.
Crystal ... Gunnison	C. J. S. Hoover, attorney at law.
Denver ... Arapahoe	<b>BARTELS &amp; BLOOD</b> , 504-508 People's Bank Bldg., attorneys at law; mining business, and collections receive prompt attention.
"	Willis B. Herr, 506 and 510 Equitable Bldg., attorney at law.

TOWN AND COUNTY		NAME	FLORIDA	
			TOWN AND COUNTY	NAME
Denver	Arapahoe (Continued.)	<b>MANLY &amp; MOORE</b> , 815-817 Ernest & Cranmer Bk., attorneys at law; real estate, mining and corporation law; counsel for numerous savings, loan, investment and mining companies; collection department. Depositions carefully taken. Compilers of Colorado law for The Mining Directory. (See card, page 19.)	Bartow	Polk John L. Albritton, cor. Main st. and Fort Meade av., attorney at law.
"	"	W. E. Richards, 615 Ernest & Cranmer Bk., attorney at law.	Gainesville	Alachua <b>HORATIO DAVIS</b> , attorney at law; practices in all the courts, state and federal; special attention given corporation and mining laws; prompt returns on collections. Reference, First National Bank of Gainesville. (See card, page 18.)
"	"	<b>A. W. RUCKER</b> , 501 and 502 Mining Exchange Bldg., attorney at law; practice in mining law exclusively.	Jacksonville	Duval A. W. Cockrell & Son, 29 E. Forsyth st., attorneys at law.
"	"	S. D. Walling, Tabor Bk., lawyer.	Leesburg	Lake J. B. Gaines, Main st., attorney.
"	"	T. J. Drum, Bank Bldg., mining attorney.	Ocala	Marion John H. Burchell, Merchants' National Bank Bldg., attorney at law.
Durango	La Plata	M. J. McCloskey, attorney at law.		
Fort Collins	Larimer	Frank J. Amis, attorney at law.		
Fulford	Eagle	J. I. Sampson, mining attorney.		
Georgetown	Clear Creek	C. T. Roberts, mining attorney.		
Glenwood Springs	Garfield	John T. Shumate, 1604 Bennet av., attorney at law.		
Gunnison	Gunnison	Alexander Gullett, attorney at law.		
"	"	Dexter T. Sapp, mining lawyer.		
Montrose	Montrose	Sherman & Twitchell, mining and general attorneys.	Salmon City	Lenhi Ralph P. Quarles, attorney at law.
New Castle	Garfield	Arthur L. Bearisley, mining and commercial attorney.		
Ouray	Ouray	Story & Stevens, attorneys at law.		
Pueblo	Pueblo	John A. Collins, 321 1/2 Santa Fe av., attorney at law.	Chicago	Cook <b>BALL &amp; BARRETT</b> , Suite 1501-1504 Unity Bldg., 79 Dearborn st., attorneys and counselors at law.
"	"	J. E. Rizer, Graham-Wescott Bk., attorney at law.	"	" <b>DAYTON, POOLE &amp; BROWN</b> , 215 Dearborn st., patent solicitors. (See card, page 12.)
Red Cliff	Eagle	A. R. Brown, attorney	"	" <b>ROSS &amp; TODD</b> , 185 Dearborn st., Rooms 13 and 14, attorneys and counselors at law. (See card, page 529.)
"	"	S. N. Hoover, attorney at law.	"	" St. John & Merriam, 79 Dearborn st., 1001-1004 Unity Bldg., attorneys and counselors.
"	"	Chas. K. Phillips, mining and commercial attorney.	"	" <b>CLARK VARNUM</b> , Suite 414 Chamber of Commerce Bldg., attorney at law. Especial attention given to important cases and non-resident business. Has as permanent correspondents and associate counsel a leading member of the bar in every city of importance in the United States. References given whenever and wherever required. (See card, page 528.)
Silver Cliff	Custer	McNeely & Watkins, attorneys.		
Silverton	San Juan	C. M. Frazier, cor. Twelfth and Ruse sts., attorney.		
Telluride	San Miguel	W. H. Gabbert, attorney at law.	Danville	Vernilion Edwin Winter, 414 Franklin st., attorney at law.
Walsenburg	Huerfano	R. R. Ross, attorney at law.	Joliet	Will Higgins & Akin, Room 21 Court-House, attorneys at law.
			Springfield	Sangamon Patton & Hamilton, 419 and 421 E. Adams st., attorneys at law.

## GEORGIA

Blairsville	Union	J. A. Butt, attorney at law.
La Fayette	Walker	Copeland & Jackson, Main st., attorneys.

## IDAHO

Salmon City	Lenhi	Ralph P. Quarles, attorney at law.
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## ILLINOIS

Chicago	Cook	<b>BALL &amp; BARRETT</b> , Suite 1501-1504 Unity Bldg., 79 Dearborn st., attorneys and counselors at law.
"	"	<b>DAYTON, POOLE &amp; BROWN</b> , 215 Dearborn st., patent solicitors. (See card, page 12.)
"	"	<b>ROSS &amp; TODD</b> , 185 Dearborn st., Rooms 13 and 14, attorneys and counselors at law. (See card, page 529.)
"	"	St. John & Merriam, 79 Dearborn st., 1001-1004 Unity Bldg., attorneys and counselors.
"	"	<b>CLARK VARNUM</b> , Suite 414 Chamber of Commerce Bldg., attorney at law. Especial attention given to important cases and non-resident business. Has as permanent correspondents and associate counsel a leading member of the bar in every city of importance in the United States. References given whenever and wherever required. (See card, page 528.)
Danville	Vernilion	Edwin Winter, 414 Franklin st., attorney at law.
Joliet	Will	Higgins & Akin, Room 21 Court-House, attorneys at law.
Springfield	Sangamon	Patton & Hamilton, 419 and 421 E. Adams st., attorneys at law.

