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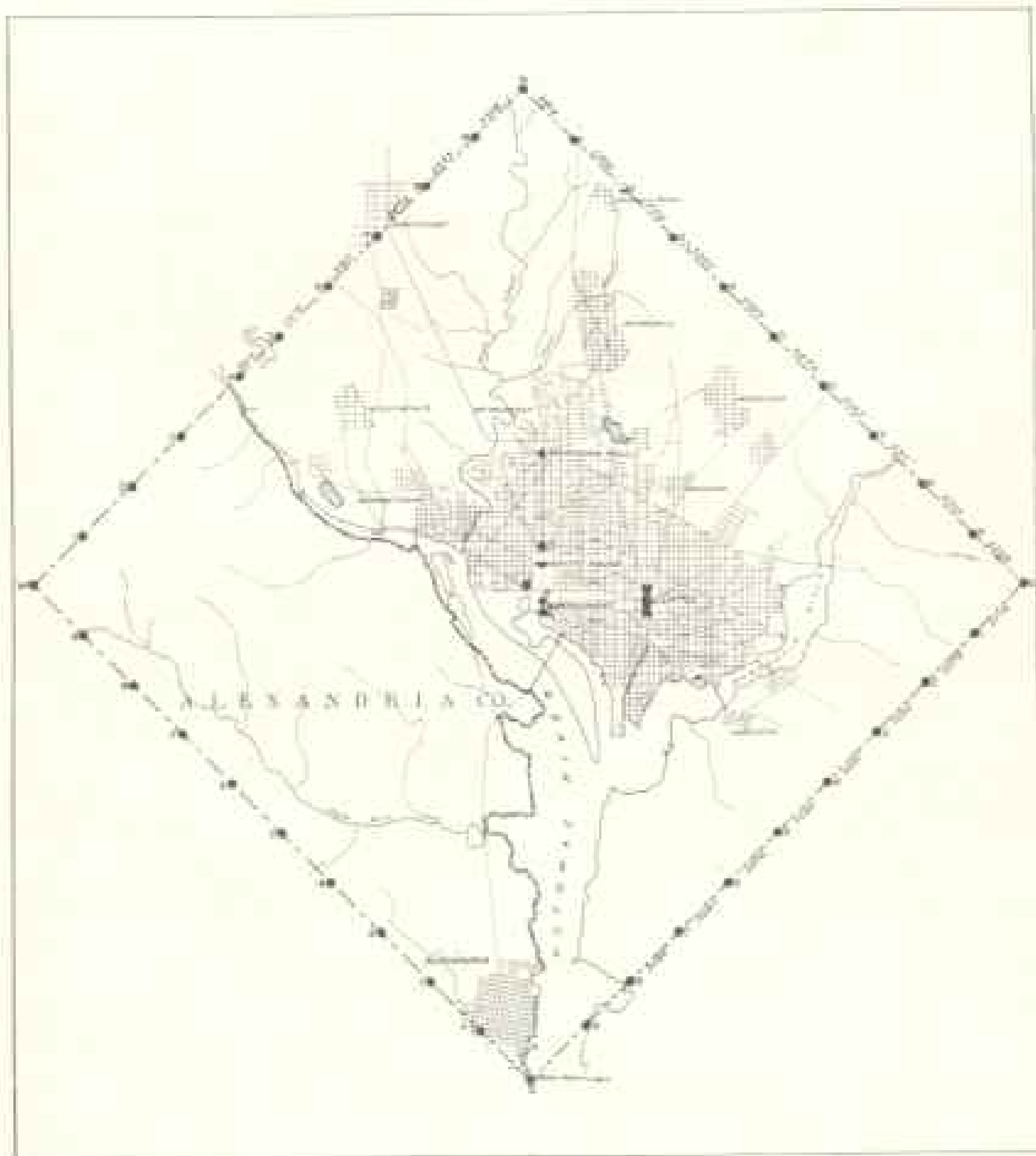
SURVEYS AND MAPS
OF THE
DISTRICT OF COLUMBIA

MARCUS BAKER



WASHINGTON
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DISTRICT OF COLUMBIA.

The figures on the farther show the numbers of the milestones marking the boundary and their distances apart in feet. One mile equals 5,280 feet.

A — *Capitol stone.*—South of the *White House* and west of the south end of the old Capitol. Undressed and unmarked sandstone, about 4 feet high, set in 1804, now gone and site unmarked.

B — *Jefferson stone.*—South of center of *White House* and west of center of Capitol. A "freestone obelisk," set in 1804, 175 feet 8½ inches north of the Capitol stone; said to be now used as a hitching post at the Reform school. Site now marked by a granite post flush with sod in the Monument lot.

C — *Center of the original District of Columbia.*—It is near the corner of Seventeenth and C streets, being 1,305 feet north and 1,575 feet west of the Washington monument.

D — *Stole at intersection of "Sixteenth and northern edge of north street."*—Set in 1804. Whether still in place is not known.

Meridian Hill.—"A freestone obelisk," set in 1804, "to mark the initial meridian for longitudes in the United States." Stone gone and site unmarked. Stone said to be in use as a carriage step at Fourteenth and R streets; also said to be in use as a hitching post at the Reform school.

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SURVEYS AND MAPS OF THE DISTRICT OF COLUMBIA

BY

MARCUS BAKER

(Presented before the Society March 23, 1894.)

On the 15th of April, 1791, there was laid, with solemn and elaborate masonic ceremonial, the corner stone of the District of Columbia. This stone, still standing, though hidden from view, forms a part of the foundation wall of the lighthouse at Jones point, near Alexandria, Virginia. It is under the gateway in front of the south door of the lighthouse. The long and tedious discussion which led to the selection of a district, not to exceed ten miles square, on the banks of the Potomac, between its Eastern branch and the Conogocheague, does not belong to the present theme. It suffices to say that selection had been made by act of Congress July 16, 1790. Under this authority President Washington directed a preliminary or provisional survey of the area to be taken for the Federal Government. This preliminary survey he directed should begin at a point on Hunting creek determined

by running a line from Alexandria courthouse southwestward half a mile and thence southeastward to the northern shore of Hunting creek. From the point so found a tract substantially like the District of Columbia as it existed prior to the retrocession of Alexandria county to Virginia, in 1846, was selected; but this tract included a portion of Maryland lying *south* of the Eastern branch of the Potomac, or Anacostia river, and could not be taken under the terms of the act, which provided that the Federal territory should lie wholly *north* of the Eastern branch. This being reported to Congress, an amended act was promptly passed authorizing the boundaries of the District as originally laid out. Washington then gave directions for running the definitive boundary lines. As is well known, Washington was a surveyor, and therefore well qualified to draw up instructions to surveyors. It is interesting to quote his language:

Now, therefore, for the purpose of amending and completing the location of the whole of said territory of ten miles square, in conformity with the said amendatory act of Congress, I do hereby declare and make known that the whole of said territory shall be located and included within the four lines following, that is to say:

Beginning at Jones point, being the upper cape of Hunting creek, in Virginia, and at an angle in the outset of forty-five degrees west of the north, and running in a direct line ten miles, for the first line; then beginning again at the same Jones point and running another direct line, at a right angle with the first, across the Potomac ten miles, for a second line; thence from the termination of said first and second lines, running two other lines of ten miles each, the one crossing the Eastern branch aforesaid and the other the Potomac, and meeting each other in a point.

To take charge of the newly created territory, supervise its survey, and attend to the business growing out of its condemnation for public use, Washington appointed, January 22, 1791, three commissioners, Thomas Johnson, Daniel Carroll, then a member of Congress from Maryland, and Dr David Stuart.

Two months later, March 28, 1791, Washington arrived in Georgetown from Philadelphia, and the next day made a tour of inspection of the District in company with the three commissioners and two surveyors, Andrew Ellicott and Major Peter Charles L'Enfant. The commissioners held their first meeting on the 12th of April following, in Georgetown, and three days

later, namely, the 15th of April, 1791, as already mentioned, the corner stone at Jones point was laid with solemn masonic ceremonial, in the presence of a large gathering of citizens, chiefly from Alexandria. The survey then proceeded, and in September following the commissioners decided upon the name which was to be given to this new Federal territory and the city to be created within it. They ordered that the title of the map prepared by Major Ellicott should be "A map of the city of Washington, in the Territory of Columbia." Before this time the future city was referred to as the Federal city.

How the boundaries of the District were run I do not know, but suppose that it was done with transit and chain. As the country was timbered, and as the boundary crossed the Potomac twice and the Eastern branch once, it will be seen that the task was not a perfectly simple one. It appears that the work of measuring and staking out the outline of the District was completed in 1791; that during the following year the line was cleared of timber to the width of 20 feet on each side; and that in this 40-foot lane through the woods stone mileposts were erected. These posts are two feet high and one foot square. They are marked on the District side, "JURISDICTION of the UNITED STATES," followed by an inscription showing the distances from that corner of the District from which they are numbered, such as "Miles 3," "Miles 6 & 10 P.," etc; on the opposite side, "Maryland" (or "VIRGINIA"); on the third side, the year "1792" (except the Virginia stones, marked "1791"); and on the fourth side, the variation of the compass. The stones are numbered from 1 to 9 on each line, from south to west, west to north, etc.*

About ten years ago the Coast Survey executed a triangulation for the purpose of determining the geographic positions of

* Since the foregoing was written I have personally visited and inspected most of the boundary monuments of the original District of Columbia, set in 1791 and 1792. Though this inspection is still incomplete, it is deemed advisable to print here the following table, showing the condition of the monuments so far as inspected, and especially to print the *variation of the compass* recorded upon them. These variations are the earliest ones observed and recorded for the District of Columbia, and the only record of them known to me is upon these boundary monuments. These monuments are of Aquia creek sandstone and were sawed out. Through abuse and exposure to the weather the inscriptions are becoming obscured, a few being already totally lost.

