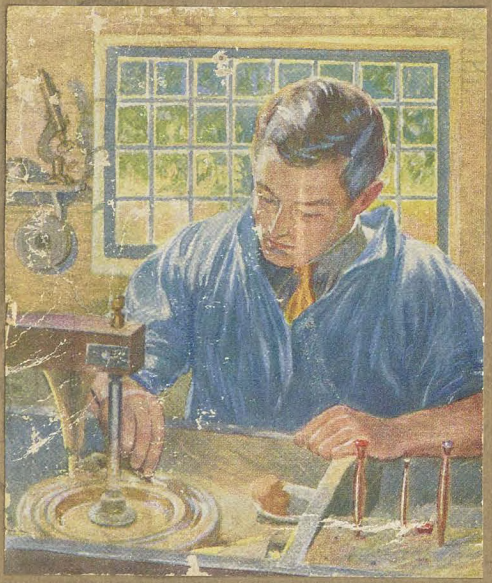
A Guide for Gem Buyers



J. Sinkiewicz
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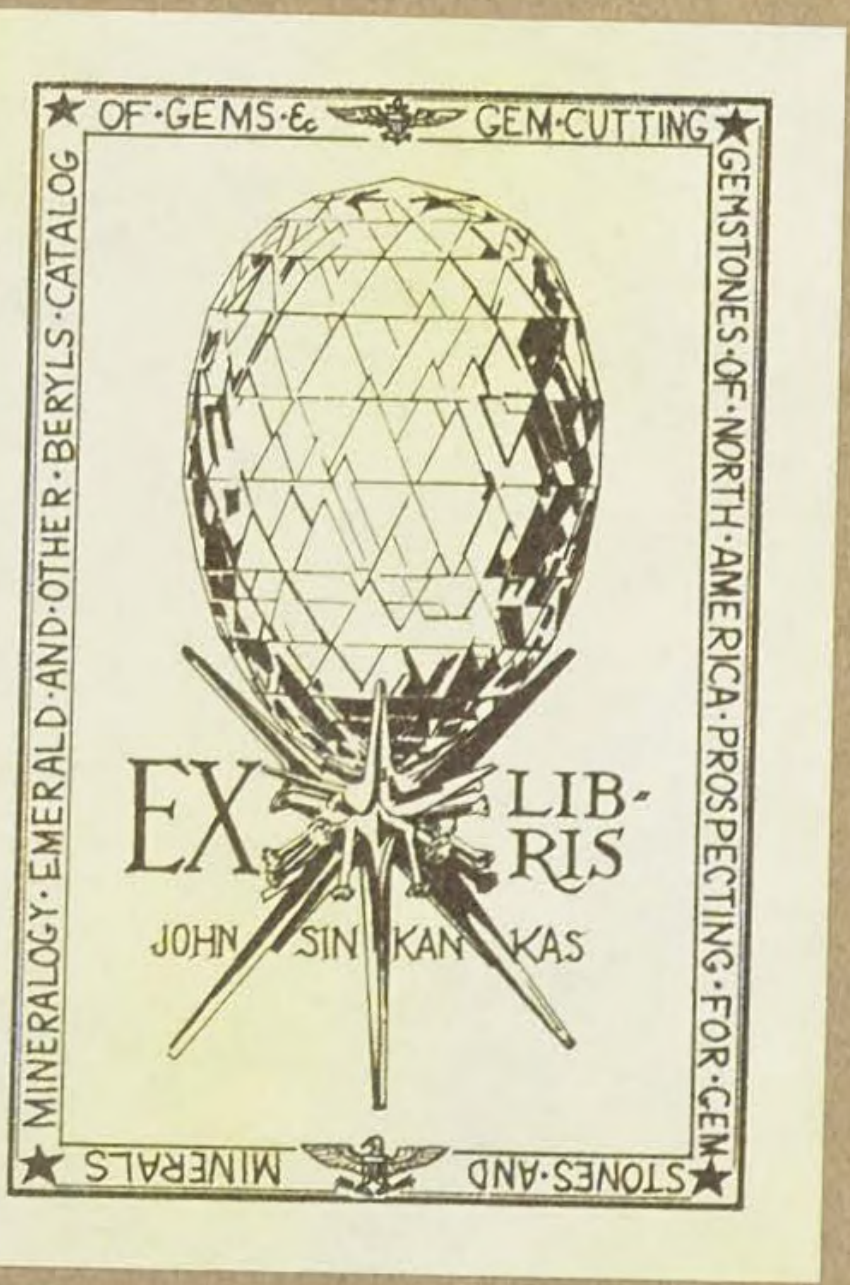
OF·GEMS·&c GEM·CUTTING
GEMSTONES·OF·NORTH·AMERICA·PROSPECTING·FOR·GEM
STONES·AND MINERALS
MINERALOGY·EMERALD·AND·OTHER·BERYLS·CATALOG
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A Guide for Gem Buyers

Espositer, Varni Co.
45-49 John Street
New York

Foreword

THE modern jeweler realizes that his customers have developed, in recent years, into very discriminating buyers of gems and jewelry.

His patrons are demanding jewelry made to special order; favorite gems are being asked for; definite color schemes are required and many hitherto little-known semi-precious stones have become articles of daily demand.

We have issued this little book that the jeweler may have for convenient and ready reference information that we hope may prove helpful in catering to a growing and profitable *clientèle*.

Our further object is to acquaint the jeweler with the unusual facilities of the Espositer, Varni Company and the kind and quality of the service and cooperation it has to offer him.

As dealers in precious and semi-precious stones, we enjoy connections abroad that keep us constantly informed concerning foreign markets and buying opportunities. Our unusual advantages in the purchase of gems we are glad to pass on to the jewelers in the form of better values.