## INDIANA

Williamsport	Warren	W. P. Rhodes, attorney at law.
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## IOWA

Centerville	Appanoose	T. M. Fee, attorney at law.
Des Moines	Polk	W. G. Harvison, Clapp Block, attorney at law.
Oskatoosa	Malhaska	J. F. & Wm. R. Lacey, attorneys.

## CONNECTICUT

Bristol	Hartford	<b>EPAPHRODITUS PECK</b> , 130 Main St., No. 2 Masonic Temple, attorney at law. Compiler of Connecticut law for The Mining Directory. References: Bristol Savings Bank, Bristol National Bank, Bristol Copper & Silver Mining Co. (See card, page 18.)
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## DISTRICT OF COLUMBIA

Washington	D. C.	<b>STORY B. LADD</b> , Loan & Trust Bldg., attorney; American and foreign patents.
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TOWN AND COUNTY	NAME	TOWN AND COUNTY	NAME
What Cheer	Keokuk <b>C. M. BROWN</b> , 1 and 2 Savings Bank Block, attorney at law. Member of American Attorneys' Association. Compiler of Iowa laws for The Mining Directory. Mining and commercial law a specialty; collections promptly attended to. (See card, page 18.)	Greenfield	Franklin Frederick L. Greene, cor. Main and Federal sts., attorney at law.
		Pittsfield	Berkshire Pingree Dawes Jr. & Burke, 25 Bank row, attorneys at law.
<b>MICHIGAN</b>			
		Jackson	Jackson Wilson & Cobb, attorneys at law.
		Norway	Dickinson <b>R. C. FLANNICAN</b> , attorney at law. Compiler of laws of Michigan for The Mining Directory. Corporation, mining and commercial law a specialty.
<b>MINNESOTA</b>			
		Duluth	St. Louis <b>A. E. McMANUS</b> , Room 293 Pallas Bldg., attorney at law; mining and commercial law a specialty, collections promptly attended to. Reference any bank or business house in Duluth. (See card, page 528.)
		"	" Geo. W. Mann, 214 Chamber of Commerce, attorney at law.
		"	" Herbert R. Spencer, 218 W. Superior st., attorney at law.
		"	" Tinkham & Tinkham, 105 and 107 West Superior st., attorneys at law.
		Minneapolis	Hennepin Chas. B. Holmes, 615 Guaranty Loan Bldg., attorney.
		St. Paul	Ramsey William Foulke, 25 and 26 National German-American Bank, attorney.
<b>MISSISSIPPI</b>			
		Jackson	Hinds <b>BRAME &amp; ALEXANDER</b> , attorneys at law, reporters of the supreme court of Mississippi, and attorneys for the Capital State Bank. Special attention given all commercial business entrusted to us. Prompt returns on collections. (See card, page 528.)
<b>MISSOURI</b>			
		Ash Grove	Greene Harvey Murray, attorney at law.
		Andora	Lawrence H. H. Bloss, attorney at law.
		"	" Carr McNatt, cor. Olive and Madison av., attorney at law.
		Cartersville	Jasper Joseph Fountain, E. Main st., attorney at law.
		Carthage	Jasper H. T. Harrison, 808 Clinton st., attorney at law.
		"	" Harrison & Harrison, S. E. corner of Square, attorneys.
		Fredericktown	Madison B. B. Cahoon, attorney at law.
		Joplin	Jasper <b>JAMES P. MEAD</b> , N. W. cor. Third and Main sts., attorney at law and notary public.
		"	" Chas. H. Montgomery, 317 Main st., attorney.
		"	" A. E. Spencer, Berz Block, attorney at law.
		Kansas City	Jackson Thos. C. Brown, 818-820 New York Life Bldg., attorney.
		"	" Hall & Van Valkenburgh, Rooms 829, 830 and 831 New York Life Insurance Bldg., attorneys.
		"	" Richard H. Stewart, 706 Wall st., attorney.
<b>KANSAS</b>			
Girard	Crawford Fuller & Randolph (see Pittsburg).		
Hutchinson	Reno Whiteside & Gleason, 24 S. Main st., attorneys at law.		
Lyons	Ree Jean F. Webb, mining attorney.		
Ness City	Ness Geo. S. Redd, attorney at law.		
Pittsburg	Crawford <b>FULLER &amp; RANDOLPH</b> , special attention given mining and commercial litigation and collections. Resident attorneys. A. T. & S. F. R. R. F. & P. Coal & Mining Co. St. L. & S. F. R. R. First National Bank, Girard. Pittsburg & Midway Coal Co. Franklin Coal Co. (See card, page 19.)		
Pleasanton	Lincoln W. W. McCullough, attorney at law.		
<b>KENTUCKY</b>			
Louisville	Jefferson <b>W. O. HARRIS</b> , 39 and 31 Bull Block, attorney at law (late Judge of Louisville law and equity court). Prompt attention given all commercial business entrusted to my care. (See card, page 19.)		
Whitesburg	Letcher D. D. Fields, attorney at law.		
<b>LOUISIANA</b>			
New Orleans	Orleans <b>FRANK L. RICHARDSON</b> , 7 Camp st., Morris Bldg., attorney at law. Commercial litigation and collections a specialty. (See card, p. 19.)		
<b>MAINE</b>			
Maebias	Washington <b>C. B. DONWORTH</b> , Donworth Bk., Main st., attorney and counselor at law. Commercial litigation a specialty. Collections receive prompt attention. (See card, page 19.)		
Portland	Cumberland Frank & Larrabee, 185 Middle st., attorneys and counselors at law.		
<b>MARYLAND</b>			
Baltimore	Baltimore <b>ELLIOTT &amp; HOFFMAN</b> , Daily Record Bldg., cor. Fayette and St. Paul sts., attorneys at law. Special attention given commercial, real estate and mining litigation. (See card, page 19.)		
<b>MASSACHUSETTS</b>			
Boston	Suffolk <b>HERBERT L. BAKER</b> , John Hancock Bldg., 178 Devonshire st. and 35 Federal st., attorney at law; gives special attention to commercial and mining litigation. (See card, page 19.)		
"	" <b>WALTER L. CHURCH</b> , 9 Franklin st., mining and commercial attorney, six years' practical experience in Colorado and Nevada mines.		