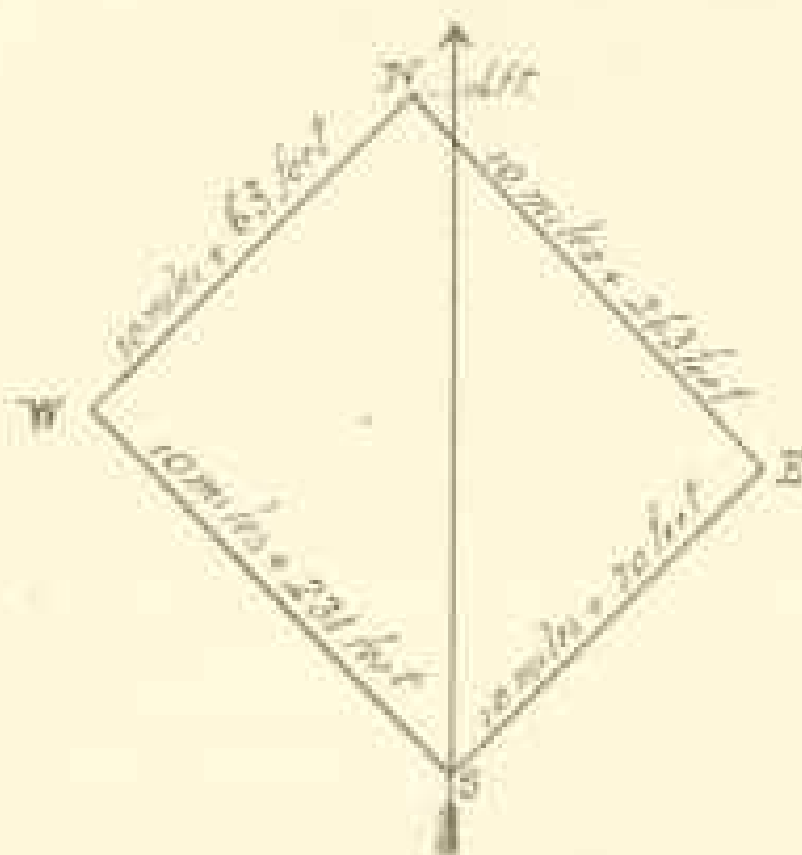


FIGURE 1.—*District of Columbia.*

north of the southern point, but bears $5^{\circ} 19'.7$ west of north of it.

the corners of the original District, as well as some other points. The work was done by Mr C. H. Sinclair, of the United States Coast and Geodetic Survey. To his courtesy and that of the Coast Survey office I am indebted for the following facts respecting the boundary line. The District is not an exact square or spherical quadrilateral. Its distortion, much exaggerated, is shown in figure 1. The northern point is not exactly

BOUNDARY MONUMENTS OF THE DISTRICT OF COLUMBIA.

Erected in 1791-92. Condition in 1894.

Monu- ment.	Vari- tion.	Condition, etc.	Monu- ment.	Vari- tion.	Condition, etc.
E.	?	Invisible; built into L. H. wall.	N.	$1^{\circ} 27' E$	Fair condition; erect.
S. W. 1	$0^{\circ} 30' W$.	Erect; good condition. Stone gone.	S. E. 1	$1^{\circ} 00' E$	Fair condition; leaning.
" 2	" "	"	" 2	$1^{\circ} 12' E$	Fair condition; erect.
" 3	$7^{\circ} 1' E$	Very bad condition; figures illegible.	" 3	$0^{\circ} 18' W$.	Fair condition; erect.
" 4	"	"	" 4	$0^{\circ} 27' W$.	Good condition; erect.
" 5	"	"	" 5	$0^{\circ} 22' E$	Leaning; fair condition.
" 6	"	"	" 6	$0^{\circ} 11' E$	Erect; very good condition.
" 7	$0^{\circ} 00' E$	Leaning; bad condition; open field.	" 7	$1^{\circ} 00' E$	Erect; seaward; in woods.
" 8	"	"	" 8	$0^{\circ} 24' E$	Erect; good condition.
" 9	"	"	" 9	$0^{\circ} 10' E$	Fair condition; erect.
W.	"	"	E.	$0^{\circ} 10' E$	Erect; good condition.
N. W. 1	"	"	S. E. 1	"	"
" 2	$0^{\circ} 36' E$	Erect; bad condition; in woods.	" 2	$0^{\circ} 04' E$	Erect; excellent condition.
" 3	$0^{\circ} 10' E$	Broken down by army wagon; very bad condition.	" 3	$0^{\circ} 00' W$.	Bad condition.
" 4	$0^{\circ} 00' W$.	Erect; fair condition; in woods.	" 4	"	Illegible; very bad condition.
" 5	$0^{\circ} 0' W$.	Erect; fair condition.	" 5	$0^{\circ} 22' E$	Erect; fair condition.
" 6	"	Illegible; bad condition; at roadside.	" 6	$0^{\circ} 18' E$	Erect; excellent condition.
" 7	$0^{\circ} 34' E$	Erect; good condition; in meadow.	" 7	$0^{\circ} 25' E$	Barred; nearly out of sight.
" 8	$0^{\circ} 27' E$	Erect; fair condition; in young timber.	" 8	$0^{\circ} 24' E$	Partly buried in swampy thicket.
" 9	$2^{\circ} 00' E$	Erect; fair condition; in thick woods.	" 9	$0^{\circ} 27' E$	Leaning; at river edge; fair condition.

Variation in 1792 (see Elliott, mean of 27 values)..... $0^{\circ} 20' E$.
 Variation in 1894 (assumed)..... $4^{\circ} 25' W$.
 Change in 102 years..... $4^{\circ} 05'$.
 Change in 1 year..... $0^{\circ} 2.3$.

It is therefore 116 feet west of the meridian through the southern corner. The lengths of the four sides, intended to be exactly ten miles long, are found to be in fact as follows :

Southwestern side	is	10	miles	plus	230.6	feet	long.
Northeastern	"	"	10	"	"	253.1	"
Southeastern	"	"	10	"	"	70.5	"
Northwestern	"	"	10	"	"	63.0	"

Thus the District is approximately a rectangle, the northeastern and southwestern sides exceeding ten miles by about 245 feet, and the southeastern and northwestern sides each exceeding ten miles by about 65 feet. If a more critical examination be made, it will be found that the distances between the various mileposts differ quite sensibly from miles, and it will be found further that the stones are not in line. The actual lengths of these supposed miles may be seen on plate 9.

As to direction, consider line number 1, or the southwestern line. It is intended to bear 45° west of north. Its actual direction, as now appears from the Coast Survey determinations already referred to, is $44^\circ 59' 24''.6$ west of north, or about half a minute less than intended. The second, or southeastern line, which was to bear north 45° east, is found actually to bear north $45^\circ 1' 45''.6$ east, exceeding the intended value by $1'$.

Site of Washington before 1790.—How did the site of Washington and the District of Columbia look before 1790? No contemporary map, so far as I know, exists to answer this question. Still, scattered bits of information here and there, diligently and patiently collected by Dr J. M. Toner, have enabled a map to be made which in part answers the question. Twenty years ago Messrs E. F. M. Faeltz and E. W. Pratt, authors and publishers of a real estate directory of Washington, published a book entitled "Washington in Embryo," in which they include a map "compiled from the rare historical researches of Dr J. M. Toner." This map shows the drainage, farm outlines, etc., of the tract on which Ellicott laid out a great city in 1791. Within this tract existed one real and two paper towns. Georgetown was the real town, and had been in existence some 35 or 40 years, while Carrollsburg and Hamburg existed on paper only.

Carrollsburg was a tract of 160 acres on the northern bank of the Anacostia, just east of the Arsenal grounds. Before its subdivision into 268 town lots it was known as Duddington manor

or Duddington pasture. The town laid out in the latter part of 1770, near the deepest water of the Eastern branch, was doubtless named after Daniel Carroll, an extensive land owner on Capitol hill. The subdivision was made under a deed of trust recorded at Marlborough, Maryland, November 2, 1770.

Hamburgh is or was the name of a town surveyed and laid off in town lots by its owner, Jacob Funk, whose plat is recorded at Marlborough, Maryland, October 28, 1771. The tract embraced 120 acres and was divided into 287 lots. The town was located with reference to deep water in the Potomac, and occupied in part the site of the old Naval Observatory. It was sometimes called Funkstown, after its owner.

The L'Enfant and Ellicott Maps.—Preceding and during the surveys already described, a French engineer, Major Peter Charles L'Enfant, was engaged under Washington's direction in planning the future capital. The map which he prepared may be called a paper map—that is, it was a project in which the city was laid out on paper. This, the first map of Washington, is now in the custody of the commissioner of public buildings and grounds, in the War Department. Having become much faded and worn with use, it was a few years since sent to the Coast Survey office, where it was very carefully traced and a photolithographic copy of it prepared.