Buying our gems *in the rough*, cutting the stones under the personal supervision of members of the firm, enables us to execute orders for cutting, polishing and repairing in a manner that insures satisfaction in *quality*, *price* and *prompt service*.

ESPOSITER, VARNI CO.

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Illustrations

The Cutting and Polishing of Gems

THE art of cutting precious stones can be traced back through the centuries. In 1285 a guild of gem cutters existed in Paris; about a century later there were lapidaries at work in Nuremburg and it is likely that the craft was followed long before this time. To Ludwig Van Berguen, of Bruges, is given the credit of first cutting diamonds with a symmetrical arrangement of facets. This was about 1460.

It is difficult to get precise information concerning the tools of the early gem cutters, but inasmuch as those of modern lapidaries are so very simple, it is probable that there has been little change in the instruments used in the trade. But while few changes mark the equipment of the modern lapidary, yet great strides have been taken toward greater skill and finesse on the part of the workers in the craft and in the display of judgment that makes for getting the utmost in beauty and value from the rough gems.

In no other craft is the mental quality of judgment as important as in that of the lapidary. In the cutting of a valuable gem from the rough

stone the slightest error in judgment may mean a vast difference in the beauty of the finished gem and a difference of many dollars in its value. Next to judgment the qualities that are of value in a lapidary are experience and skill and a trained delicacy of touch.

It will be interesting to the buyer of gems to know the routine of carrying the rough stone through the various processes that finally produce the finished polished gem as it is found at the jewelers. It may be well to explain here that the cutting and polishing of diamonds is a special craft—the lapidary who works in diamonds seldom concerns himself with other gems. It is also interesting to know that with the diamond to obtain brilliancy is the prime requisite, while with most other gems the matter of color is given precedence and brilliancy is a subservient quality.

The cutting and polishing of the diamond is very largely a mechanical, mathematical application of pressure and friction, while most other gems are manipulated with a human delicacy of touch and a perfection of technique which constitute the whole secret of success in gem cutting. The cutter of gems other than the diamond has a license for following his own ideas and he may

alter or modify the cutting to bring out the peculiarities of any stone and depart as far as he wishes from the conventional. We shall describe here the various processes through which a rough gem stone passes.

"SLITTING"

The best judgment of the lapidary is called into play in his first consideration of the rough stone, for it is here that his experience and wisdom provides for getting the greatest measure of beauty and value from the uncut gem, and for minimizing waste and loss of weight. After passing upon the characteristics of a rough stone and deciding upon the method of getting the most from it, the lapidary, if the gem requires it, then puts it through the process known as "slitting."

This process of dividing the rough stone is accomplished by holding it against the edge of a thin metal, circular revolving plate. The biting edge of this plate is due to the diamond dust which it contains. The delicate operation of "slitting" provides pieces of the stone in suitable sizes for further working. If the gem is to be faceted it is then further fashioned toward the shape it is destined to assume on a flat,

horizontally revolving wheel. On this wheel the principal facets are outlined and the stone at this process begins to take on a definite form. In order to facilitate handling each individual gem is then mounted with cement on the end of a tiny holder of wood. This holder looks very much like the ordinary pen holder. Taking these mounted gems the operator next proceeds to another wheel, upon which the operation of faceting is completed. In this operation the extreme of judgment is required and considerable latitude is given the operator that he may bring out the individual characteristics and beauty of each gem.

HOLDER

In his work on this wheel the lapidary is helped mechanically by what is termed a "jamb peg." This is a top shaped wooden affair that is used both as a rest and a guide. Being filled with a number of holes throughout its length the operator, by sticking the end of his holder in one, may regulate to any degree desired the angle of the gem on the wheel.

After the faceting is complete the gem is still dull, colorless and uninteresting, and is now passed on to the polisher, whose work it is to bring the utmost in brilliance and color to the surface of the gem. The polisher is usually a man who has no other connection with the gem

than in finishing the work of the cutter. The work of the polisher is more mechanical than that of the cutter, but it is work of great delicacy, nevertheless. The polisher must brighten and polish the facets, but in no way must he enlarge the tables or change the angles of the gem as designed by the cutter. The gem in the hands of the polisher may bring to light a number of faults—a tiny flaw may grow larger, an edge or angle may chip or a vein prove troublesome, and it requires a real craftsman, an operator with an exquisite nicety of touch, a man of infinite patience to carry the work of the cutter to completion and to do it with the least investment of time.

The discs used in polishing are similar to those used in cutting, except that instead of using an erosive substance on the surface a variety of polishing materials, such as Tripoli is used. The discs used in both cutting and polishing are made of various material, depending upon the peculiarities and hardness of the gem being handled. They are made of iron, brass, copper, lead, gun metal, bell metal, tin, pewter, etc. For polishing Cabochon gems circular revolving drums and wheels of wood, leather and felt are also used.

POLISHING

Concerning Gems

FEW THINGS that man has made use of in his evolution from barbarity to civilization have so much of romance, superstition and fascination woven about them as have precious stones. It is probable that the same subtle lure of a beautiful gem, which even the most matter-of-fact man or woman knows, led Adam and Eve, when the world was young, while they inhabited the Garden of Eden, when not busy with its fruits, to gather certain bright pebbles, which, saved and prized, became the first precious stones of history.

As far back toward this date as written accounts take us, we find jewels playing an important part in the history of the world. There were the twelve stones, each the symbol of a tribe of Israel; also the twelve stones of the High Priest's breast-plate. In Ezekiel, the covering of the King of Tyre was described as containing nine precious stones. Each of the Apostles was associated with a precious stone. In Revelation, John describes twelve precious stones in connection with the Heavenly City. The histories of Egypt, Greece and Rome, and more modern countries, often refer to some important crown jewel, or otherwise famous gem.