TOWN AND COUNTY		NAME	NEVADA	
Kansas City	Jackson (Continued.)	<b>TRABER &amp; McNEIL</b> , Rooms 307, 208 and 302 Long Bros. Bldg., attorneys at law (notary in office). Special attention given to mining and all kinds of commercial litigation. Prompt returns assured on collections. (See card, page 528.)	TOWN AND COUNTY	NAME
St. Joseph	Buchanan	<b>JOHN DONIPHAN</b> , 413 Francis st., attorney and mining law; presd. St. Joseph & Cripple Creek Mining Co., and Danphin Tin Co.; practice in state and United States courts.	Battle Mountain	Lander <b>JAMES F. DENNIS</b> , attorney at law.
Springfield	Greene	John W. Jump, Rooms 2 and 3 Green County Bank Bldg., attorney.	Elko	Elko E. L. Farrington, attorney at law.
Steelville	Crawford	E. A. Pinnell, Main st., opp. courthouse, attorney, notary public and abstractor.	Ely	White Pine Frank X. Murphy, attorney at law.
Webb City	Jasper	Lucius L. Wittlich, attorney.	Pioche	Lincoln <b>GEORGE S. SAWYER</b> , Lacour st., Lynch's Block, attorney at law; special attention given to business of mining companies; collections promptly attended to. Compiler of Nevada laws for The Mining Directory. (See card, page 528.)
West Plains	Howell	L. B. Harris, attorney.	Virginia City	Storey <b>W. E. F. DEAL</b> , Bank of California Bldg., attorney at law. Twenty-nine years' experience in mining litigation and mining titles. References, Bank of California and Nevada Bank of San Francisco.
			"	" C. E. Mack, Rooms 6 and 7 Odd Fellows Bldg., attorney at law.

## MONTANA

Billings	Yellowstone	O. F. Goddard, attorney and counselor at law.
Bozeman	Gallatin	Luce & Luce, commercial attorneys.
Butte	Silver Bow	E. H. Irvine, Son & Co., 21 E. Granite st., attorneys.
"	"	F. T. McBride, 122 N. Main st., attorney at law.
Castle	Meagher	Miller & Peavy, mining attorneys.
Deer Lodge	Deer Lodge	H. R. Whitehill, attorney at law.
Dillon	Beaver Head	Emmett Callahan, 159 Main st., attorney at law.
Great Falls	Cascade	Cooper & Pigott, 83 and 84 Tod Bldg., attorneys at law.
"	"	H. A. Day, Dunn Block, Central av., mining and commercial attorney.
Helena	Lewis and Clarke	S. A. Balliet, 18 1/2 S. Main st., attorney.
"	"	Alex. C. Botkin, 109, 119 and 111 Granite Block, mining and commercial attorney.
"	"	<b>DAVID B. CARPENTER</b> , Room 10 Bailey Block, attorney at law; general practice in corporation, mining, real estate and commercial law. Special attention given to mining litigation, collections, etc. (See card, page 528.)
"	"	J. A. Carter, attorney at law.
"	"	H. R. Cansty, Granite Block, attorney at law.
"	"	<b>MILES J. CAVANAUGH</b> , Room 9 Bailey Block, mining and commercial attorney.
"	"	John B. Clayberg, cor. Main and Edwards, attorney at law.
"	"	J. M. Clements, attorney at law.
Townsend	Meagher	J. E. Kamouse, Broadway, attorney.
White Sulphur Springs	Meagher	Thompson & Maddox, attorneys at law.

## NEBRASKA

Lincoln	Lancaster	<b>STEVENS, LOVE &amp; COCHRAN</b> , Newman Block, attorneys at law; general law, equity and corporation practice, with special attention to commercial business. Refer to any bank in Lincoln; James H. Walker & Co., Chicago; Hibbard, Spencer, Bartlett & Co., Chicago; Continental Building & Loan Assn., Kansas City; Omaha Oil & Paint Co., Omaha. First-class reference will be furnished in any large city in the United States. (See card, page 528.)
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## NEW HAMPSHIRE

Nashua	Hillsboro	<b>H. A. CUTTER</b> , 76 Main st., attorney at law (commissioner for Massachusetts); commercial and real estate law specialty. Practice in all courts. Collections receive prompt attention. (See card, page 529.)
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## NEW JERSEY

Trenton	Mercer	<b>LOWTHORP &amp; OLIPHANT</b> , 132 E. State st., attorneys and counselors at law; corporation and commercial law; practice in state and federal courts. (See card, page 529.)
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## NEW MEXICO

Albuquerque	Bernalillo	Warren, Ferguson & Brarer, First National Bank Bldg., attorneys.
Cerrillos	Santa Fe	Chas. F. Easley, attorney at law.
Deming	Grant	<b>S. M. ASHENFELTER</b> , Wormser Block, Silver av., attorney at law; special attention given to mining, commercial and real estate litigation.
Hillsboro	Sierra	A. B. Elliott, attorney at law.
"	"	F. W. Parker, attorney at law.
Las Cruces	Doña Ana	S. B. Newcomb, attorney at law.
Silver City	Grant	<b>JAMES S. FIELDER</b> , attorney at law. Reference, The Silver City National Bank. Mining law a specialty.
"	"	H. L. Pickett, attorney at law.
"	"	John M. Wright, attorney at law.
Socorro	Socorro	Cheves & Dougherty, Abryta Block, attorneys at law.
"	"	James G. Fitch, attorney at law.
"	"	H. B. Hamilton, attorney at law.
White Oaks	Lincoln	B. H. Dye, attorney at law.