After the approval of L'Enfant's plan, the next step was to lay out the streets, parks, reservations, etc, upon the ground. This work was entrusted to Major Andrew Ellicott, and his map appears to have been first engraved in 1792. The manner in which the city was laid out is told in a note upon the map itself, which is as follows:

In order to execute this plan, Mr Ellicott drew a true meridional line by celestial observation, which passes through the area intended for the Capitol; this line he crossed by another due east and west, which passes through the same area. These lines were accurately measured and made the base on which the whole plan was executed. He ran all the lines by a transit instrument and determined the acute angles by actual measurement, and left nothing to the uncertainty of the compass.

Near the intersection of North Capitol and R streets is, or till recently was, a monument, which I have not seen, said to be some fifteen feet high, on land owned by a Mr Beall. I have been unable to secure definite information as to the purpose of this monument or its use. It seems probable that it was a mon-

ument erected by Mr. Ellicott as an azimuth mark, and its recent destruction is therefore regrettable.

The boundary line, as has been seen, was run out in 1791. It was cleared of timber and most of the milestones set during the following year, 1792, and it is probable that during this same year Ellicott produced the general topographic map of the entire District, the date of publication of which is uncertain. The only copy of this map of the District known to me is in the Library of Congress, entitled "Territory of Columbia, drawn by Andrew Ellicott." Its conjectural date, added in pencil, is 1793. This map was republished in 1852, the republication being seemingly a facsimile in all respects, except the omission of the phrase "drawn by Andrew Ellicott." Reduced copies of it have been several times published. Down to the publication of Boschke's map of the District at the outbreak of the war, this topographic map of the District by Ellicott is apparently the only one ever made.

Land Office Surveys.—In the surveying division of the General Land Office is a not very large package of papers relating to surveys by the United States of public lands in the District of Columbia. The ragged and yellow label, written in a large, fair hand, runs thus: "Papers relating to applications to appropriate certain lands in the District of Columbia under the provisions of the joint resolution of Congress of February 16, 1839," etc.

This package contains all the papers in the General Land Office relating to public land surveys in the District of Columbia, the history of which is briefly this: After the settlement of the District of Columbia had progressed for some years or decades, it was found that here and there errors had been made by surveyors in staking out or marking the boundaries of lots, farms, and estates. In some cases a tract might by the terms of its description be counted in two adjoining tracts, and so two people might claim the same tract. In other cases tracts supposed to adjoin were found not to touch, and there would thus be a tract lying between which had no private owner. This tract then belonged to the United States. The person discovering this error naturally wished to acquire possession of this now valuable land. That he might do so, congressional authority was necessary. Accordingly, on February 16, 1839, a joint resolution was passed by Congress permitting purchase under the old Maryland law of 1801, which provided for the sale of "vacancies"—i. e., un-

occupied or unclaimed land. Under this provision the General Land Office acted as the local land office for the District of Columbia, and whenever vacancies were discovered and reported a request for survey was presented. A deposit of three shillings and six pence per acre, Maryland money, was required, and an additional charge of four shillings was afterward required to complete the purchase, which thus cost the purchaser seven shillings and six pence, or one dollar, per acre. It is interesting to note that under this law the General Land Office has received applications for and has made surveys of about 60 tracts in the District of Columbia. Perhaps the most noteworthy case was that of the Kidwell bottoms, or Potomac flats, as we now call them.

The Boschke Maps.—Albert Boschke was a German employed in the Coast Survey before the war. He conceived the idea of making a very accurate map of Washington and of the District of Columbia, with the hope of selling to the Government.

He was at the time employed in the drawing division of the Coast Survey, and while so employed organized a corps of surveyors at his own expense to do the fieldwork. This gradually absorbed his time and thought, led to irregular attendance at the office, and finally to his enforced resignation from the survey.

Two maps resulted from his work, one a map of the whole District, the other a map of the city. The map of the District is usually spoken of as the Boschke map. It was engraved upon copper by Mr David McClelland, and was just about to be published—indeed, a few copies or proofs had been printed—when, the war breaking out, the Government seized the map and plates.

The map of the city was produced first and published in 1857. It is interesting from the fact that the houses were drawn from actual tape-line measures in the field and drawn with scrupulous painstaking. It is also interesting as being one of the early pieces of work of the well-known firm of lithographers, Bien & Company, of New York.

The field-work of the District map was based primarily upon a line from the dome of the Capitol to the Naval Observatory. The data was taken from the Coast Survey Report for 1851, and the position of the observatory as there given was assumed by Boschke to refer to the transit circle.

It subsequently appeared that it referred to the station on the roof from which angles had been measured, and his base line

was thus in error by about eight feet. This small error is still in the map.

The roads were meandered by two parties, one with transit and chain, the other with a level. Their results being platted, the plats were taken to the field and the contours and other details sketched in.

The Virginian part of the District, it will be remembered, had been ceded back to Virginia in 1846. Boshke's map did not, therefore, include any of the topography in Alexandria county. That which now appears on the so-called Boshke map was added by two Coast Survey officers, Messrs Dorr and Rockwell, in the first year of the war. At the outbreak of the war the United States had no topographic map of the District, the only topographic map existing being the manuscript produced by Boshke. He sold his interest in it to Messrs Blagden, Sweeney, and McClelland. Mr McClelland is an engraver, now seventy-four years old, living in Le Droit park. He engraved the Boshke map, which was executed on two plates. With his partners, he agreed to sell the manuscript and plates to the Government for \$20,000. Secretary of War Stanton, not apparently understanding the labor and expense of a topographic map, thought that \$500 was a large sum. There was, therefore, a disagreement as to price. After some negotiations, Mr McClelland and his partners offered all the material, copper-plates and manuscript, to the Government for \$4,000, on condition that the plates, with the copyright, should be returned to them at the close of the war. This offer also was refused. There then appeared at Mr McClelland's house in Le Droit park a lieutenant, with a squad of soldiers and an order from the Secretary of War to seize all the material relating to this map. Mr McClelland accordingly loaded all the material into his own wagon and, escorted by a file of soldiers on either side, drove to the War Department and left the material. While the war was still in progress, after further conference, Secretary Stanton agreed to refer the question of payment for this property to the Committee on War Claims. That committee recommended a payment of \$8,500, and the owners, regarding this amount in cash as worth more than future uncertainties, decided to accept it. Thus all the material became Government property at a cost of \$8,500, and the plates, two in number, are now in possession of the War Department. Electroplate copies of them are also in the possession of the Coast

Survey. A subsequent claim for the difference between \$8,500 and \$20,000, the price asked, was presented to Congress, which decided that the acceptance of the \$8,500 settled the claim, and no more has ever been allowed.

United States Geological Survey Map.—In 1885-'86 the United States Geological Survey made a contour topographic map of the District and surrounding country in Maryland and Virginia. This map is a part of the general topographic map of the United States which that survey has in hand. The hill forms are shown by means of contours with intervals of twenty feet. The scale is one mile, approximately, to one inch. Existing maps were used in its preparation so far as they were available, and for the rest the work was done in the field. The method followed was largely that of traversing, the traverse lines being controlled by triangulation.

United States Coast and Geodetic Survey Map.—A very elaborate and detailed topographic survey of the District of Columbia was instituted in 1881. In the District of Columbia appropriation bill for the fiscal year 1880-'81 there was inserted an item appropriating \$5,000 "for surveys of the District of Columbia, with reference to the future extension of various avenues to the District line." Under the authority thus given, topographers from the Coast Survey were detailed to execute the work. It was arranged that the map should be on a scale of 1:4800, or 400 feet to an inch. This is a scale of about 13 inches to the mile. The work was planned to be most accurate and detailed, and the relief was to be expressed in contours, with a five-foot interval. The survey thus planned and begun is now completed, and covers the entire District outside the original limits of Washington and Georgetown—that is, it covers an area of 48.2 square miles. Work was in progress during the ten years, 1881-1891, in which there was specifically appropriated for it \$65,600. The resulting map sheets are not yet published. Some photolithographic sheets have been issued from time to time, but they do not cover the entire area. The work is being engraved upon copper and printed in four colors—black for culture, blue for water, brown for hill forms, and green for woodland. A few such sheets have been issued, each sheet covering about one square mile. It will be seen that this survey is one of the most detailed, elaborate, and careful pieces of topography that has been executed in this country up to date, and its publication is

awaited with interest.* It is proposed to number the sheets consecutively from 1 to 100. If the original District of ten miles square be subdivided into 100 square miles there will be one atlas sheet to each square mile. Beginning at the northern corner of the District and running southeastward, the sheets will be numbered 1, 2, 3, etc, up to 10; thence returning to the north-western side, the next row will be numbered 11, 12, 13, etc, to 20, and so on to complete the entire District.

The First Meridian.—Old residents of Washington and some of the modern ones also know the term Meridian hill. The story of this name is a story of surveying and thus a part of our theme. A hundred years ago it was the custom of various nations to reckon longitude from their own capitals—a bad custom not yet quite dead. Our grandsires, proposing to follow this practice, gave early attention to establishing a first meridian. Joined to it was the idea of a national observatory and American ephemeris, to the end that the young republic might in these respects as well as in all others be quite free from dependence on foreign nations. The complete story of this first meridian seems to be still unwritten.