PHYSICAL PROPERTIES

Long experience in handling gems gives one the ability to tell most precious stones at a glance, but even the experienced lapidary is often misled. Precious stones possess many unique physical distinctions, which enable one by certain tests to be positive of their identity. Among these properties are the shapes of the crystals in which they are found, the manner in which they cleave or split, the way in which they transmit light, their lustre, color, hardness, specific gravity, manner in which they are acted upon by light, their condition when heated, their electrical properties, and their appearance under the X-Ray.

CRYSTALLOGRAPHY

All natural crystals of gems are divided into six systems—isometric, tetragonal, hexagonal, orthorhombic, monoclinic and triclinic. While very valuable before the stone is cut, this means of identification is useless afterwards.

CLEAVAGE

Cleavage is that tendency which some substances have of parting in some directions more easily than in others. In minerals of a crystaline nature this always bears a definite relation

to the crystal formation of the mineral and is therefore another useful means of identification, not only because of the angle of the cleaved faces, but also because of the nature of the cleaved surface. Some stones such as Spodumine, Diamond and Topaz show a distinct cleavage, while others like Quartz, Garnet, etc. have the tendency to break almost, or just as easily, in any direction. This is called imperfect cleavage.

FRACTURE

The nature of a fractured surface of a stone is very important in classifying it. Certain stones appear splintery, others conchoidal, hackley, uneven, etc.

DIAPHANEITY

The diaphaneity or degree to which a gem transmits light is also important. Gems may be opaque, semi-opaque, sub-translucent, translucent, sub-transparent or transparent.

LUSTRE

The lustre of a gem is noteworthy, varying as it does from that of the Diamond, which is called adamantine, to resinous, vitreous, pearly, waxy, etc.

COLOR

The color of the gem is very important, but very misleading as a means of identification, as there are several gems that occur in nearly all the different colors. Usually the more rare in color, the more expensive the gem. However, many of the most beautiful colors are most common, and therefore the gems containing them are less expensive. The color of many gems can be changed by different processes. But these stones, though natural in structure, are intended to deceive and cannot be classed as unaltered gems.

HARDNESS

It is well known that different gems have different degrees of hardness. The following is the accepted table for determining this property:

Diamond	10	Apatite	5
Sapphire	9	Fluorspar	4
Topaz	8	Calcite	3
Rock Crystal	7	Rock Salt	2
Feldspar	6	Talc	1

The way to find the hardness of a gem is to find what other stone of known hardness scratches it and is scratched by it. To illustrate: The Dia-

mond will scratch the Sapphire; the Sapphire the Topaz, etc.; and again, a stone that is scratched by the Topaz and not by Rock Crystal may be said to have the hardness of 7, thus a very important element has been discovered, tending to identify the gem. In the alphabetical list of gems, found elsewhere in this book, the hardness is given in each case.

SPECIFIC GRAVITY

The weight of a gem, as compared to an equal bulk of water, is an important verification of any other means of identification, and often alone serves to determine to what variety a gem belongs. The best way to gauge this property is to find in which of several liquids of known specific gravity the gem will barely float. Zircon, or Jargoon, whose specific gravity is 4.7, is the heaviest gem. Garnets, Rubies, Sapphires, Diamonds, etc., down to the Opal, whose specific gravity is 2.21, are all of lesser gravity, in the order named.

LIGHT ACTION

The four ways in which light is affected by precious stones are important means of identifying gems to the scientist. To these properties,

the lustre, fire and other attractive qualities of precious stones are entirely due. Dichroism is the property possessed by some colored gems of taking on different shades when viewed from different angles. The other properties of light action can be determined with certain instruments.

HEAT

Extreme heat affects the color of many gems, and great caution is required on the jeweler's part in soldering jewelry or subjecting the stone to other processes which heat the stone, as some stones such as sapphires or garnets will stand a little heat, while the great majority will not stand any at all.

ELECTRICITY

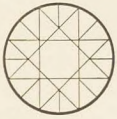
Many gems possess the quality of becoming electrified by friction. This phenomenon is most apparent in Tourmaline. If warmed, one end of this stone becomes positive, while the other becomes negative.

Styles of Cutting

STONES as they are found are seldom used as gems, without cutting. There are two principal ways of cutting precious stones, besides such special forms as the cameo, intaglio, crest, monogram and scarab, viz.: faceted cutting, and curved surface or cabochon cutting. We illustrate on opposite page the principal forms in which gems are cut. Naturally, transparent or semi-transparent gems are usually cut with facets, which increase their sparkle, while most translucent and opaque gems are cut cabochon, which brings out their color and lustre.

The following list gives the names of the styles of cutting illustrated opposite:

1. Round brilliant (top view).
2. Oval brilliant (top view).
3. Rose cut (top view).
4. Round brilliant (side view).
5. Cushion brilliant (top view).
6. Rose cut (side view).
7. Step cut (octagon).
8. Pear brilliant (top view).
9. Step cut (oblong).
10. Cabochon (side view).
11. High Cabochon (side view).
12. Lentil shape (side view).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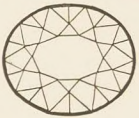
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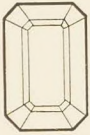
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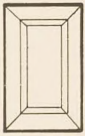
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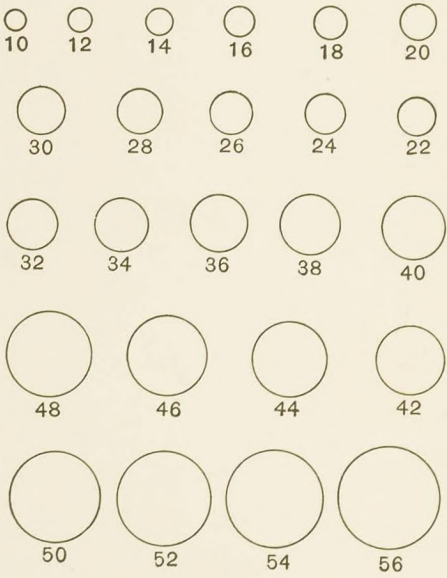
10