## NEW YORK

Gouverneur	St. Lawrence	Conger & Orvis, attorneys at law.
Granville	Washington	Jurden E. Seeley, Main st., attorney and counselor at law.
New York	New York	J. F. Crosby, 54 Exchange pl., attorney at law.



## TOWN AND COUNTY

## NAME

New York	New York	<b>HASTINGS &amp; CLEASON</b> , 265 Broadway, attorneys at law. Commercial and mining litigation specialties. Prompt attention given collections. (See card, page 529.)
"	"	A. P. Smith, 261 Broadway, attorney at law.

## NORTH CAROLINA

High Point	Gulford	Edwin D. Steele, attorney at law.
Morgantown	Burke	M. Silver, attorney at law.
Salisbury	Rowan	R. Lee Wright, Legal row, attorney at law.
"	"	Lee S. Overman, attorney at law.
Webster	Jackson	<b>WALTER E. MOORE</b> , attorney at law; prompt returns on collections; mining and commercial law a specialty. (See card, page 529.)

## NORTH DAKOTA

Fargo	Cass	<b>SPALDING &amp; PHELPS</b> , attorneys and counsellors at law; practice in all the courts, state and federal; commercial and real estate cases a specialty; collections promptly attended to. (See card, page 529.)
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## OHIO

Ashland	Ashland	Byron Stillwell, 92 Main st., attorney at law.
Bellaire	Belmont	Gallaher & Woodbridge, over post-office, attorneys at law.
Cleveland	Cuyahoga	<b>ROBERT E. McKISSON</b> , Mercantile Bank Bldg., attorney and counsellor at law; corporation and commercial law; estates settled; prompt personal attention given to legal collections; attorney for The Diebold Safe & Lock Co., The Ohio Heating & Plumbing Manfg. Co., The Cleveland Window Glass Co., The Fairbanks-Morse Co., H. W. Hubbard, Esq., and Henry Koebel, Esq., etc., etc. References: The Central National Bank, the Merchants' Banking & Storage Co., the Euclid Avenue National Bank and the Cleveland National Bank, special references whenever desired. Depositions taken. Notary public in office. (See card, page 529.)
Columbus	Franklin	<b>FINCKEL &amp; FINCKEL</b> , Room 61, Wesley Bldg., attorneys; patents and patent litigation; special attention given to mining inventions.
Fostoria	Seneca	<b>CHAS. C. BARND</b> , S. E. cor. Wood and rocker sts., attorney; specialty, patents and royalties.
New Lisbon	Columbiana	N. B. Billingsley, attorney at law.
"	"	Conrad Hune, E. Walnut St., attorney at law.

## OKLAHOMA

Guthrie	Logan	<b>WILLIAM BLINCOE</b> , attorney at law; special attention given to commercial and real estate law; do a general practice. (See card, page 529.)
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## OREGON

## TOWN AND COUNTY

## NAME

Baker City	Baker	Frank L. Moore, attorney at law.
"	"	L. M. Robinson, Main st., mining attorney.
Grant's Pass	Josephine	<b>ROBERT C. SMITH</b> , First National Bank Bldg., attorney at law; mining and commercial litigation a specialty; collections promptly attended to. (See card, page 530.)
Jacksonville	Jackson	C. W. Kahler, California st., attorney at law.
Portland	Multnomah	G. O. Holman, 4 Washington st., Washington Bldg., attorney at law.
"	"	Zera Snow, Concord Bldg., attorney at law.

## PENNSYLVANIA

Allentown	Lahigh	Samuel J. Kistler, attorney at law.
Bedford	Bedford	John M. Reynolds, attorney at law.
Bethlehem	Northampton	J. R. Kennerer, Globe Bldg., Main st., attorney at law and notary public.
Clearfield	Clearfield	Oscar Mitchell, Market st., attorney at law.
Easton	Northampton	N. D. Chase, 57 Centre Square, attorney at law.
Mauch Chunk	Carbon	Freyman & Heydt, 76 Broadway, attorneys at law.
Pittsburg	Allegheny	<b>HUDSON &amp; McCUE</b> , 100 Diamond St., attorneys at law; collections, corporation law, mining, etc.
"	"	Chas. G. McVain, 403 Grant st., attorney at law.
"	"	M. H. Stevenson, 170 Fourth av., attorney at law.
Pittston	Luzerne	Geo. S. Ferris, cor. Main and William sts., attorney at law.
Pottsville	Schuylkill	Fergus G. Farquhar, 110 S. Centre st., attorney at law.
"	"	Edmund D. Smith, 113 S. Centre st., attorney at law.
Reading	Berks	Erneulant & Ruhl, 534 Washington st., attorneys at law.
Seranton	Lackawanna	Chas. L. Hawley, 211 Wyoming av., attorney at law.
"	"	Charles H. Welles, 118 Wyoming av., attorney at law.
Uniontown	Fayette	Boyd & Umbel, 42 E. Main st., attorney at law.
"	"	<b>GEORGE M. HOSACK</b> , 42 E. Main st., attorney at law, practice in all courts.
Wilkes Barre	Luzerne	<b>SIDNEY R. MINER</b> , 22 S. Franklin st., attorney at law and notary public. Prompt attention given to all legal business. Titles examined, collections made. Reference: Wyoming National Bank, Wilkes Barre. (See card, page 530.)
"	"	Henry W. Palmer, 9 Franklin st., attorney.

## SOUTH CAROLINA

Beaufort	Beaufort	<b>ELLIOTT &amp; TOWNSEND</b> , Bay st., attorneys at law; commercial law a specialty. Immediate attention given collections and prompt returns made. (See card, page 530.)
Spartanburg	Spartanburg	Nicholls & Moore, 2 Magnolia st., attorneys at law.