On L'Enfant's plan for the Federal city the letter *B* appears on the site of the Emancipation statue in Lincoln park, about a mile east of the Capitol. A marginal note indicates the plan proposed for this place, to wit:

An historic column; also intended for a mile or itinerary column, from whose station (a mile from the Federal house) all distances of places through the continent are to be calculated.

This appears to indicate that L'Enfant planned to have the primary meridian of the United States pass through a point exactly one mile east of the Capitol. Still this is not certain, as the only evidence discovered is the marginal note just cited. On the same map the longitude of the Capitol is given as $0^{\circ} 0'$, *i. e.*, according to this note the first meridian was to pass through the Capitol, or Congress house, as it was then called. As a first meridian could not at the same time pass through the Congress house and a point one mile east of the Congress house, it seems likely that the eastern one never got beyond the suggestion or proposal on the original plan.

* Since this was written and while this article is in press the Coast Survey has issued a map of the District of Columbia in five sheets. It is a black photolithograph; scale, 12000, or 800 feet to an inch.

When in 1791-92 Ellicott laid off the streets, avenues, reservations (or appropriations, as they were then called), he began by drawing "a true meridional line by celestial observation, which passes through the area intended for the Congress house; this line he crossed by another due east and west, which passes through the same area. These lines were accurately measured and made the bases on which the whole plan was executed."

This line of Ellicott's is probably, perhaps surely, the first meridian laid down on the ground in the District of Columbia, and may have been designed for two purposes: first, to serve locally as a reference or base-line from which to lay out the then imaginary city, and second, to serve as a first meridian from which to reckon longitudes in the very young and very patriotic republic.

Now Meridian hill is not north of the Capitol, but north of the White House, at the head of Sixteenth street, and so we have another meridian to consider.

In the State Department is a letter from Nicholas King, S. C. W. (which I take to mean surveyor city of Washington), to the President of the United States (Jefferson) relative to a meridian line through the President's house. It is dated October 15, 1804, and upon it are two endorsements. The first is "Nicholas King. 15 Oct. 1804. Meridian Line through the centre of the President's house." The second is "King Nich. Surveyor's office Oct. 15, 04. recd. Oct. 15. to be filed in the office of state as a record of the demarcation of the 1st. meridian of the U. S."

This is an important letter,* and as it appears not to have been published, I have appended a copy of it to this paper.

It appears that Mr King, under the direction of a Mr Briggs, laid out a meridian line along Sixteenth street in 1804. Who ordered this work done I do not know; but as Mr King, who ran the line, made a report to President Jefferson, and as this report was sent to the State Department and endorsed to be filed as a record of the demarcation of the first meridian of the United States, I infer that the work was done at the instigation of President Jefferson and for the purpose of marking the initial meridian line from which longitudes were to be counted in the United States.

* I am indebted to the courtesy of Mr Fred L. Harvey, formerly secretary of the Washington National Monument Association, for calling my attention to and furnishing me with a copy of this letter.

Thus I infer that L'Enfant planned to have the first meridian pass through a point exactly one mile east of the Capitol; that President Jefferson planned to have the first meridian pass through the President's house, about one and one-half miles west of the Capitol, whereas the meridian afterward adopted by Congress was that of the Capitol itself.

The meridian through the President's house was, as already indicated, run out in 1804 by Nicholas King. Setting up his transit at the northern door of the White House and pointing to the star "in the tail of the constellation Ursa Minor at its eastern elongation," he then depressed the telescope to sight a mark at the intersection of Sixteenth and north I streets. This mark was an Argand lamp placed on a very low stand. Over the lamp was a tin cylinder with a slit in it. The offset or distance from this mark westward to the true meridian line was then calculated and very carefully measured, and the meridian "line marked on the head of a post firmly driven into the ground" at the intersection of Sixteenth street with the northern side of north I street. No surface marks now show the place of this historic post. Is it or its decayed remains still in place beneath the pavement or was it removed long ago? The telescope was now elevated and pointed due north "to the top of a hill near two miles north of the President's house, on the lands of Mr Robert Peter, where temporary posts were fixed and the line marked upon them."

Early in September of 1804 Mr King, with the consent of Mr Peter, "planted a small obelisk of freestone, prepared by Mr Blagden, on the height where the stakes (or posts) had been fixed." The apex of this stone was in the true meridian from the center of the northern door of the White House.

The line was extended southward across Tiber creek and two stones planted near the site of the future Washington monument. It was planned to set a stone exactly south of the center of the President's house and exactly west of the center of the Capitol. The surveyor, on reaching this spot and finding the Capitol invisible, prolonged the line and set a stone at the intersection of the meridian and a line due west from the southern end of the old Capitol. This stone was standing when I came to Washington, some twenty years ago; I have seen it many times. It was a rough brownish sandstone or freestone about 10 inches square and 3 to 4 feet high. I do not remember any marks or

inscription upon it. It was always pointed out to me as the center of the District. In the recently published centennial history of Washington this is called the *Capitol stone*. It is now gone and its site is unmarked.

After establishing the Capitol stone Mr King measured back toward the White House 175 feet 8½ inches, a distance just one-half of the length of the Capitol as it then existed, and here erected a monument. Of the spot and its mark he says:

It is on the south bank of Tyber creek, and marked by the erection of a small pier, covered by a flat freestone, on which the lines are drawn.

Ex-Commissioner Webb, in his centennial history of Washington, already mentioned, page 28, calls this the *Jefferson stone* or *Center stone* and describes it, as also its removal in 1872 by order of General Babcock, who seems not to have been aware of its character or history.

It seems probable that this Jefferson stone was removed when grading was in progress and the Capitol stone carefully preserved; that later the relation of these stones, as has been described above, became known to the engineers, who then set a new stone in place of the removed Jefferson stone, and then removed the Capitol stone.

The more or less exact site of the Jefferson stone is now marked by a cut granite stone (or post) planted nearly flush with the ground and marked by a deep cut across, north and south by east and west. It may be seen on the green lawn on the eastern side of and near to the driveway west-northwest from the Monument.

Recapitulating, then, we find that along the meridian line through the White House, run in 1804, were three stone monuments—Meridian stone, Jefferson stone, and Capitol stone, and a wooden post at I street north. The Meridian stone is gone and its site is unmarked. The Capitol stone is gone and its site is unmarked. The Jefferson stone is gone, but its site is marked. Some suitable label or inscription would, however, add greatly to the interest of this mark, which is, as it now stands, meaningless to most people. And, lastly, the forgotten post on I street. Of this we have no present knowledge.

A word now about the stone on Meridian hill. It will be remembered that Commodore (afterward Admiral) Porter had a mansion on the old Peter place, at the head of Sixteenth street. Its main entrance was due north of the main entrance to the

White House. Exactly in line between these doorways, on the lawn south of the house, stood a low sandstone block, on which was placed a brass sun-dial. The stone was carved in cylindrical form on its northern side. This stone, so the story goes, was removed when Sixteenth-street hill was cut down some twenty years ago, and is now doing duty as a carriage step at the corner of Fourteenth and R streets. On talking with the owner of the place at Fourteenth and R streets, however, he denied vigorously that this was the Meridian stone. He described the Meridian stone as similar to the Capitol stone; and Mr King, who set the Meridian stone and the Capitol stone in 1804, also describes them as similar. I infer, therefore, that two stones at the head of Sixteenth street have been called Meridian stone. The original one, still extant, is said to be now serving as a hitching post in front of the Reform school. The carriage step at Fourteenth and R streets is probably a later stone set up as a base or support for a sun-dial, and came to be known as *the* Meridian stone to the exclusion of the original freestone obelisk.

The Center of the District.—It is commonly stated and believed that the Jefferson stone was established at the exact center of the original District, and that the Washington monument, which is less than 200 feet therefrom, practically marks such center. Unless I am mistaken, this is an error, and the center of the original District is nearly half a mile (2,048 feet N. 50½° W.) northwest from the monument.

When Ellicott marked out the District boundary he had to find a true meridian line astronomically. This he did at Jones point, but I do not know of anything to show that he ran this "true meridional line" through the present Washington. It is stated in the recent centennial history that he did, but on what evidence does not appear. It is also stated that this line ran exactly through the middle of the White House and up Sixteenth street, but the surveys now available show that the meridian of Jones point passes west of the State, War, and Navy building and nearly along Eighteenth street.

It seems to have been assumed that because Ellicott determined the meridian at Jones point that he ran that meridian through Washington, and that the terms Meridian stone, Meridian hill, Meridian hill farm, etc, are derived from his work, whereas the facts seem to show that these names are due to the work of another surveyor, working thirteen years later, under different

instructions, on a different problem, and for a quite distinct purpose. In short, the Sixteenth-street meridian, established in 1804, is quite independent of the center of the District and quite independent of Ellicott's survey.

The location of the center of the original District is one proof of this. This central point is at the intersection of the diagonals. The latitudes and longitudes of the four original corners and of the Washington monument enable us to make the following comparison:

	Latitude north.	Longitude west of Greenwich.
Center of District	38° 53' 34".915	77° 02' 27".745
Washington monument.....	38° 53' 22".102	77° 02' 07".78
Difference.....	12".805	19".965

It thus appears that the center of the District is 12".805 or 1,305 feet farther north and 19".965 or 1,579 feet farther west than the monument. This locates it on or near C street north, between Seventeenth and Eighteenth streets west. This is the center of the original District.