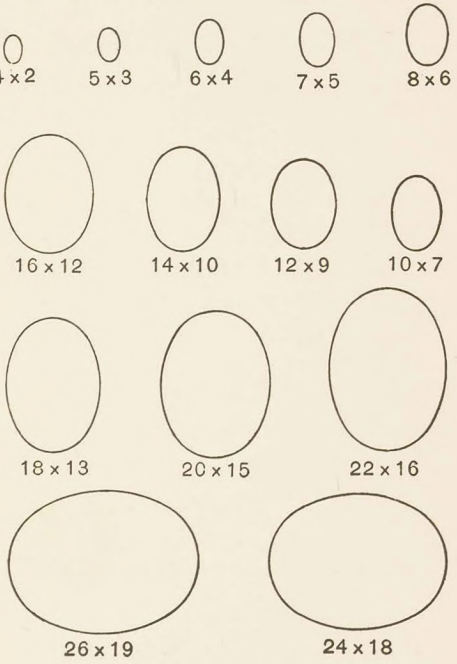

11


12

Sizes

Precious stones are generally bought by weight, but for convenience when ordering it is best to give stone size number, if round, or size in millimeters if other than round (see opposite page), giving length and width.

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6x4
7x5
8x6
16x12
14x10
12x9
10x7
18x13
20x15
22x16
26x19
24x18
STANDARD MILLIMETER SCALE
0
10
20
30
40
50

Personal, Individual Service

ONE member of our firm gives his sole attention to the cutting of gems; another to the polishing and repairing of gems. Another member's time is devoted to the filling of orders received. A personal, individual service is thus rendered by those who are most directly interested in giving the fullest measure of satisfaction to the customer.

Espositer, Varni Co.

Gem Cutters and Dealers

45-49 John Street, New York

A Dictionary of Gems

THE descriptions given here are designed to give in concise form information that the jeweler and his patron will wish to know.

AGATE — Hardness, 6½

All Agates are varieties of Chalcedony. The name agate is usually applied to that which contains parallels of different colors or spots or patches. There is also an agate which contains some iron oxide in the form of moss or leaves: this is called Moss Agate.

Prices, $0.50 to $4.00 each.

ALEXANDRITE — Hardness, 8½

Alexandrite is a rare variety of chrysoberyl found in the Ural Mountains and received its name from the fact that it was first found on the birthday of Alexander II, Czar of Russia, in the year 1830. The colors, green by daylight and red by artificial light, are the national colors of Russia.

Prices on application.

AMAZONITE — Hardness, 6

A verdigris green, opaque Feldspar. It is one of the stones which when cut cabochon is useful for scarf-pins and cuff buttons.

Prices, $0.50 to $4.00 each.

AMETHYST — Hardness, 7

A purple variety of transparent Crystal Quartz, shading from a pale violet to a dark plum color. At one time quite scarce, Amethyst was considered one of the most valuable jewels, Queen Charlotte's necklace of fine specimens being

valued at two thousand pounds. Cut cabochon or faceted, this stone is very popular. We have a variety of cuttings always on hand. This is the birthstone for February.
Prices, $0.25 to $2.50 per carat.

AQUAMARINE — Hardness, 7½

As the name implies, this stone has the colors of the sea, varying from pale blue to sea green. Though not so rare, nor as much in demand as its sister, the Emerald, this stone is of the same chemical composition as the more valuable member of the Beryl family. It is one of the birthstones for March.
Prices, $4.00 to $20.00 per carat.

AVENTURINE — Hardness, 6½

A sub-transparent to sub-translucent, pale green Quartz, with iridescent spangles of mica displayed through it.
Prices, $0.50 to $5.00 each.

AZURITE — Hardness, 4 to 5

One of the most beautiful blues seen in precious stones characterizes this stone. Like Malachite, it derives its color from the presence of copper.
Prices, $0.20 to $0.50 per carat.

BERYL — Hardness, 7½

A silicate of aluminum and glucinum. This mineral comes in various colors, the green variety known as Emerald, the sea-water blue from which the name Aquamarine is derived. The name Beryl is usually applied to Golden Yellow and colors other than emerald or aquamarine.
Prices, $0.50 to $10.00 per carat.

BLOODSTONE — Hardness, 6½

An opaque, rich dark green Chalcedony, with spots of red Jasper like drops of blood. One of the birthstones for March, and very popular for individual jewelry.
Prices, $0.50 to $8.00 each.

CAIRNGORM — Hardness, 7

A smoky, yellowish brown variety of Crystal Quartz. Its rich dark color makes it very much desired for jewelry.
Prices, $0.25 to $2.00 per carat.

CARNELIAN — Hardness, 6½

Derives its name from its color, that of raw flesh. It is a translucent variety of Chalcedony. Its uniform color makes it valuable for intaglios, etc. A full assortment of all shapes and sizes are always on hand.
Prices, $0.50 to $8.00 each.