## SOUTH DAKOTA

TOWN AND COUNTY	NAME
Deadwood.....Lawrence	<b>MARTIN &amp; MASON</b> (Eben W. Martin, Norman T. Mason), attorneys at law; special attention given mining litigation. (See card, page 530.)
" " "	Moody & Washabaugh, attorneys at law.
Hermosa.....Custer	C. J. Patton, 11 Vilas st., attorney.
Hot Springs...Fall River	Loomis S. Cull, Chicago av., attorney at law.
Rapid City...Pennington	Wood & Buell, Rooms 4, 5 and 6 Lakota Block, mining attorneys.

## TENNESSEE

Centreville...Hickman	W. P. Clarke, attorney at law.
Knoxville...Knox	Webb & McClung, 148 Gay st., attorneys at law.
Nashville...Davidson	<b>BURCH &amp; WALLER</b> , Rooms 31-33 Coles Bldg., attorneys at law; practice in all the courts, state and federal; commercial litigation a specialty. Completes of Tennessee laws for The Mining Directory. (See card, page 530.)
" " "	<b>SMITH &amp; DICKINSON</b> , 230 1/2 N. Cherry st., attorneys and counselors at law; do a general practice.
Rogersville...Hawkins	Smith & Chestnut, attorneys at law.

## TEXAS

El Paso...El Paso	<b>N. B. BENDY</b> , 212 El Paso st., attorney at law; practices in all courts; special attention given to land and mining law; negotiates mines and lands in Texas, New Mexico, Arizona and Republic of Mexico; titles to mines and lands examined; mining charters obtained for corporations. (See card, page 530.)
" " "	J. P. Crosby, attorney at law.
" " "	John Mitchell, 18 Bronson Block, attorney at law.

## UTAH

Salt Lake City...Salt Lake	<b>BOOTH, LEE &amp; GRAY</b> , 63-65 Commercial Block, mining corporation, insurance and commercial litigation; will practice in all courts, and before the United States land-office and department of the interior; collections promptly attended to. Refer to American National Bank, Commercial National Bank, Petro Mining Co., Salt Lake City, Utah. Other references furnished on application. (See card, page 530.)
" " "	Grant H. Smith, 15 Second South st., mining lawyer.
" " "	D. H. Wenger, 21 and 22 Central Block, mining attorney.

## VERMONT

Burlington...Chittenden	<b>J. W. RUSSELL</b> , attorney at law; special attention given commercial litigation and collections. (See card, page 531.)
Castleton...Rutland	Bronley & Clark, attorneys at law.

## VIRGINIA

TOWN AND COUNTY	NAME
Anella Court House Amelia	H. Meade, attorney at law.
Christiansburg Montgomery	<b>PHLEGAR &amp; JOHNSON</b> , attorneys at law; commercial and mining law a specialty; collections promptly attended to. (See card, page 34.)
Fincaisle.....Botetourt	C. H. Vines, commercial and mining attorney.
Fredericksburg Spottsylvania	<b>J. C. JOHNSON</b> , attorney at law. References: The Bank of Fredericksburg; American Exchange National Bank, New York. Will examine and report on mineral properties and titles in Virginia.
Lomisa.....Lomisa	R. L. Gordon, attorney at law.
Radford.....Montgomery	Hoge & Hoge, Briggs Bldg., attorneys at law.
Richmond...Henrico	<b>JAMES LEWIS ANDERSON</b> , 1 and 3 Goddard Hall, cor. Eleventh and Bank sts., attorneys at law; prompt attention given mining and commercial cases, collections, etc. (See card, page 531.)

## WASHINGTON

Black River Falls...Jackson	Geo. M. Popham, attorney at law; collections.
Everett.....Snohomish	<b>N. D. WALLING</b> , attorney at law; mining law a specialty.
Fairhaven.....Whatcom	Thomas G. Newman, Mason Block, attorney and counselor at law.
New Whatcom...Whatcom	Black & Lenning, cor. Elk and Holly sts., attorneys at law.
Seattle.....King	<b>ANDREW F. BURLEIGH</b> , attorney at law.
Spokane.....Spokane	Thomas B. Higgins, Jamieson Bldg., attorney at law.
" " "	<b>JONES, VOORHEES &amp; STEPHENS</b> , Hyde Block, attorneys at law; practice in all the courts; special attention given to mining and commercial business; collections promptly attended to. (See card, page 531.)
" " "	Wills H. Merriam, Rooms 6 and 7 P. O. Block, mining attorney.
" " "	Philip Stanford, 19 and 20 First National Bank Bldg., attorney.
Tacoma.....Pierce	<b>LEO &amp; JORDAN</b> , Rooms 200 and 210 National Bank of Commerce Bldg., attorneys; practice in all the courts. References: Columbia National Bank, Tacoma. (See card, page 531.)
" " "	<b>DR. WILLIS E. EVERETT</b> , 1318 E. St. South, mining lawyer.
" " "	J. F. Ramage, 134 1/2 Pacific av., mining attorney.
Whatcom.....Whatcom	J. C. McFadden, Holly st., attorney at law.