APPENDIX.

Surveyor's Office, 15th Oct., 1804.

Sir: Being requested by Mr Briggs to assist him in running a true meridian line which should pass through the center of the President's house, and to perpetuate the same, as also the point of intersection by a due west line drawn from the center of the Capitol by fixing permanent marks thereon, and as the pressure of other official engagements prevented his attention to more than ascertaining the meridian line and marking it temporarily, it devolves on me to describe the mode pursued in ascertaining the line and the required intersections, that others may know what dependence is to be placed on their accuracy.

In running the meridian line I acted only in the capacity of assistant, conforming entirely to the instructions of Mr Briggs, and executing with all the care in my power the marking of his temporary line, agreeably to his signals and instructions, in giving which I believe he used all the accuracy of which the instrument was capable.

With a new transit instrument, executed by Voigt of Philadelphia, he ascertained the place of the star, in the tail of the constellation Ursa Minor, on its greatest eastern elongation, and, continuing the vertical circle to the surface of the ground by the instrument, he determined the bearing, in the line of which on a very low stand was placed one of Argand's lamps covered by a tin cylinder, in which a small slit was made for a sight, and the line from the light toward the instrument was drawn upon the stand. Knowing the radius of the circle described by the star, or half the angle formed by its greatest elongations, east and west, and the altitude of the pole, he by calculation deduced the horizontal angle made by two vertical circles, one of which is the meridian passing through the pole; the other through the star's place when farthest east. This horizontal angle being found, and the base line measured from the place of the instrument (the north door of the President's house) to where it is intersected by an east-and-west line from the place of the light or sight used (the north side of north I street), afforded the necessary data for calculating the distance to be measured west from the place of the sight to the true meridian line, which offset was very carefully made and the line marked on the head of a post firmly driven into the ground. The meridian being thus fixed and a point found due north from the place of observation, the line was continued by the instrument at one sight and tested by reversing the telescope at an intermediate station in the line to the top of a hill nearly two miles north of the President's house, on the lands of Mr Robert Peter, where temporary posts were fixed and the line marked upon them, according to the instructions by signal from Mr Briggs at the instrument. From the President's house the line was reversed by the instrument and continued south across the Tyber creek and marked in the same manner on the head of posts driven in the public appropriation called the mall.

Having obtained the permission of Mr Peter, early in September I planted a small obelisk of freestone, prepared by Mr Banglen, in the meridian line north of the President's house, on the height where the stakes had been fixed under the direction of Mr Briggs. The apex is in the true meridian from the center of the north door.

In perpetuating the south line it was deemed best to place the stone where the meridian line should be intersected by a west line from the Capitol. The surface of the ground, however, being unfavorable—the Capitol not being visible at the point of intersection—it suggested the planting an obelisk similar to that on the north line at a point on the meridian west from the south end of the Capitol and where the building was distinctly seen, and from thence find the intersection of the center line by measuring northwards half the length of the Capitol. Although the body of the building was in full view, yet intervening trees prevented my seeing with the necessary distinctness the south end of the Capitol; and I had to find the required point on the meridian by setting off the angle included between the northwest corner of the building and the center of the President's house. This angle I had previously calculated, from the distance, 7,696.8 feet, and the length of the Capitol, 351

feet 5 inches, to be $87^{\circ} 23' 0'' S$. For the greater accuracy I measured this angle from different parts of the circle of a theodolite, made by Adams, going several times around the instrument and taking the mean as the correct angle. In one instance, however, I found a variation of nearly two minutes in the angular distance of the buildings; in others they would coincide for several observations. I thus ascertained my position and the point on the meridian line from which a line drawn at right angles due east would touch the south end of the Capitol with all the precision the instrument is capable of. Here I planted the obelisk, and measured from the center of it north 175 feet $8\frac{1}{2}$ inches, half the length of the building, for the point of intersection on the meridian drawn through the center of the President's house by a west line from the center of the Capitol. It is on the south bank of Tyber creek and marked by the erection of a small pier, covered by a flat freestone, on which the lines are drawn.

I am, sir, very respectfully yours;

NICHOLS KING, S. C. W.

THE PRESIDENT OF THE UNITED STATES.

(First endorsement.)

Nichols King.

15 Oct^r, 1804.

Meridian line through the center of the President's house.

(Second endorsement.)

King, Nich^s.

Surveyor's Office, Oct. 15, '04.

Rec^d Oct. 15.

To be filed in the office of State, as a record of the demarcation of the 1st meridian of the U. S.

LIST OF MAPS OF WASHINGTON AND THE DISTRICT OF
COLUMBIA, WITH NOTES THEREON

BY MARCUS BAKER

In gathering material for the foregoing notes on surveys and maps of Washington and the District of Columbia various maps have been examined. As no list of such maps is known to be in print, it is deemed worth while to print this list, which may serve as a useful beginning for the future bibliographer. The titles have been prepared by the compiler himself, unless otherwise indicated. The places where the maps were seen is also indicated for those which are not common.

L. C. = Library of Congress.
G. S. = " " Geological Survey.
C. S. = " " Coast and Geodetic Survey.

1791. L'Enfant (Peter Charles). Plan of the city intended for the permanent seat of the Government of t[he] United States. Projected agreeable to the direction of the President of the United States in pursuance of an act of Congress passed the sixteenth day of July, MDCCXC, establishing the permanent seat on the bank of the Potomac. By Peter Charles L'Enfant.

Size, 30 x 45 inches. **Scale,** 4 inches to one mile, or **1:15840.**

Colored photolithograph made by C. & G. S. in 1887 from original in "Office of Commissioner of Public Buildings, D. C."

This is No. 2036a of the C. S. catalogue of charts, 1887.

1792. Elliott (Andrew). Plan of the city of Washington, in the territory of Columbia, ceded by the states of Virginia and Maryland to the United States of America, and by them established as the seat of their government after the year MDCCC. Engraved by Thackara & Vallance, Philada., 1792.

Size, 21 x 28 inches. **Scale,** 100 paces to one inch, or **1:10900.**

Black. Engraved on copper. Original copper plate said to be in possession of the C. & G. S.

This map is No. 2035 of C. & G. S. catalogue of charts, 1887, where the date is given as 1888. Copies seen, L. C. and C. S.

[1792?] Elliott (Andrew). Plan of the city of Washington, in the territory of Columbia, ceded by the states of Virginia and Maryland to the United States of America, and by them established as the seat of their government after MDCCC.

Size, 17 x 20 inches. **Scale,** 100 paces to one inch, or **1:10900.**

Black. Engraved on copper.

[Is Maps of the District of Columbia and city of Washington and plans of the squares and lots of the city of Washington. Printed in pursuance of a resolution

of the Senate of the United States. Sm. fol., Washington, printed by A. Boyd Hamilton, 1832.]

This is map No. 343 of the C. & G. S. catalogue of charts for 1883, where its date is given as 1800. Original copper plate said to be in possession of the C. & G. S.

- [1792?] **Ellicott** (Andrew). Plan of the city of Washington, in the territory of Columbia, ceded by the states of Virginia and Maryland to the United States of America, and by them established as the seat of government after the year MDCCCL. Engraved by Sam^l Hill, Boston.

Size, 17 x 20 inches. **Scale,** 100 poles to one inch, or 1:19800.

Black. Engraved on copper.

Three copies of this map in L. C. Apparently same as preceding, differing only by the added words, "Engraved by Sam^l Hill, Boston."

- [179-?] **Reid** (L.) Plan of the city of Washington, in the territory of Columbia, ceded by the states of Virginia and Maryland to the United States of America, and by them established as the seat of their government after the year 1800. Robinson, sculp., N. York. Publish'd by L. Reid.

Size, 16 x 21 inches. **Scale,** 100 poles to one inch, or 1:19800.

Black. Engraved on copper.

Evidently a copy of Ellicott's map. Copies seen, L. C.

- [1793?] **Ellicott** (Andrew). Territory of Columbia. Drawn by Andw. Ellicott.

Size, 21 x 22 inches. **Scale,** 2 inches to one mile, or 1:31680.

Black. Engraved on copper.

The only copy of this map known to me is the very yellow and soiled one now in the Library of Congress. It was reproduced in 1852, omitting the words, "Drawn by Andw. Ellicott." It is the first topographic map of the District of Columbia, and was the only one down to about 1860. All the maps of the District of Columbia I have seen published between 1831 and 1861 appear to have been copied from this one.

1793. **Bent** (W.) Plan of the city of Washington now building for the metropolis of America, and established as the permanent residence of Congress after the year 1800. B. Baker, sculp.

Size, 10½ x 12½ inches.

Black.

[*The Universal (The) Magazine.* 65, London, W. Bent, 1793, vol. 30, July, 1793, being p. 41.]

Copy seen, L. C.

1794. **Gotha Almanac.** Plan de la ville de Washington en Amerique. Weidner Jun. del. J. G. Klinger, sc. Nov. 1794.

Size, 6 x 8 inches.

Black. Engraved on copper.

[*Je Gothaischer Hof. Kalender zum Nutzen und Vergnügen auf das Jahr 1795.* 187, Gotha, bey G. W. Eitzinger, 1794, p. 35.]

1795. **Reid, Wayland, and Smith.** Plan of Washington. Published by Reid, Wayland, and Smith, 1795.