CAT'S EYE — Hardness, 8½

The other most valuable variety of Chrysoberyl. Cut cabochon possesses a peculiar effect, similar to that in the iris of a cat's eye. Until Tiger's Eye, a brown variety of Quartz, was widely employed as a substitute, this stone was very popular. It appears in yellow or light green.
Prices, $25.00 per carat and up.

CAT'S EYE (QUARTZ) — Hardness, 6½ to 7

A variety of Quartz somewhat resembling the true Cat's Eye in appearance, but much less beautiful. Greenish-gray in color.
Prices, $0.50 to $2.00 each.

CHALCEDONY — Hardness, 6½ to 7

To this family belong all the varieties of Agate, Bloodstone, Carnelian, Chrysoprase, Onyx, Jasper, etc. What is usually known as Chalcedony is the pure mineral of transparent gray, often tinged with blue, green, etc.
Prices, $0.50 to $5.00 each.

CHRYSOBERYL — Hardness, 8½

A beautiful transparent gem-stone, in different shades of brown, yellow, sage-green, etc. Cut faceted, it is very

effective in gold jewelry. Cat's Eye and Alexandrite are the two most valuable varieties.
Prices, $5.00 per carat and up.

CHRYSOCOLLA — Hardness, 4 to 5

This stone is opaque, combining the beautiful colors of Azurite-Malachite and Turquoise. Cut and polished cabochon, it makes a beautiful stone for all jewelry. We make a specialty of having a large variety of choice specimens on hand.
Prices, $1.00 to $10.00 each.

CHRYSOPRASE — Hardness, 7

Chrysoprase is a beautiful apple-green chalcedony. The color is due to about one per cent. nickel oxide. Fine specimens resemble translucent cabochon emeralds.
Prices, $1.00 to $5.00 per carat.

CORAL — Hardness, 5

This well-known stone, which is built up by the outgrown shells of minute inhabitants of the sea, ranges in color from bright pink to dark red. It is cut cabochon, and is widely used. To meet the demand, we have all sizes and colors constantly on hand.
Prices, $0.50 to $2.00 per carat.

CROCIDOLITE — Hardness, 7

A fibrous, lustrous brown and yellow variety of Quartz, which, when cut cabochon, presents shimmering lines, somewhat resembling Cat's Eye, and usually called Tiger's Eye. All sizes kept in stock.
Prices, $0.50 to $4.00 each.

EMERALD — Hardness, 7½ to 8

The present demand for green stones, and the increasing scarcity of Emeralds, make this stone at the present time

the most precious of all gems. The most valuable specimens of this transparent gem have the well-known velvety emerald green color, but lighter shades are also found. The emerald is the birthstone for May.

Prices, $10.00 to $500.00 per carat, and up.

GARNET — Hardness, 6½ to 7½

The most common color of the Garnet is red, which, when cut cabochon, is known as the Carbuncle. Many other colors are found, however, including violet, brown, delicate pink and green. It is the birthstone for January.

Prices. $0.50 to $25.00 each

JADE — Hardness, 6½ to 7

This sage-green and green-and-white stone is particularly valued by the Chinese, who, with infinite patience, fashion rings, bracelets and many other ornaments from this tough mineral. The best Jade comes from Upper Burmah, but the darker green variety is also found in New Zealand. Jade is very popular for jewelry of all kinds, especially seal rings.

Prices: Chinese Jade; $1.00 each and up; New Zealand Jade $0.50 each and up.

JASPER — Hardness, 7

An opaque, massive variety of Chalcedony, usually of a red color, sometimes yellow, brown or green.

Prices, $0.50 to $5.00 and up.

KUNZITE — Hardness, 7

This recent discovery in California, and named after Dr. Kunz, is a variety of Spodumene. In color it is of delicate lilac, greatly resembling pale Amethyst.

Prices, $8.00 to $25.00 per carat.

LABRADORITE — Hardness, 6

This variety of Feldspar was first found in Labrador, from which it derives its name. It exhibits bright splashes

of color, particularly blue, when turned to the light at certain angles, otherwise having a dull gray or brownish appearance.

Prices, $0.50 to $5.00 each.

LAPIS LAZULI — Hardness, 6

Moses' Table of Laws was supposed to have been engraved on this beautiful opaque, azure-blue stone. It is frequently mottled with white spots and specks of iron pyrites. This stone is greatly in demand at the present time. The finest variety presents a clean or slightly spotted dark-blue surface and is found in Russia. Another variety of a lighter color and mottled with white quartz is found in Chili. It is one of the birthstones for December.

Prices: Russian, $1.00 to $15.00 each; Chili, $0.50 to $5.00 each.

MALACHITE (Carbonate of Copper) — Hardness, 4 to 5

This beautiful opaque stone appears in layers and patches of green. Malachite has a silky luster, and in spite of its comparative softness takes a high polish. We carry a full assortment of cabochon cuts.

Prices, $0.40 to $4.00 each.

MALACHITE-AZURITE — Hardness, 4 to 5

This stone is a combination of Malachite and Azurite, intermingled to form beautiful peacock colors. All cabochon cuts.

Prices, $0.50 to $5.00 each.

MOONSTONE — Hardness, 6

Is a very beautiful sub-variety of Feldspar, and reflects a bluish-white light in an opalescent manner. We carry a choice selection of Moonstones. A colorless translucent variety of Chalcedony pebbles is found on one of the beaches in California, are sometimes termed moonstones,

but is not the true Moonstone. Many of the latter are sent us by jewelers, who receive them from tourists to be cut and mounted into scarf-pins and cuff buttons for souvenirs.

Prices, $0.50 to $10.00 each.

MOSS AGATE — Hardness, 6½

Instead of the parallel bands of color by which common Agate is known, Moss Agate contains particles of iron oxide which give it the appearance of containing some variety of vegetable growth.