## WEST VIRGINIA

Parkersburg...Wood	<b>MERRICK &amp; SMITH</b> , attorneys at law; practices in Wood, Wirt, Ritchie and Pleasants Counties in federal courts and court of appeals. Corporation, commercial and mining law, collections, real estate litigation and contested claims throughout West Virginia a specialty. References: Second National Bank and Parkersburg National Bank, Parkersburg, W. Va. (See card, page 531.)
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WISCONSIN

TOWN AND COUNTY	NAME
Milwaukee, ...Milwaukee	Harold W. Niekerson, Rooms 4 and 5 Mack Block, attorney.
" " "	Turner & Thulin, 105 Grand av., attorneys at law.
Racine " " Racine	<b>COOPER &amp; NELSON</b> (H.A. Cooper, Peter Bering Nelson), attorneys and counselors, notary in office. Compilers of the Wisconsin laws for The Mining Directory and Reference Book. Special and prompt attention given to corporation mining and general commercial litigation in all state and federal courts. References: Racine—Union National Bank, West Shore Lumber Co., Kelley, Weeks & Co., Lumber Co., M. M. Secor Trunk Co., and any other bank or business house in the city. (See card, page 531.)
Shullsburg " La Fayette	J. B. Simpson, attorney at law.

WYOMING

Laramie " Albany	Nellis E. Corthell, attorney at law.
Saratoga " Carbon	J. F. Crawford, attorney at law.

BRITISH COLUMBIA

Kamloops " Yale	Frederick J. Fulton, barrister, solicitor, notary public.
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MANITOBA

Winnipeg " Winnipeg	<b>HOUGH &amp; CAMPBELL</b> , McIntyre Bldg., Main St., Isaacs Campbell, Q. C., J. Manby Hough, barristers, etc. Do a general practice. (See card, page 31.)
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NEW BRUNSWICK

Dorchester Westmoreland	<b>EMMERSON &amp; CHANDLER</b> , barristers and attorneys, practice in all the courts of the dominion and province; special attention to commercial and mining litigation; collections receive prompt attention. (See card, page 531.)
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NOVA SCOTIA

Bridgetown Annapolis	<b>JOHN ERVIN</b> , Queen St., barrister, solicitor, notary public, solicitor for Torbrook Iron Co.
Windsor " Hants	<b>A. E. SHAW</b> , L. L. B., 64 Water St., barrister, solicitor and notary public; commercial and mining business a specialty.

ONTARIO

TOWN AND COUNTY	NAME
Belleville " Hastings	Ponton & Morden, Bridge St., solicitors, notaries.
Kingston " Kingston	Joseph Bayden, 38 Clarence St., barrister and solicitor.
" " "	Macdonnell & Mudie, 38 Clarence St., barristers, solicitors, notaries.
Ottawa " Ottawa	Chrysler & Lewis, 7 Ontario Chambers, attorneys.
" " "	<b>MCLEOD STEWART</b> , 44 Metcalfe St., barrister, solicitor Canadian Anthracite Coal Co.; mining law a specialty.
Perth " Lanark	J. A. Allen, Gore St., barrister, solicitor, notary public.
" " "	Elliott & Rogers, Foster St., barristers, solicitors and conveyancers.
Port Arthur Algoma	Thos. A. Gorham, Cumberland St., attorney at law.
Rat Portage Algoma	<b>ROBINSON &amp; LANCFORD</b> , barristers, solicitors, notaries public, etc.; mining and commercial business a specialty; collections receive immediate attention and prompt returns made. Local solicitors for the Imperial Bank of Canada. (See card, page 531.)
Sault Ste. Marie Algoma	Heerst & McKay, Queen St., barristers.
Sudbury " Nipissing	F. F. Lendenx, attorney.
Toronto " Toronto	Charles Henderson, 28 and 30 Toronto St., barrister, solicitor, notary.
" " "	J. A. Wright, 2 Adelaide St. East, barrister, solicitor, notary.
Windsor " Essex	A. H. Clarke, Medbury Block, barrister at law.

QUEBEC

Aylmer " Ottawa	Thomas P. Foran, Main St., attorney at law.
Sherbrooke " Sherbrooke	White & Cote, McBanis Block, barristers, advocates.

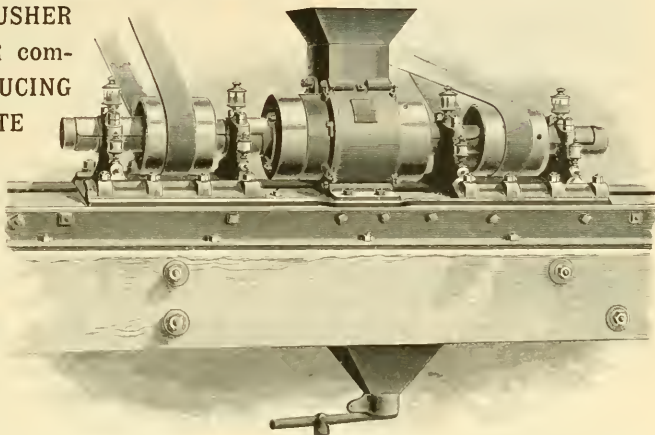
MEXICO

City of Mexico " "	<b>Y. SEPULVEDA</b> , Gallo No. 7, attorney at law, land and mining titles examined, grants, privileges and franchises secured; practices before all the departments.
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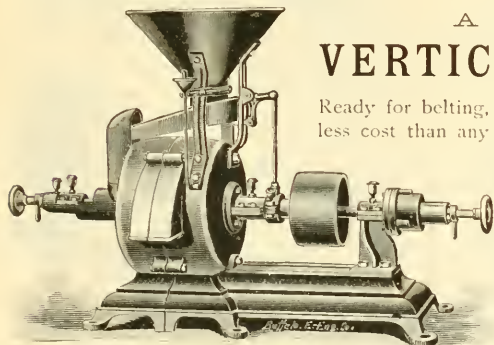
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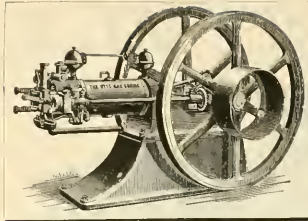
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PIOCHE, - - NEVADA.

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Attorney at Law,

(Commissioner for Massachusetts.)

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Law Specialties.