Not seen. Title from sale catalogue.

1795. Griffith (Dennis). Map of the state of Maryland laid down from an actual survey of all the principal waters, public roads and divisions of the counties therein; describing the situation of the cities, towns, villages, houses of worship and other public buildings, furnaces, forges, mills and other remarkable places; and of the Federal territory; as also a sketch of the state of Delaware; showing the probable connexion of the Chesapeake and Delaware bays; by Dennis Griffith, June 20th, 1794. Engraved by J. Thackara & J. Vallance, Philada. Published June 6th, 1795, by J. Vallance, engraver, No. 145 Spruce street. Subtitle, "Plan of the city of Washington and Territory of Columbia."

Size, 18 x 14 inches. **Scale,** 250 yards to an inch, or 1:33000.

Black. Engraved on copper.

Apparently copied from Elliott's map of the District of Columbia, 1792. Copies seen, G. S.

1798. Dermott (James R.) The Dermott or tin case map of the city of Washington, 1797-8. Prepared by James R. Dermott, who was instructed by the commissioners, June 15, 1795, to prepare a plat of the city. The resulting map was sent to Pres't Adams June 21, 1798.

Size, 24 x 32 inches. **Scale,** about 8 inches to one mile, or 1:7160.

Black. Photolithograph.

Republished by the C. & G. S. in 1888. It is No. 3833 of the C. & G. S. chart catalogue of 1892. Copies seen, G. S.

1800. Weld (Isaac, Jr.) Plan of the city of Washington. Published by J. Stockdale, Picadilly, 16th Sept., 1798.

Size, 7 x 3 inches. **Scale,** 1½ inches to one mile, or 1:39688.

Black. Engraved on copper.

[In Weld (Isaac, Jr.) *Travels through the states of North America, etc.* By Isaac Weld, Jr. 2d ed., 16 x 2 vols. 8°, London, J. Stockdale, 1801, vol. 1, p. 86.]

1802. Moore (S. S.) and Jones (T. W.) Plan of Washington to accompany the traveller's guide. No title or scale.

Size, 4 x 6 inches.

Black. Engraved on copper.

[In Moore (S. S.) and Jones (T. W.) *The traveller's directory, etc.* 12°, Philadelphia, M. Carey, 1802, map B.]

[180-?] **King (Robert).** A map of the city of Washington, in the District of Columbia, established as the permanent seat of the government of the United States of America, taken from actual surveys as laid out on the ground by Rt. King, surveyor of the city of Washington. Engraved by C. Schwarz, Washn.

Size, 24 x 31 inches. **Scale,** 2½ inches to one mile, or about 1:13000.

Black. Engraved on copper.

Has two views: (1) South front of the President's house; (2) East front of the Capital of the United States. Copies seen, L. C.

1815. Warden (D. B.) Territory of Columbia. Drawn by Andw. Elliott. Engraved by P. A. F. Tardieu, Paris, 1815.

Size, 11 x 11 inches. **Scale,** 6.25 inches to one mile, or 1:55000.

Black. Engraved on copper.

[In Warden (D. B.) *A chorographical and statistical description of the District of Columbia, etc.* 8°, Paris, 1816, col. 16.]

A reduced copy of Elliott's map. Copies seen, L. C.

1816. Winder (Rider H.) No title or scale.

Size, 10 x 15½ inches.

[In Remarks on a pamphlet entitled "An enquiry respecting the capture of Washington by the British on the 24th of August, 1814, with &c. By R. Winder." P., Baltimore, J. Robinson, 1818.]

A crude diagram of the country between Bladensburg and Mt. Vernon and between Georgetown and Patuxent river. Copies seen, L. C.

1820. Force (Peter). A correct map of the city of Washington, capital of the United States of America. Lat., 38° 53' N.; long., 0° 0'. Engraved by W. I. Stone, Washn. [1820]. Entered according to act of Congress on the 31th (sic) day of January, 1820, by Peter Force, of the District of Columbia.

Size, 10½ x 21½ inches. **Scale,** 100 paces to one inch, or 1:19800.

Black. Engraved on copper.

[In Force (Peter): A national calendar for 1820. By Peter Force. 18th, Washn., 1820, 4d. fr.]

Contains views: (1) West front of Capitol; (2) North front of President's house. Two copies in L. C.

1828. Brennan (John). Map of the city of Washington. Published by John Brennan, 1828. Drawn by F. C. De Krafft, city surveyor. Engraved by Mrs W. I. Stone.

Size, 10½ x 21½ inches. **Scale,** about 347 inches, equal to one mile, or 1:18200.

Black. Engraved on copper.

Copies seen, L. C.

1830. Bussard (William). A map of Georgetown, in the District of Columbia, by William Bussard, 1830. Engr. by W. Harrison, Washn.

Size, 24 x 27 inches. **Scale,** 100 yards to an inch, or 1:3600.

Very rugged, worn, and yellow copy in office of city surveyor. Another copy owned by W. H. Lowdermilk.

1846. McClelland (David). Map of the city of Washington, established as the permanent seat of the Government of the United States of America, 1800. Engraved and published by D. McClelland.

Size, 14 x 27½ inches. **Scale,** 3 inches to one mile, or 1:21120.

Black. Engraved on copper.

A sub-sketch consists of a reduced copy of Elliott's map of the District of Columbia of 1793. Scale, 7½ inches, equal to 10 miles, or 1:15000. Copies seen, L. C.

1851. Van Derveer (Lloyd). Map of the city of Washington, D. C., established as the permanent seat of the Government of the U. S. of Am. James Kelly, surveyor. Lloyd Van Derveer, publisher, Camden, N. Jersey, 1851.

Size, 20 x 42 inches. **Scale,** 6½ inches to one mile, or 1:5730.

Colored, glazed, on roller.

Contains views of (1) Capitol, (2) President's house, (3) Greenough's statue of Washington, (4) Patent Office, (5) Observatory, (6) Monument, (7) City Hall, (8) Gen. and Post Office, (9) Smithsonian Institution, (10) Treasury Department, and (11) Statistics from census of 1850. Also contains sub-sketch of the District of Columbia from Elliott's map. Copies seen, L. C.

1852. U. S. Senate. Territory of Columbia.

Size, 21 x 22 inches. **Scale,** 2 inches to one mile, or 1:31680.

Black. Engraved on stone?

[In *Maps of the District of Columbia and city of Washington and plats of the squares and lots of the city of Washington.* Printed in pursuance of a resolution of the Senate of the United States. Sm. fol., Washington, printed by A. Boyd Hamilton, 1852.]

This is a reproduction of Elliott's map of 1792. Copies seen, L. C., G. S., G. S., and engineer's office, War Dept.

1852. U. S. Senate. Map of the city of Washington, in the District of Columbia, established as the permanent seat of the government of the United States of America. W. J. Stone, sc., Washn.

Size, 22 x 31 inches. **Scale,** 5 2/3 inches to one mile, or 1:13200.

Black. Engraved on copper.

[In *Maps of the District of Columbia and city of Washington and plats of the squares and lots of the city of Washington.* Printed in pursuance of a resolution of the Senate of the United States. Sm. fol., Washington, A. Boyd Hamilton, 1852.]

This is chart or map No. 3006 of the C. & G. S. catalogue of charts for 1853, where the date of the chart is given as 1852.

1852. U. S. Senate.

Reproduction of Elliott's map of [1792?], which is No. 3043 of the C. & G. S. chart catalogue, 1853.

1857. Boschke (Albert). Map of Washington city, District of Columbia, seat of the Federal government. Respectfully dedicated to the Senate and House of Representatives of the United States of North America. Surveyed and published by A. Boschke, C. E., 1857.

Size, 36 x 46 inches. **Scale,** 300 feet to one inch, or 1:6000.

Colored. Lithograph of J. Hen, 90 Fulton St., N. Y.

Copyright, 1857, by A. Boschke. Ornamental border and 18 marginal pictures.

An original and excellent map. The best map of Washington, in my judgment, that has ever been made. Copies seen, L. C. and C. S.

1858. Bohn (Casimir). Map of the city of Washington, established as the permanent seat of the government of the United States of America. 1858. Published by C. Bohn. Copyright by C. Bohn, 1858.

Size, 13 x 17 inches. **Scale,** 2 1/2 inches to one mile, or 1:21600.

Black. Engraved on copper?

[In *Bohn (Casimir) Handbook of Washington, etc.* 167, Washington, 1860, ad. 18.]

This is a reproduction of McClelland's map of 1846. Copies seen, L. C.

1861. Boschke (Albert). Topographical map of the District of Columbia, surveyed in the years 1856, 57, 58 & 59 by A. Boschke. Published by D. McClelland, Blanchard & Mohun, Washington, D. C., 1861. Engraved by D. McClelland, Washington, D. C. Copyright, 1861, by D. McClelland, Blanchard & Mohun, Hugh B. Sweeney and Thos. Blagden.

Size, 40 x 40 inches. **Scale,** 4 inches to one mile, or 1:15840.

Black. Engraved on copper.

The first contour topographic map of the District of Columbia. An excellent map. The original copper plates seized by the United States in 1867 and now in possession of the War Department. Electroplate copies in possession of the C. & G. S. Copies seen, G. S., C. S., and Harrison's bookstore.

