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978-1-108-07540-4 - The Science of Gems, Jewels, Coins and Medals, Ancient and Modern

Archibald Billing

Excerpt

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G E M S.



A TREATISE on Gems naturally embraces the precious stones, or jewels; for although the word ‘gem’ has been for ages conventionally applied to stones with some subject or device engraved upon them,—such as the ring-stones alluded to by Mæcenas, one of the first connoisseur gem-collectors on record, in his epistle to Horace,*—the Romans had no name for jewel but *gemma*;† nor for jeweller, except *gemmarius*. The Romans of the present day, however, apply the word *gioia* to jewel, as in the pretty Italian ballad, where it is used figuratively:

“ Benedetta sia la madre, chi te fece così bella;

* * * * *

Tu sei la *gioia* mia,”‡ &c.;

* “ Lucentes, mea vita, nec smaragdos,
Berillos mihi, Flacce, nec nitentes,
Nec per candida margarita quæro,
Nec quos Thynica lima perpolivit
Anellos, neque jaspios lapillos,”—

that is, “seal-rings and jasper pebbles, polished by the Thynian file,” besides the jewels which he has previously enumerated.

† “ Non gemmis, neque purpurâ ve-
nale nec auro” HORACE.

—“not to be purchased by jewels or gold.”

‡ “ Oh, blest be the mother who made thee so pretty;

* * * * *

Thou art my own jewel,” &c.

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and the lyric poet Moore writes gem as synonymous with jewel:

“ Rich and rare were the gems she wore.”

Poetry, music, and the fine arts cheer and ennoble the soul; the nations and individuals who excelled in them are immortalised in the traditions and memorials of mankind, from the time of Homer until now. David, “the man after God’s own heart,” poured forth strains of harmonious melody and poetry united, which are perpetuated to the present day in the peals of the oratorio.

The Caucasian race of Greeks, combining in themselves the highest union of beauty and intelligence, in their turn held sway, and perfected the rudiments of art which they found in Assyria, India, and Egypt, corrupted by luxury, vice, and idolatry, but still exquisitely beautiful. Even when fallen, conquered by the overwhelming force of Rome, the Greeks remained the arbiters of elegance, until Rome rivalled its teacher in refinement, and became so imbued with taste and skill, that Italy is still the *alma mater* of the fine arts, and the source of gems.

At almost all times the gem-engravers have cut devices on precious stones—amethyst, emerald, garnet, sapphire, ruby, and even diamond; so that, in fact, as jewels are gems, though all gems are not jewels, we must treat of them together.

Besides the beautiful and interesting *statues*, such as the Apollo Belvedere, and others, copied from the human figure, which is the most beautiful thing in nature, as being made after “God’s own image and likeness” (Genesis i. 26), we know that the ancient sculptors exercised exquisite skill, taste, and care in the execution of basso relievo and alto relievo, as evinced in the Elgin and Phigalian marbles, and

various *metopes** (1¹) and *friezes* (2²) of public buildings, and in the numerous subjects sculptured on *tombs*, *sarcophagi* (3³), and *vases* (4⁴, 5⁵); also the fine bas reliefs executed in *bronze*, some of them upon various pieces of armour, such as those discovered near the river Siris, in Italy, and presented to the British Museum by the Chevalier Bronsted: there are two of them, which were one on each side of the breastplate of a cuirass, about six inches high: (6) is a cameo by Pistrucci, which gives an exact representation of one of them. Bas relief, then, has been always estimated as a beautiful and effective branch of sculpture, from the earliest periods down to Thorwaldsen (7⁷), Canova (8⁸), and Flaxman (9⁹); and this applies equally to the bas reliefs called gems, cameos (14¹⁴ and 15¹⁵), and the impressions produced from intaglios or seals (10¹⁰ and 11¹¹).

The intaglio and cameo gems are executed in stones much harder than marble, and highly valued, both for the beauty of the workmanship and the quality of the carnelian, sardonyx,

* N.B.—The figures in the plates are uniformly (unless specified as otherwise) of the same size as the gem, coin, medal, or other object represented. The larger figures refer to the plates, and the smaller to the notes.

¹ Elgin metope, the figures of which are about four feet high.

² Elgin frieze figures, about three feet three inches high.