Prices, $0.50 to $5.00 each.

OLIVINE — Hardness, 6½ to 7

The gem known by the jeweler as olivine is a demantoid garnet of a beautiful olive green color. It has great dispersive power and is not exceeded by the diamond in this respect.

Prices, $5.00 to $100.00 per carat.

OPAL — Hardness, 6

This well-known stone is of a formation somewhat similar to Quartz, but the exact cause for its opalescence is unknown. The Opal was in such high esteem with the Romans that one of them fled the country to save an Opal about the size of a hazel-nut, valued at what would now be one hundred thousand dollars, from being seized. The best Opals come from Australia, Hungary and Mexico. The Opal is unique among stones in the variety of colors, which can be likened only to the plumage of certain birds. In gold settings, Opals are exceedingly popular for both conventional and artistic jewelry. The favorite is the Harlequin Opal, showing bright green and crimson flashes.

For the past few years a black variety has been very popular. It is thus described by the artist Du Blé:

"When Nature had finished painting the flowers, coloring the rainbow and dyeing the plumage of the birds, she swept the colors from her palette and molded them into Black Opals."

Opal is one of the birthstones for October.

Prices, $1.00 to $50.00 per carat and up.

OPAL MATRIX — Hardness, 6

Our stock of Opals includes much of this beautiful material, and the contrast between the Opal and the rock in which it is found gives a rugged effect which is much desired in artistic jewelry. We make a specialty of our Opal Matrix.

Prices, $1.00 to $5.00 per carat.

PEARLS

Pearls are very unlike other gems, in that they are found in the shells of oysters and other shell-fish. The beautiful fresh-water pearls of the United States rival those of the Orient in lustre, and surpass them in color. Round Buttons, Baroques, etc., are always to be had. It is one of the birthstones for June.

Prices, $2.00 to $200.00 per grain and up.

PEARLS (Cultured)

Every year during the months of July and August small pieces of rock and stone are placed in spots where the larvæ of the pearl-oyster have been found to be most abundant. Soon small oyster-spots are found attached to them. As this takes place in shallow waters of not more than a few fathoms, they would die from cold if left there during the winter, so together with the rocks to which they are anchored, they are removed to deeper waters and carefully laid out in beds prepared for them. Here they lie until they reach their third year, when they are taken out of the sea and undergo an operation which leads to pearl formation. This consists chiefly in introducing into them round pieces of nacre, which are to serve as the nuclei of pearls. These shells are then put back into the sea and left undisturbed for at least four years more. At the end of that time they are taken out, and it is found that the mollusk has invested the inserted nucleus with layers of nacre and has, in fact, produced a pearl.—*From K. Mikimoto's Booklet on Japanese Cultured Pearls.*

PERIDOT — Hardness, 6 to 7

A clear yellow green gem; variety of the mineral chrysolite. It is very effective and may be had in a number of sizes and shapes. It is a moderate-priced stone, and is one of the birthstones for August.

Prices, $2.00 to $10.00 per carat.

QUARTZ — Hardness, 7

To this family belong Rock Crystal, Rutile Quartz, Amethyst, Rose Quartz, Yellow Quartz (called Spanish Topaz), Smoky Quartz, called Cairngorm, Milky Quartz, Aventurine, etc. It is a common mineral, usually transparent and hard enough to be cut as a gem stone. Some of the above sub-varieties are very beautiful in color and widely worn.

Prices: Rose Quartz, $0.50 to $5.00 each; Rutile Quartz, $1.00 to $5.00 each.

RHODONITE — Hardness, 6½ to 7

A silicate of manganese, pink or flesh red color, sometimes containing black markings caused by Iron Oxide. Opaque to translucent, occurring in large pieces suitable for cutting jewel boxes, paper weights, etc. When cut cabochon it makes a very beautiful stone for cuff links, scarf pins and artistic jewelry.

Prices, $1.00 to $5.00 each.

RUBELLITE — Hardness, 7

Red Tourmaline (See).

Prices, $5.00 to $30.00 per carat.

RUBY — Hardness, 9

This red variety of Corundum, to which family the Sapphire and Oriental Topaz also belong, surpasses the Diamond in value and is next in hardness. This rare red gem has been highly prized for thousands of years. The finest

Rubies come from India. The most valuable color is the well-known pigeon's blood. This transparent gem is sometimes cut cabochon.

Prices, $10.00 to $200.00 per carat and up.

SAPPHIRE — Hardness, 9

The name Sapphire is always applied to blue corundum; like the Ruby, which is red corundum, it is cut both faceted and cabochon. The most prized colors for the Sapphires are corn flower and royal blue. The translucent variety of Sapphire or Ruby, when examined in a certain light, shows a six-pointed star; these are cut cabochon and known as Star Sapphires or Star Rubies. Corundum is also found in many other colors. Golden yellow, known as Yellow Sapphire or Oriental Topaz, and purple, known as the Oriental Amethyst. Ceylon has been the source of supply for most of these corundum gems. Montana is now furnishing a brilliant blue variety. It is the birthstone for September.

Prices, $5.00 to $150.00 a carat and up.

SARD — Hardness, 7

Carnelian (See).

Prices, $0.50 to $4.00 each.

SERPENTINE — Hardness, 4

High-grade Serpentine, known as noble Serpentine, is an opaque stone varying from rich olive to pistachio green, and is of waxy lustre. It takes a high polish. It is one of the stones not crystalline in composition.

Prices, $1.00 to $5.00 each.