1862. McDowell (General Irvin). Surveys for military defenses. Map of N. eastern Virginia and vicinity of Washington, compiled in topographical engineer's office, at division headquarters of General Irvin McDowell, Arlington, January 1, 1862, from published and manuscript maps corrected by recent surveys and reconnaissances. Engraved on stone by J. Scheller, No. 120 Pearl St., N. Y.

Size, 20 x 67 inches. **Scale,** one inch to the mile, or 1:63360.
Black. Lithograph.

1862. Colton (G. Woolworth). Topographical map of the original District of Columbia and environs; showing the fortifications around the city of Washington. By E. G. Arnold, C. E. Published by G. Woolworth Colton, 18 Beekman St., New York, 1862. Copyright by Arnold, 1862.

Size, 22 x 33 inches. **Scale,** 2 inches to one mile, or 1:31680.
Colored. Lithograph.

Topography shown by hachures. Mainly copied from Bossche's map. One of the maps issued by Colton was seized by order of Secretary Stanton, and this is probably the one. Copies seen, L. C.

1867. Carpenter (B. D.) Map of the roads in Washington county, D. C., 1867. B. D. Carpenter, surveyor of Washington county, D. C.

Size, 34 x 40 inches. **Scale,** 1 inch to one mile, or 1:15840.

Black, with certain roads colored. Lithograph by J. P. Goddard, 281 Pennsylvania Ave., Washington. Copies seen, U. S.

1868. Wyeth (S. D.) Map of the city of Washington, District of Columbia.

Size, 6 x 7½ inches. **Scale,** none.

Purple.

[In Wyeth (S. D.) *The Federal city, etc.* 2d ed., #7, Washington, D. C., Gibson Brothers, 1868, pp. 24, 25.]

Very crude and poor. Copies seen, L. C.

1868. Johnson (A. J.) Johnson's Washington and Georgetown, published by A. J. Johnson, New York. Copyright 1868.

Size, 13 x 17 inches. **Scale,** 2½-16 inches to one mile, or 1:44700.

Colored.

[In Johnson's *new illustrated family atlas of the world, etc.* 2d. ed., New York, A. J. Johnson & Co., 1865, map 48.]

1870. Forsyth (William). Plan of the city of Washington, in the District of Columbia, established as the permanent seat of government of the United States, extended to embrace its suburban towns, villages, &c., and the city of Georgetown, and showing original and other valuable data not to be found on any maps heretofore published. Also a diagram of the avenues, showing their true courses and distances, and a plan of Alexandria. By William Forsyth, formerly surveyor of Washington city. 1870. Copyright 1870.

Size, 60 x 68 inches, in six sheets. **Scale,** 300 feet to one inch, or 1:60000.

Colored, glazed, on rollers. Photolith. by the N. Y. Lithographing, Engraving & Printing Co.; Julius Bien, sup'g.

There are said to be two editions of this map. Copies seen, city surveyor's office and L. C.

[1872.] **Forsyth** (William). Map of Georgetown, in the District of Columbia, prepared from surveys and other data under an act of the legislature approved Decr. 28th, 1871. Wm. Forsyth, surveyor District of Columbia.

Size, 47 x 56 inches. **Scale**, 200 feet to one inch, or 1:2400.

Colored, glazed, on rollers.

Copies seen, city surveyor's office.

1872. **Petersen** (A.) and **Enthoffer** (J.) Map of the city of Washington, showing the subdivisions, grades, and the general configuration of the ground in equidistances from 5 to 5 feet altitude. Compiled, with the assistance of the city sur., P. H. Donegan, by A. Bester and J. Enthoffer. Published by A. Petersen and J. Enthoffer, of the U. S. Coast Survey, 1872. For sale by Philip & Solomons.

Size, 46 x 108 inches. **Scale**, 200 feet to one inch, or 1:2000.

Black. Engraved on copper.

Copies seen, F. W. Pratt, gun building.

1873. **Enthoffer** (J.) Map of the city of Washington, showing the progress of buildings up to October 1st, 1873. Compiled by J. Enthoffer, top. engineer. Copyright, 1873.

Size, 22 x 25 inches. **Scale**, 1,000 feet to one inch, or 1:12000.

Photograph.

May never have been published. Has 10-foot contours, and classifies buildings as "houses, shanties, stables," Copies seen, L. C.

1874. **Fachts** (E. F. M.) and **Pratt** (F. W.) Sketch of Washington in embryo, viz., previous to its survey by Major L'Enfant. Compiled from the rare historical researches of Dr Joseph M. Toner, who by special favor has permitted the use of his labor and materials for the publication of a grand historical map of this District now in progress by his efforts, combined with the skill of S. R. Seibert, C. E. Compilers, E. F. M. Fachts & F. W. Pratt, 1874.

Size, 16 x 21 inches. **Scale**, about 3½ inches to one mile, or 1:15000.

Black. Photolith. by N. Peters, Washington, D. C.

[In Fachts (E. F. M.) and Pratt (F. W.) *Washington in embryo, etc.*, ed., Washington, 1874, facing p. 32.]

Copies seen, L. C.

1882. **Ward** (Lester Frank). Map of Washington and vicinity. Prepared in the office of the U. S. Geological Survey, 1882.

Size, 24 x 30 inches. **Scale**, about 0.28 inches to one mile, or 1:100000.

Black. Photolithograph.

[In Ward (L. F.) *Guide to the Parks of Washington and vicinity*, being Bulletin 22, U. S. National Museum. #7, Washington, 1892.]

1882. **U. S. Coast and Geodetic Survey.** Washington and Georgetown harbors, District of Columbia, 1882.

Size, 18 x 26 inches. **Scale**, 4 inches to one mile, or 1:15840.

Colored. Photolithograph.

This is C. S. chart 101a, issued July, 1862. Drawn by A. and H. Lindenköhl. Land, buff; water, green, and sky, shaded; has 10-foot contours.

- 1882. Boyd (William H.)** Boyd's map of the city of Washington and suburbs, District of Columbia, 1882. Published by Wm. H. Boyd, directory publisher, Washington, D. C. Copyright 1882.

Size, 15 x 18 inches. **Scale,** 1,000 feet to one inch, or 1:12500.
Black. Photoithograph by Am. Photoith. Co., New York.

- 1884. Commissioners, District of Columbia.** Topographical map of the District of Columbia and a portion of Virginia, compiled under the direction of Major G. J. Lydecker, corps of engineers, Engineer Commissioner, D. C. By Captain F. V. Greene, corps of engineers, 1884. Drawn by W. T. O. Bruff.

Size, 21 x 21 inches. **Scale,** 2 inches to one mile, or 1:31680.
Black. Lithograph by Julius Bien & Co., New York.
Contour interval, 20 feet. Copies seen, District Commissioners' office and G. S.

- 1884. Commissioners, District of Columbia.** Topographical map of the District of Columbia and a portion of Virginia, compiled under the direction of Major G. J. Lydecker, corps of engineers, Engineer Commissioner of the D. of C., by Captain F. V. Greene, corps of engineers, 1884. Drawn by W. T. O. Bruff.

Size, 41 x 41 inches. **Scale,** 4 inches to one mile, or 1:15840.
Lithograph by Julius Bien & Co., New York.
A contour map. Contour interval, 20 feet. Culture, black; water, blue; contours, brown. Copies seen, Eq. Co-op. Bldg. Ass'n, 202 F St., and G. S.

- 1884. Stewart (James M.)** Map of the city of Washington, in the District of Columbia, showing the lines of the various properties at the division with the original proprietors in 1792.

Size, 24 x 32 inches. **Scale,** 2 1/2-16 inches to one mile, or 1:22200.
Colored. Lithograph.
Copyrighted by James M. Stewart, Washington, D. C., 1884. F. Bourquin, 31 N. Sixth St., Philadelphia.
Copies seen, Office of Commissioner of Public Buildings and Grounds and real estate office of Weller & Depetit, 40 Pa. Ave. S. E.

- 1886. U. S. Geological Survey.** District of Columbia and adjoining territory, being the Washington sheet of the general topographic map of the United States. Surveyed and compiled by J. D. Hoffman and D. J. Howell in 1885-6, under the direction of Henry Gannett, U. S. Geological Survey.

Size, 19 x 28 inches. **Scale,** about one mile to one inch, or 1:62500.
Engraved on copper. Printed in 7 colors: culture, black; water, blue; contours, brown. Contour interval, 20 feet.

- 1886. Warner (B. H.)** B. H. Warner & Co.'s map, showing a bird's-eye view of the city of Washington and suburbs. Locating the public buildings and places of interest. Copyright, 1886, by B. H. Warner & Co. Prepared by A. G. Gedney, Post building, Washington, D. C.

Size, 20 x 20 inches. **Scale,** none.
Black. Photoithograph.
Compromise between a view and a map.

1887. Engineer Department, District of Columbia. Map of the city of Washington for use of the engineer department, District of Columbia, 1887.

Size, 28 x 38 inches, in 120 sheets. **Scale,** about 850 feet to one inch, or 1:10000. Black. Photolithograph by Norris Peters, Washington, D. C. Copies seen, G. S. and District Commissioners' office.

1887. Silversparre (Axel). Map of Washington, D. C., and environs, with marginal numbers and measuring tape attachment for instantly locating points of interest within a radius of twenty miles from the Capitol. Compiled [etc] by Axel Silversparre, C. E. Published by R. E. Whitman, Washington, D. C. Copyrighted, 1887.