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COUNSEL AND NOTARY FOR  
NATIONAL BANK OF THE REPUBLIC, NEW YORK

REFERENCES:

First National Bank, Detroit, Mich.; First National Bank, Nevada, Mo.; Fourth National Bank, Cincinnati, O.; Shawmut National Bank, Boston, Mass.; Winchester Repeating Arms Co., New York; Ames Iron Works, New York; Wallace, Elliott & Co., New York; A. J. Bates & Co., New York; Morse & Rogers, New York; Goodyear Metallic Rubber Shoe Co., New York; Meyer Rubber Co., New York; Bay State Shoe and Leather Co., New York; Pulsometer Steam Pump Co., New York; William Sturgis, Jr., Cheyenne, Wyo.

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WEBSTER, NORTH CAROLINA.

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AND

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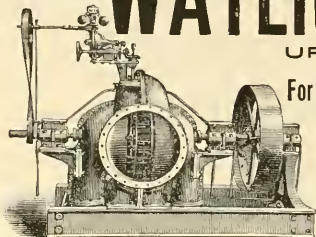
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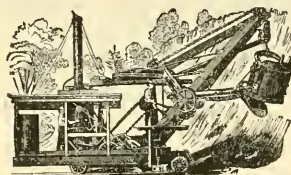
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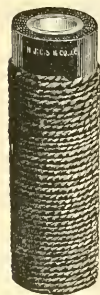
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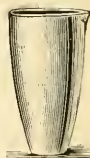
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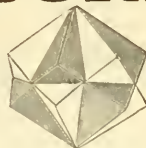
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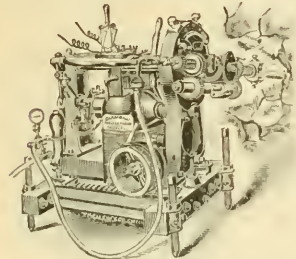
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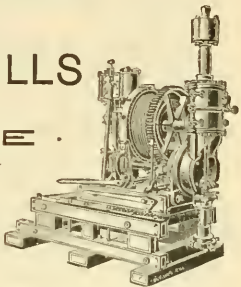
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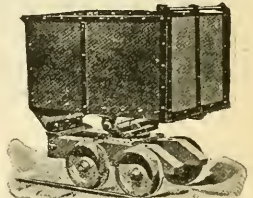
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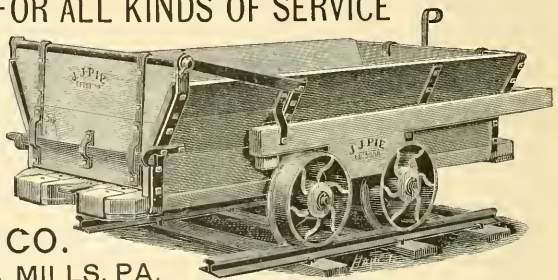
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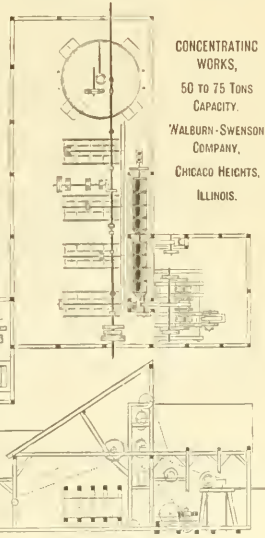
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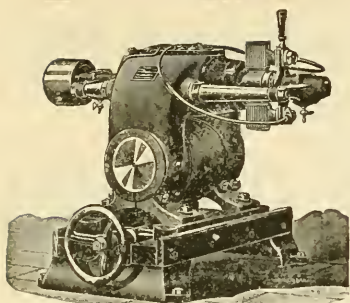
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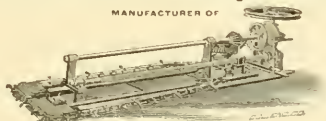
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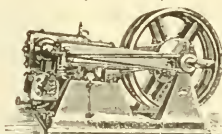
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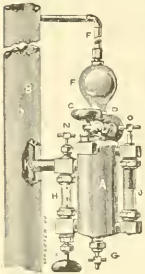
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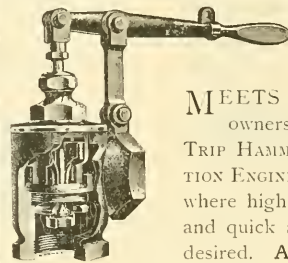
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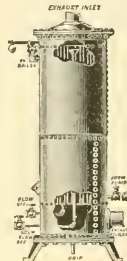
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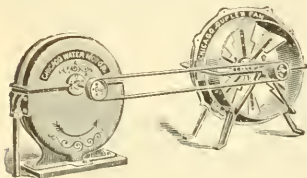
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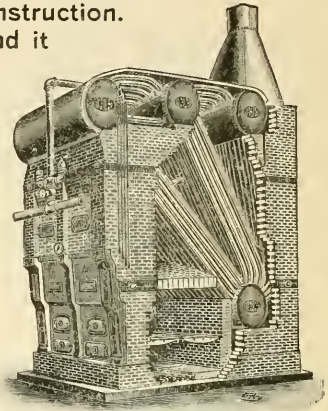
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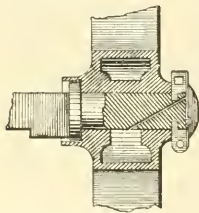