SMITHSONITE (Carbonate of Zinc) — Hardness, 5

A beautiful apple green and sky blue translucent mineral named after James Smithson, founder of the Smithsonian

Institute, Washington, D. C. A striped variety found in Greece is cut en cabochon, making a striking gem for scarf pins; it is rather soft for other uses.
Prices, $1.00 to $6.00 each.

SODALITE — Hardness, 6

A blue opaque stone, with vitreous lustre, otherwise resembles Lapis Lazuli. It is cut cabochon.
Prices, $0.50 to $5.00 each.

SPINEL — Hardness, 8

This beautiful transparent gem is hardly appreciated. It is found in many colors, but the well-known flame red variety is the best known. Spinel is closely allied to Corundum and sometimes mistaken for Ruby.
Prices, $10.00 per carat and up.

SPODUMENE — Hardness, 7 to 7½

A clear transparent canary-colored stone; resembles Oriental Topaz. Its disposition to cleave or split makes it difficult to cut. A pink variety is called Kunzite.
Prices, $6.00 to $20.00 per carat.

SUNSTONE — Hardness, 6 to 7

Belongs to the Feldspar group. It comes in different shades of brown and contains minute scales of mica which scintillate in the sunlight, giving the stone a unique appearance.
Prices. $1.00 each and up.

THOMPSONITE — Hardness, 5

This opaque vari-colored stone resembles an assortment of different stones closely packed together. The different sections vary in color from pistachio to sage green, also in shrimp-pink, greenish-yellow and Chinese white. Thompsonite is cut cabochon.
Prices, $1.00 to $25.00 each.

TOPAZ

There are several kinds of Topaz. The true or precious Topaz is a bright transparent stone found in different shades of yellow and light pink; hardness, 8. Besides these are the Oriental Topaz; hardness, 9 (this being yellow Corundum and belonging to the Sapphire group). Yellow Quartz is also called Topaz, the dark or brown variety of which is called Spanish Topaz; hardness, 7. Topaz is the birthstone for November.

Prices: { Precious, $2.00 to $20.00 per carat.
Oriental, $4.00 to $30.00 per carat.
Quartz, $0.50 each and up.

TOURMALINE Hardness, 7 to 7½

This transparent stone is found in almost any color, red and green predominating. Different colors are sometimes found in the same crystal. Dark-red Tourmaline is called Rubellite and is cut faceted and cabochon. It is one of the birthstones for October.

Prices, $1.00 to $10.00 per carat and up.

TURQUOISE Hardness, 6

Is found in the light shades of blue. This gem is probably the most popular of the opaque stones. Sky blue is the shade preferred. The finest blue specimens are found in Persia. Cut in cabochon, scarab and cameo they are particularly effective. They are sometimes found of a greenish color, due to impurities in the ground. We have a large stock of these stones at attractive prices. It is one of the birthstones for December.

Prices, $0.50 to $12.00 per carat.

TURQUOISE MATRIX Hardness, 6

Although much less valuable than the clear Turquoise, the Matrix is exceedingly popular. The contrast between the clear blue of the stone and the rock in which it is found makes an effect which is very decorative for art jewelry.

Prices, $0.25 to $1.50 per carat.

VARISCITE — Hardness, 4 to 5

An opaque stone which takes a high polish, and is found in rich greens of various shades. Cut cabochon, usually with the matrix, it makes a very desirable stone for art jewelry.

Prices, $0.50 per carat and up.

VESUVIANITE — Hardness, 6½

A translucent brown, green, or yellow appearing stone which gets its name from being found on Mount Vesuvius. A variety found in California is known as Californite. Cut cabochon.

Prices, $0.50 to $4.00 each.

WILLIAMSITE — Hardness, 5½

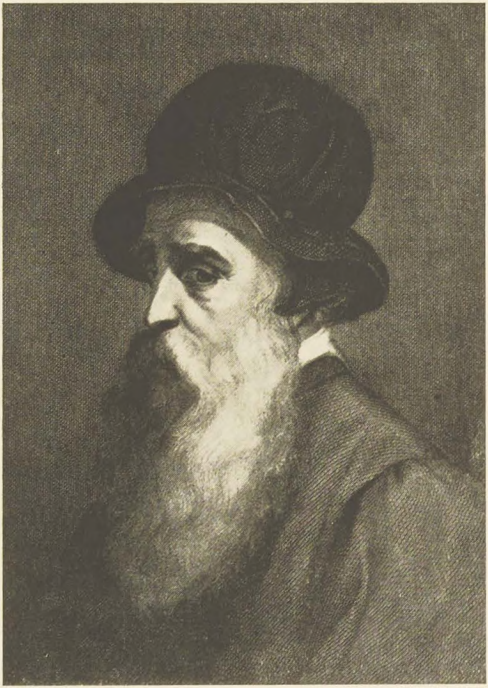
A green stone resembling New Zealand Jade, translucent, and sometimes mottled with specks of other minerals. It takes a high polish, and is applicable for distinctive settings. It is a variety of Serpentine.

Prices, $0.50 to $4.00 each.

ZIRCON — Hardness, 7½

In certain properties, this gem is unique. Next to the Diamond, it is the most brilliant and has the adamantine lustre. It is the heaviest of gems and is found in a variety of colors, brown predominating. The white stones, called Jargoons, are sometimes mistaken for diamonds.

Prices, $2.00 to $20.00 per carat.



Benvenuto Cellini

Symbolism in Gems and Jewelry

THE individualizing of gifts of gems or jewels is one of the refinements of the art of the modern jewelry craftsman. The goldsmiths of Cellini's day made generous use of symbolism embodying in the metals they wrought and in the gems they used a suggestion of the personality of patron or possessor or both.

Appropriate symbolism enhances the value of the choicest piece of jewelry. It may reflect a hope, an aspiration, an affection or an experience; its secret hid from all save the recipient and the giver.