³ Bas relief, on marble sarcophagus, British Museum. Four feet long; eighteen inches high. Achilles discovered amongst the daughters of Lycomedes.

⁴ Marble vase, British Museum. Three feet high.

⁵ Portland (or Barberini) vase, British Museum. Ten inches high.

⁷ Cupid restoring Psyche to life, marble bas relief; the figures two feet high; by Thorwaldsen.

⁸ The forge of Vulcan; figures of Venus, Mars, and Cupid, an intaglio, from the marble bas relief by Canova.

⁹ Mercury conveying Pandora to earth, designed by Flaxman.

¹¹ Laocoon, a cameo, sardonyx, by a Roman artist.

¹⁵ Parting of Hector and Andromache, cameo, sardonyx, by Girometti.

¹⁰ Impression of an intaglio, Laocoon, by a Roman engraver.

¹¹ Impression of an intaglio, Hector and Andromache, by Pichler.

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sard, amethyst, emerald, or other stones upon which they are engraved, and which are often of high price. These gemstones are all so hard as to require diamond to cut them, —hence the Italian epithet, *pietra dura*.

Inasmuch as every *die* used for coining is an *intaglio*, there is an intimate connection between the execution of *gems* and of *coins* and *medals*; thus, the two most celebrated gem-engravers in the early part of this century, Girometti and Pistrucci, were at the head of the die department of the mint —Girometti in Rome, and Pistrucci in London. And so early as the “archaic Greek” period, three or four hundred years before Christ, there is some evidence that at least one engraver, Phrygyllus, executed both coins and gems. Benvenuto Cellini, the immortal statuary, gemmist, jeweller, chaser, and medallist, was chief engraver in the mint of Pope Clement VII.

The beauty of *jewels* consists in the *material*, that of *gems* essentially in the workmanship of the *sculptor*. The gem-engraver, if he has not gone through the studies and training of a sculptor, in drawing and modelling from life, can no more succeed in executing good gems—which are, in fact, *miniature sculpture*—than a miniature-painter, or any painter, can produce works of merit, if he has not practised drawing the superficial anatomy of the living human figure, equally necessary to sculptor and painter; and it is the deficiency in this part of education which has caused much imperfection in miniature works of sculpture and painting. The beauty of workmanship of most *intaglios* or seals cannot be estimated without making the bas-relief impression; but many of them are engraved in fine transparent stones, which, when held against the light, show every part of the design distinctly,—and such gems are displayed in this manner on frames, in the museums of the Continent, as (16) and (17)—which show the

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appearance of intaglios on fine transparent carnelians held up to the light.

The first intaglio seals used for making impressions were on the *cylinders* (18 and 19), in Assyria; and on the under side of *scarabs* (20), or *beetles*, as (21 and 22) in Egypt. The cylinders, however, spread into Persia and Egypt, and the scarabs into Assyria (23²³), Greece, and Etruria; and some light is thrown on the obscure history of the Etruscans by the investigation of the gems found in that country. The scarabei were, apparently, in as common use with them as with the Egyptians, which was not the case with any other nations, though many scarabei have been found in Assyria, Phœnicia, and the Grecian coasts, whose inhabitants traded with the Egyptians. This circumstance, added to the mode of interment used by the Etruscans, their pottery, and the forms painted on their vases, seem to indicate an Egyptian origin. Expatriated Shepherds, or some migration from Egypt to Etruria in consequence of a revolution, may have been the connecting link.

The cylinders are of various sizes, from less than one inch to two or more, and the thickness or diameter about half of the length: they are not always perfectly cylindrical, being sometimes convex, sometimes concave, on the sides; and they are perforated by a hole passing from end to end, the bore being wide enough to admit a thick cord, or ribbon, so that they could be worn on the wrist or neck: they are engraved with various devices,—sometimes a group of figures, as (18-24); sometimes a single one, as (19); the impressions of which are made by rolling them along over wet clay, wax, or other impressible substance (24).

The scarab is of all sizes, from that of a small beetle (20) to that of a turtle, or larger, as may be seen in the British Museum. They are made of every description of stone: the

²³ An Assyrian scarab intaglio.