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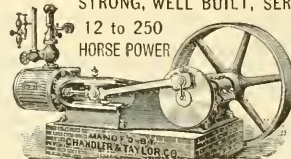
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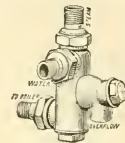
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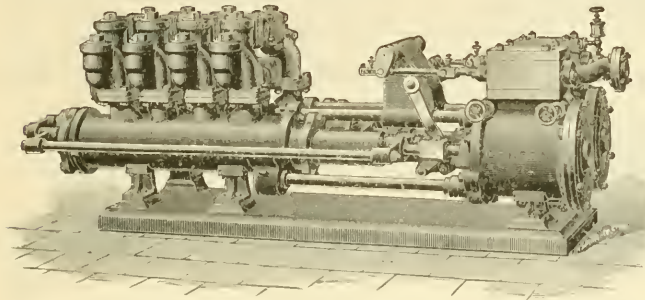
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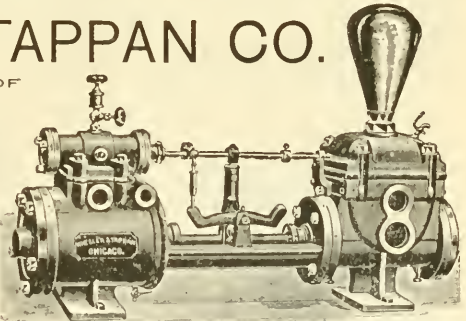
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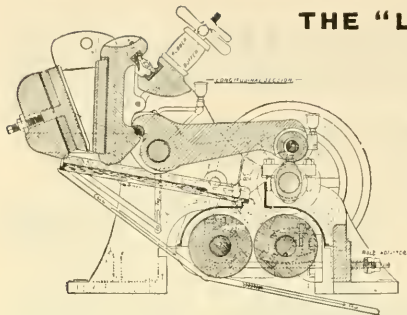
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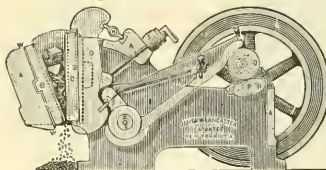
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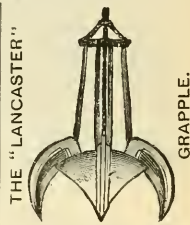
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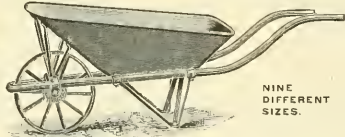
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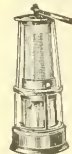
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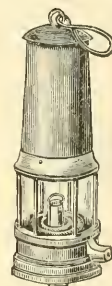
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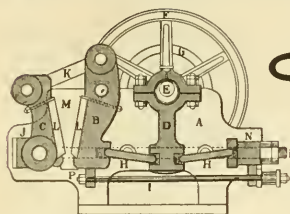
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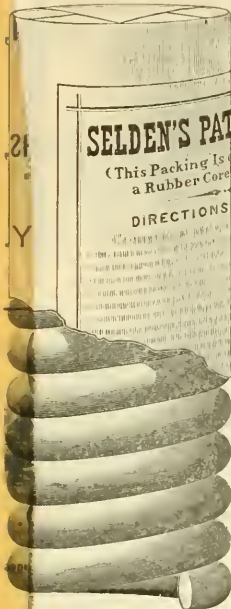
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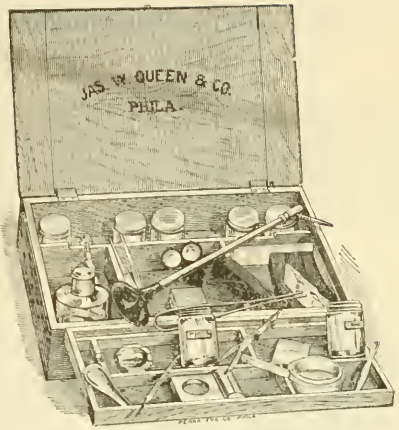
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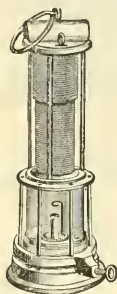
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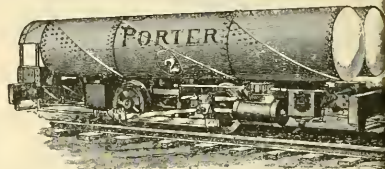
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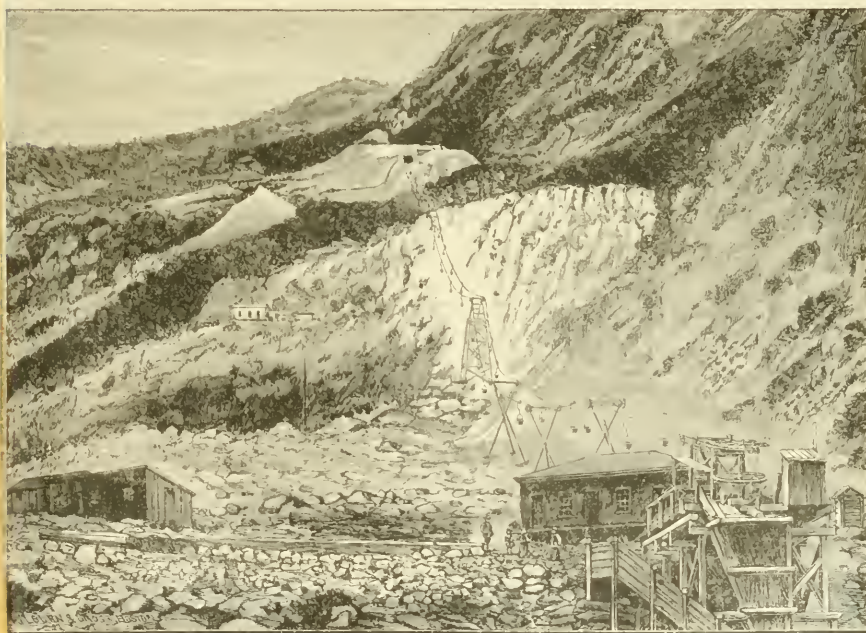
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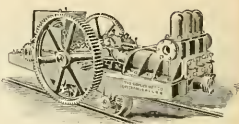
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