Jewelry thus made has a value to the possessor far beyond the intrinsic value of the gems and metals used or the skill of the workmanship employed.

The jeweler in designing a piece of symbolic jewelry usually takes into consideration first the birthstone of the person for whom the ring, brooch, scarfpin, etc., is intended as well as the donor of the gift. Sometimes but one birthstone is used, but often both.

Very often the appropriate Zodiacal Signs are included in the design and often, too, the conventionalized flower of the proper month or months.

To include in the design an intimate experience significant only to the donor of the gift and to its ultimate possessor requires that the jeweler be made somewhat of a confidant in the execution of the work.

We are giving herewith as a help to the designer of Symbolic Jewelry "The Sentiments of the Months," including Natal Stones, Talismanic Gems, Guardian Angel, Special Apostles, Zodiacal Signs and Flowers.

JANUARY

Natal Stone.....Garnet.
Talismanic Gem.....Onyx.

Guardian Angel.....Gabriel.
Special Apostle.....Simon Peter.
Zodiacal Sign.....Aquarius.
Flower.....Snowdrop.

The gleaming garnet holds within its sway
Faith, constancy and truth to one alway.

FEBRUARY

Natal Stone.....Amethyst.
Talismanic Gem.....Jasper.

Guardian Angel.....Barchiel.
Special Apostle.....Andrew.
Zodiacal Sign.....Pisces.
Flower.....Primrose.

Let her an amethyst but cherish well,
And strife and care can never with her dwell.

MARCH

Natal Stones..... { Aquamarine. Bloodstone.
Talismanic Gem..... Ruby.

Guardian Angel..... Malchediel.
Special Apostles..... James and John.
Zodiacal Sign..... Aries.
Flower..... Ipomea, Violet.

Who wears a bloodstone. be life short or long,
Will meet all dangers, brave and wise and strong.

APRIL

Natal Stone..... Diamond
Talismanic Gem..... Topaz.

Guardian Angel..... Ashmodei.
Special Apostle..... Philip.
Zodiacal Sign..... Taurus.
Flower..... Daisy.

Innocence, repentance—sun and shower—
The diamond or the sapphire is her dower.

MAY

Natal Stone..... Emerald.
Talismanic Gem..... Carbuncle.

Guardian Angel..... Amriel.
Special Apostle..... Bartholomew.
Zodiacal Sign..... Gemini.
Flower..... Hawthorn.

No happier wife and mother in the land
Than she with emerald shining on her hand.

JUNE

Natal Stones..... { Pearl or Moonstone.
Talismanic Gem..... Emerald.

Guardian Angel..... Muriel.
Special Apostle..... Thomas.
Zodiacal Sign..... Cancer.
Flower..... Honeysuckle.

Thro' the pearl's charm, the happy years
Ne'er see June's golden sunshine turn to tears.

JULY

Natal Stone..... Ruby.
Talismanic Gem..... Beryl.

Guardian Angel..... Humiel.
Special Apostle..... Paul.
Zodiacal Sign..... Capricornus.
Flower..... Holly.

July gives her fortune, love and fame
If amulet of rubies bear her name.

AUGUST

Natal Stones..... { Sardonyx. Peridot.
Talismanic Gem..... Diamond.

Guardian Angel..... Hamatiel.
Special Apostle..... James, the son of Alpheus.
Zodiacal Sign..... Virgo.
Flower..... Poppy.

She, loving once and always, wears, if wise,
Sardonyx—and her home is paradise.

SEPTEMBER

Natal Stone.....Sapphire.
Talismanic Gem.....Jacinth.

Guardian Angel.....Tsuriel.
Special Apostle.....Lebbeus Thaddeus.
Zodiacal Sign.....Libra.
Flower.....Morning-glory.

If sapphire upon her brow is laid,
Follies and dark delusions flee afraid.

OCTOBER

Natal Stones.....{ Opal. / Tourmaline.
Talismanic Gem.....Agate.

Guardian Angel.....Bariel.
Special Apostle.....Simon (Zelotes).
Zodiacal Sign.....Scorpio.
Flower.....Hops.

When fair October to her brings the opal,
No longer need she fear misfortune's peril.

NOVEMBER

Natal Stone.....Topaz.
Talismanic Gem.....Amethyst.

Guardian Angel.....Adnachiel.
Special Apostle.....Matthias.
Zodiacal Sign.....Sagittarius.
Flower.....Chrysanthemum.

Firm friendship is November's, and she bears
True love beneath the topaz that she wears.

DECEMBER

Natal Stones..... { Lapis Lazuli. Turquoise.
Talismanic Gem.....Sapphire.

Guardian Angel.....Verchiel.
Special Apostle.....Matthew.
Zodiacal Sign.....Leo.
Flower.....Water-lily.

No other gem than turquoise on her breast
Can to the loving, doubting heart bring rest.

Gems on Approval

WHEN given particulars concerning gems desired, we are glad to send an assortment on approval. This permits an unhurried selection from a variety of stones under the best conditions. When a choice has been made the remaining gems may be returned to us. Thus distant customers have practically the same advantages as those making a personal selection in our showrooms.

Espositer, Varni Co.

45-49 John Street
New York

Semi-Precious Stones Containing Matrix

SEMI-PRECIOUS STONES containing Matrix are much in favor nowadays, especially among craftmakers in jewelry; the color of the gem itself is often softened when it appears combined with a foreign substance. We specialize in this character of stones and are able to furnish gems with most pleasing Matrix combinations.

Espositer, Varni Co.

45-49 John Street
New York

Redfield Brothers, Inc.
New York

Redfield Brothers, Inc.
New York