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largest of granite, basalt, &c. ; the small ones of every kind of loadstone, chalcedony, sardonyx, &c., and of baked clay. The beetle was an emblem venerated by the Egyptians, as the cross with the Christians ; so that it would seem that every individual possessed one, the poorer classes having them made of such a simple material as baked clay. The small scarabs, being of convenient shape and size, were converted into seals, and were engraved on the under side with a device of some kind of figures (21), or a cipher or legend, either in letters or symbols (22), such as are engraved on the obelisks, pyramids, and monuments ; and these scarabs are bored with a small hole lengthwise, so as to be worn strung on a thread or wire.

Another form of seal is the very primitive one of a flattish round chalcedony pebble, with sufficient ground off one edge to afford space for engraving a subject, and a hole being made through the middle to receive a string ; as (12), a chalcedony, brought from Nineveh, having a very rough attempt in intaglio of a winged horse, the Phœnician symbol (13). Sometimes the hole was enlarged enough to admit a finger. This shape was sometimes modified by being made of an oblong instead of a circular pebble, and the hole made near the end opposite to the intaglio,—these being evidently formed from chalcedony pebbles of an oblong shape. Some were made approaching a pyramidal shape, but these are of a later date, and present more elaborate lapidary work ; and we have had modern seals made of much the same form, of amethyst, crystal, and other stones, either bored near the top, to receive a ring, or suspended by a golden or other metallic loop—and these are sufficiently ornamental.

When these cylinders and scarabs were first made, mankind were not acquainted with the mode of cutting or engraving hard gems, such as precious stones, or flinty agates, or carnelians, or sardonyx ; but they knew how to break *flints* and

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THEIR USE.

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chalcedonies, such as abound in the Nile and elsewhere, by a hammer or stone, so as to make weapons, such as arrow- or spear-heads, and implements that were used as chisels and knives. At first, therefore, they used these broken flints to engrave and bore the cylinders and scarabs, which were then necessarily made of stones less hard than the flinty chalcedony used afterwards; these were limestones, marble of various colours, serpentine, steatite, loadstone, &c., as may be seen in the British Museum, and all collections. Afterwards, when it was discovered that *corundum* and *emery* were harder than flinty stones, such as carnelian or amethyst, &c., they were employed for the purpose of shaping, or engraving, and boring them; and subsequently, when the still harder diamond was broken into splinters, and used by the artists, it enabled them to produce very superior engravings.

We have abundant proof in historical records, and in the allusions of the classic authors, that the impressions of these early intaglio engravings were used much as seals in the present day, sometimes serving as a substitute for a lock,—as, for instance, on the door of a wine-cellar; or attached to documents, as by the Assyrians and Babylonians (evidences of which have been found in the ruins of Nineveh, by Layard); and by the Egyptians, as when Pharaoh put his ring on the hand of Joseph (Gen. xli. 42). And in Greece the edict of Solon, forbidding engravers to make duplicates of seal-rings, could be only to prevent fraud. Engraved seal-rings of metal without gem stones have been used in all ages. Thousands of these common seals have been found and handed down to the present time, and are purchased as curiosities, but possess no beauty, in general not even so much as common crests and ciphers on the seals of the present day.

The first period during which the arts arose, flourished, and decayed, was about a thousand years—500 before

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Christ, and 500 afterwards. Previously, it is true, the Egyptians, Assyrians, and other Asiatics had reached a certain point; despots, by employing an enormous population, erected gigantic works, pyramids, colossal figures, and temples, many remains of which still exist, and are ornamented with both sculpture and painting of an inferior nature,—that is, though there is considerable correctness of proportion and outline, the stiff figures are either sitting or standing still, or, if supposed to be walking in procession, they exhibit scarcely any expression of action; the only exceptions to this being some of the Assyrian and Egyptian bas-reliefs, in which there are spirited representations of men and animals in war and the chase, but at the same time glaring absurdities.

The Greeks were the founders of *graceful* art, which was prosecuted in Greece, Asia Minor, Sicily, Southern Italy, Etruria, and Rome, from the time of Pythagoras and the Olympic Games, through the Augustan age, down to the fall of the Roman Empire, when the beautiful Latin tongue perished in the ruins; but though a dead language, its apotheosis is established by a host of worshipers. Although there was abundance of beautiful statuary, there do not seem to have been any gems engraved worth looking at, until the Sicilians and Greeks, including the inhabitants of Southern Italy (called Magna Grecia), about the time of Alexander the Great, began to put the heads of their deities (25²⁵), kings (26²⁶), and well-executed animals, such as eagles (28²⁸), bulls (27²⁷), and dolphins (25), on their coins and gems; and from the beauty of their coins (25, 26, and 27) we might infer how good their gems would be.