Size, 25 x 30 inches. **Scale,** 1,600 feet to one inch, or 1:19200. Colored. Copies seen, L. C. and G. S.

1889. Commissioners, District of Columbia. Topographical map of the District of Columbia and a portion of Virginia, revised and corrected under the direction of Major Chas. W. Raymond, corps of engineers, Engineer Commissioner, D. C. By Captain T. W. Symons, corps of engineers, 1889. Drawn by W. T. O. Bruff.

Size, 41 x 41 inches. **Scale,** 1 inch to one mile, or 1:15840. Colored. Lithograph by Julius Bien & Co., N. Y. This is a revised edition of the Lydecker-Greene map of 1881. Copies seen, G. S.

1889. Evening Star. Map of the city of Washington, with compliments of the Evening Star. Souvenir of March 4th, 1889. Showing route of inaugural parade.

Size, 17 x 23 inches. **Scale,** about 2 8/10 inches to one mile, or 1:16500. Black. Photolithograph by Bell Bros., Washington, D. C. Copies seen, G. S. and Turner collection in L. C.

1891. Fisher (Thos. J.) & Company. Map of the city of Washington, District of Columbia, and adjacent portions of Maryland and Virginia. Prepared and presented with compliments of Thos. J. Fisher and Co., real estate brokers, Washington, D. C. Prepared by W. Kesley Schoepf, civil and topographical engineer, Sun building, Washington, D. C., 1891. Copyrighted, 1891, by Fisher & Co.

Size, 27 x 34 inches. **Scale,** 1:37000. Black. Lithograph by Bell Litho. Co., Washington, D. C.

1891. Fisher (Thos. J.) & Company. Map of the District of Columbia and adjacent portions of Maryland and Virginia, prepared especially for and presented with compliments of Thos. J. Fisher and Co., real estate brokers, Washington, D. C., 1891. Prepared by W. Kesley Schoepf, civil and topographical engineer, Washington, D. C.

Size, 45 x 57 inches. **Scale,** 1,000 feet to one inch, or 1:12000. Colored, glazed, on rollers. E. H. Berry, del. Bell Litho. Co., Washington, D. C. Copies seen, city surveyor's office.

1891. Holtzman (R. O.) Presented by R. O. Holtzman, real estate and insurance broker, Tenth and F streets N. W. Copyright, 1891.

Size, 17 x 13 inches. **Scale,** about 25 $\frac{1}{2}$ inches to one mile, or **1:625000.**
Crisis photolithograph.
No title. A real-estate advertising map.

1891. Hopkins (G. M.) Map of the District of Columbia, from official records and actual surveys. Published by G. M. Hopkins, C. E., 320 Walnut St., Philadelphia, Pa., 1891. Copyright, 1891.

Size, 30 x 61 inches. **Scale,** 800 feet to one inch, or **1:96000.**
Colored.

1891. U. S. War Department. U. S. Coast and Geodetic Survey. A. D. Bache, sup't. Map of the ground occupation and defense of the division of the U. S. army in Virginia in command of Brig. Gen. Irvin McDowell. Topographical survey by the party in charge of H. L. Whiting, ass't. U. S. C. S. Field-work executed during parts of June and July, 1861. By F. W. Dorr and C. Rockwell, U. S. C. S. Julius Bien & Co., lith., New York.

Size, 19 x 17 inches. **Scale,** **1:47500.**
Culture, black; water, blue; contours, brown; timber, green. Contour interval, 20 feet.
[Is also to accompany the official records of the Union and Confederate armies, 1861-1862. Published under the direction of the Hon. Redfield Proctor, Secretary of War, etc, fol., Washington, 1891, part 2, plate 5.]

1891. U. S. War Department. Surveys for military defenses. Map of northeastern Virginia and vicinity of Washington, compiled in topographical engineer's office at division headquarters of General Irvin McDowell, Arlington, January 1, 1862. Corrected from recent surveys and reconnaissances under direction of the Bureau of Topographical Engineers, August 1, 1862. Drawn by J. J. Young and W. Hesselbach.

Size, 17 x 27 inches. **Scale,** 2 miles to one inch, or **1:126720.**
Colored. Lithograph by Julius Bien & Co., New York.
[Is also to accompany the official records of the Union and Confederate armies, 1861-1862. Fol., Washington, 1891, part 2, plate 7.]

1892. Van Hook (J. C. & C. G.) Map and guide to Washington, D. C. Compiled and published by J. C. and C. G. Van Hook, National Union building, 918 F St. N. W., Washington, D. C., 1892.

Size, 18 x 23 inches. **Scale,** 35 $\frac{1}{2}$ inches to one mile, or **1:16900.**
Colored. Photolithograph by A. M. Graham, Washington, D. C.

1892. District of Columbia National Guard. Map of the District of Columbia and vicinity, showing the principal points of interest, including the present condition of the defenses of Washington. Compiled from the latest maps and from original surveys and reconnaissances by the engineering platoon of the Engineer Corps, D. C. N. G. F. L. Averill, C. E., first lieutenant, com'd'g platoon, 1892. Copyright, 1892, by F. L. Averill.

Size, 20 x 25 inches. **Scale,** about 1½ inches to one mile, or 1:40000.
 Black. Photolithograph by A. B. Graham, Washington, D. C.

1892. Howell (David Janney). Index map to Washington county plans, District of Columbia. From official records, by D. J. Howell, civil engineer and landscape architect, National Union building, Washington, D. C. Under act of Congress approved Jan'y 24th, 1891, by authority of Commissioners, D. C. Matthew Trimble, assessor, January 1st, 1892.

Size, 42 x 55 inches. **Scale,** 800 feet to one inch, or 1:96000.
 Colored. Photolithograph by Bell Lith. Co., Washington.

1893. Fisher (Thos. J.) & Company. Map of the District of Columbia and adjacent portions of Maryland and Virginia. Prepared especially for and presented with compliments of Thos. J. Fisher and Co., real estate brokers, Washington, D. C., 1893. Prepared by W. Kesley Schoopf, civil and topographical engineer, Washington, D. C. Copyrighted, 1893.

Size, 36 x 49 inches. **Scale,** 4½ inches to one mile, or 1:13000.
 Colored, glazed, on rollers.

1894. Coast and Geodetic Survey "District of Columbia. Surveyed between 1880 and 1892. Published Sept., 1894. The contour interval is 10 feet. The datum plane is 0.807 feet above half tide level of the Potomac river."

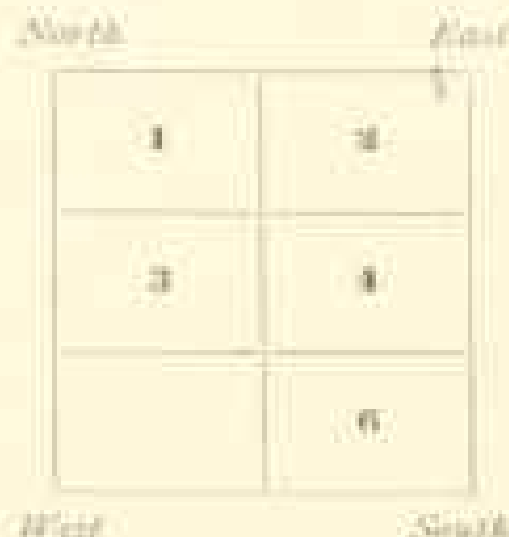
Size of each sheet, 25 x 34 inches. **Scale,** 800 feet to one inch, or 1:96000.
 Black. Photolithograph. In five sheets.

This is the first published map resulting from the careful and detailed surveys mentioned on pp. 159, 160. It shows in great detail all the present District, except the city.

The sheets have two series of numbers as follows:

- No. 2001 — Sheet No. 1.
- No. 2002 — " No. 2.
- No. 2003 — " No. 2.
- No. 2004 — " No. 4.
- No. 2005 — " No. 4.

And are distributed as shown in the annexed map.



[1894.] **United States Coast and Geodetic Survey.** Topographical map of the District of Columbia. Sheet No. 1. Scale, 1:4800. The contour interval is 5 feet. The datum plane is 0.807 feet above half-tide level of the Potomac river.

Size, 15 x 18 inches. **Scale,** 480 feet to an inch, or 1:4800.

Engraved upon copper by Evans and Burde, Washington, D. C. Printed by the Norris Peters Lith. Co., Washington, D. C.

In four colors, viz., culture, black; drainage, blue; contours, brown, and woodland, green.

The above is one sheet of the very elaborate map begun by the Coast Survey in 1880. It covers one square mile, and 100 such are required to cover the original District of Columbia. Under the scheme of numbering now adopted the District is divided into 100 squares by lines parallel to its boundaries. The northeastern row of ten sheets is numbered from the northern corner to the eastern corner 1 to 10; the second row, 11 to 20; the third, 21 to 30, and so on. Some 20 to 25 of these sheets are said to be now engraved, but none are published. The compiler has seen proofs of sheets 1, 2, 22, and 23.

Another series of sheets preceded the above described. This other series consists of photolithographs, black, made from drawings by J. A. Fleming and E. H. Fowler. The method of designating them has been changed from time to time, leaving the whole in confusion. Sheets have been designated "Section No. 10 W₁," "Section D, Sheet No. 1," and also by numbers, such numbers not agreeing with those now in use. These sheets are 15 by 18 inches, and about 13 of them have been issued.