²⁵ Proserpine; coin of Syracuse, Sicily.

²⁶ Alexander, also denominated Lysimachus; a Greek coin.

²⁸ Coin of Agrigentum, Sicily.

²⁷ Coin of Thurium (previously Sybaris), on the Gulf of Tarentum, Calabria, Magna Grecia, now the Neapolitan territory.

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ARCHAIC GEMS AND COINS—PERIODS OF ART.

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Collectors give various denominations to the veritable antique gems, as *archaic* (*ἀρχή*, *beginning*), at the early part of the period mentioned; many of them were engraved on scarabs, or stones shaped like, or cut from, the under side of the scarab, including the *Etruscan* gems,—and these have a border round them like (150 and 151), executed with more or less regularity, evidently done in imitation of a twisted cord, as in some early golden ornaments. Some are *Greco-Italian*, found in Magna Grecia and in Sicily, as at Tarentum and Syracuse; a great many of these have the corded border, and on that account used to be called Etruscan by connoisseurs,—but this mark is now acknowledged to be uncertain.

Subsequently, the wealth and luxury of the Augustan Age encouraged the Greek and Roman artists, and stimulated them to high perfection: not, however, superior to what was attained in Italy, under the patronage of the Medici, in the fifteenth and sixteenth centuries,—nor superior to the splendid workmanship of our own Wray, Brown, Burch, and Marchant; George Brown, of Dublin; and Pichler, Sirletti, Costanzi, Rega, and others, in Italy; Natter, and numerous excellent engravers, in Germany and France, during the last century and the beginning of this; who were supported and encouraged partly by the rage for buying antiques, which were forged by some of them in numbers, but who were patronised abundantly besides for works professedly their own,—especially Giovanni Pichler, who, so far from forging antiques, when he found that the dealers imposed his works for antiques, signed his name to them afterwards. And in our own time we have had Girometti, Cerbara, Amastini, Pistrucchi, Odelli, Saulini, Pannini, and others.

From the earliest period of Greek art, the subjects of these gems were usually classical and mythological,—sometimes original compositions,—as the Diomedes with the Palladium

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(79), attributed to Dioscorides; the Parting of Hector and Andromache, by Pichler (11),—but more frequently copies of some statues or groups of the sculptors in marble or statuaries in bronze. Thus, there are many gems, antique and modern, with intaglio copies of the statues of the Apollo, Venus, Mercury (29²⁹), Perseus, and Laocoon (10), and other groups of the antique and middle ages, and of the more modern Theseus and Centaur of Canova (30³⁰); the Cupid and Psyche of Thorwaldsen (7); the Satan, by Lough (31³¹); Sappho, by Theed (155); the Omphale, by Schwanthaler (37³²), and other modern sculpture.

The gems called *cameos* are themselves really *bas reliefs*, carved out of the substance of the stone, as marble *bas reliefs* are; their whole subject and beauty visible to the eye, without waiting to take an impression (6, 14, and 15), as is necessary with most *intaglios*. Cameos are cut on stones called *onyx*, *sardonyx*, &c., which consist of at least two strata or layers of different colour (32); usually one white, of which the figure, face, or whatever the subject may be, is formed (33³³); the other layer black, brown, red, or some other colour (34³⁴), or merely the natural dark gray of the chalcedony (35): Psyche contemplating the Poisonous Vase before opening it, engraved by the author, from an impression of an intaglio of G. Pichler; or translucent and colourless, as (6 and 36), so that the contrast causes the work of the whole, especially the outline, to be more distinct. The term *onyx* is derived from the Greek word *ὄνυξ*,

²⁹ Intaglio, by a Roman engraver, from the bronze statue, life-size, by Giovanni di Bologna.

³⁰ Intaglio, by a Roman engraver, after Canova; marble group, life-size.

³¹ Colossal marble statue.

³² Marble statue, life-size.

³³ Cupid returning from the Chase, black and white onyx, by Neri.

³⁴ Infant daughter of the author, modelled by him in wax, and engraved by Pistrucchi, in cameo, on brown and white sardonyx.