

electricitas omnibus cylindris tributa in materiam, quæ eandem haud conservat, quantum opus est, propagetur.

Hæc quanquam nonnisi ad delectandos oculos spectare videantur, attamen vobis, Illustrissime Præses, Viri Illustrissimi, qui in ejusmodi delectamenti electricis vim naturæ mirabilem latere perspicitis, haud ingrata fore confido. Qua spe fretus, vestro omnium favori, quem impense veneror, me submisit commendo.

Scribebam *Lipsiæ*,
die 31 *Martii*,
1747.

XVII. *Some Observations upon Gems or Precious Stones; more particularly such as the Ancients used to engrave upon, by Robert Dingley, Esq;*

Read May 7. 1747. **G**EMS or precious Stones, of all Species, are sometimes found of regular Shapes, and with a natural Polish; and sometimes of irregular Shapes, and with a rough Coat. The first Sort may be consider'd as of the Pebble-Kind; and they are said to be found near the Beds of Rivers, after great Rains: The others are found in Mines, and in the Clefts of Rocks.

The Gems of the first Sort were what the Ancients most usually engraved upon: These are commonly called *Intaglio's*; and they are mostly of a long oval Figure, inclining to a Point at each End, convex as well on the engraved Face, as on the others, with a Ridge

Ridge running from End to End on the under Side, which is hereby, as it were, divided into two Faces; both which are also, tho' not so distinctly, parted from the upper Face, by another Ridge running quite round the Oval.

The Stone most commonly found engraved is the *Beryl*; that most frequently found next is the *Plasm* or prime *Emerald*; and then the *Hyacinth* or *Jacinth*. The *Chrysolite* is sometimes, but rarely, found engraved; as are also, but that very seldom, the *Crystal*, or *Oriental Pebble*, the *Garnet*, and the *Amethyst*.

Of the *Beryl* there are three Species; the Red, inclining to Orange-colour, transparent and lively; the Yellow, of an Ochre colour; and the White, commonly called the *Chalcedon*, of the Colour of sheer Milk. These two last have less Life than the first.

The *Plasm* or prime *Emerald* is green, nearly of the Colour of stagnated Water; sometimes tolerably clear, but, for the most part, full of black and white Specks, and rather opaque.

The *Jacinth* is of a deep tawny Red, like very old Port Wine, but lively and transparent.

The *Chrysolite* is of a light-green Grass-colour, and is supposed to have been the *Beryl* of the Ancients, transparent, but not lively.

The *Crystal* or *Oriental Pebble* is harder and more lively than the common Rock *Crystal*; is of a silverish Hue, and but very little inferior to the white *Sapphire*.

The *Garnet* is of the same Colour as the *Jacinth*, but more inclining to the Purple, and not so lively.

The

The *Amethyst* is of a deep Purple, transparent and lively.

There were some other Species of Stones engraved upon by the *Romans*; but rarely before the latter Times of the Empire, when the Art itself was greatly upon the Decline.

All the before-mention'd Sorts of Stones are said to have been of the Produce of *Egypt*, or of the *East Indies*; and to have been brought from the Borders of the *Nile*, or of the *Ganges*.

Here follows a general Table of what are usually called Precious Stones.

The *Beryl*, is red, yellow, or white.

The *Plasim*, is green.

The *Jacinth*, of a deep tawny red.

The *Chrysolite*, of a light grass green.

The *Crystal*, or *Oriental Pebble*, of a silverish white.

The *Garnet*, of a deep red Claret-colour.

The *Amethyst*, purple.

The *Diamond*, white.

The *Ruby*, red or crimson-colour'd.

The *Emerald*, of a deep Green.

The *Aqua marina*, of a bluish Sea-green, like Sea-Water.

The *Topaz*, of a ripe Citron yellow.

The *Sapphire*, of a deep Sky-blue, or of a silver white.

The *Cornelian*, red or white.

The *Opal*, white and changeable.

The *Vermilion-Stone*, is more tawny than the *Jacinth*.

All these Stones are more or less transparent :
The following are all opaque :

The *Cat's-Eye*, brown.

The red *Jasper*, called also thick *Cornelian*, is of
the Colour of red Ochre.

The *Jet*, black.

Agates, are of various Sorts.

The *Blood-Stone*, is green, veined or spotted with
red and white.

The *Onyx*, consists of different parallel *Strata*,
mostly white and black.

The *Sardonyx*, of several Shades of brown and
white.

The *Agat-Onyx*, of two or more *Strata* of white,
either opaque or transparent.

Alabaster, different *Strata* of White and Yellow,
like the *Agate-Onyx*, but all opaque.

The *Toad's-Eye*, black.

The *Turquoise*, of a yellowish Blue inclining to
green.

Lapis-Lazuli, is of a fine deep Blue.

Of most of the Species before-mention'd there are
some of an inferior Class and Beauty. These are
commonly called by Jewellers Occidental Stones :
They are mostly the Produce of *Europe*, and found
in Mines or Stone-Quarries; and are so named, in
Opposition to those of a higher Class, which are al-
ways accounted Oriental, and supposed to be only
produced in the more Eastern Parts of our Conti-
nent.

The

The *Onyx*, *Sardonyx*, *Agate-Onyx*, *Alabaster* of two Colours or *Strata*, as also certain Shells of different Coats, were frequently engraved by the Ancients in *Relief*; and these Sorts of Engravings are commonly called *Cameo's*. They also sometimes ingrafted a Head, or some other Figure in *Relief* of Gold, upon a *Blood Stone*.

Besides which there are some Antiques, mostly *Cornelians*, that are cover'd with a *Stratum* of White. This *Stratum* has by some been look'd upon as natural; but it was really a sort of Coat of Enamel that was laid on. This was used only in the Times of the lower Empire.

The Stones esteem'd the best for engraving upon were the *Onyx* and *Sardonyx*; and next to them the *Beryl* and the *Jacinth*.

The Ancients engraved most of their Stones, except the *Onyx* and the *Sardonyx*, just as they were found; their natural Polish excelling all that can be done by Art; but the Beauty of the several Species of *Onyx's* could only be discover'd by cutting.

The Merit both of *Intaglio's* and *Cameo's* depends on their Erudition, on the Goodness of the Workmanship, and on the Beauty of their Polish.

The antique Gems of *Greek* Work are the most esteem'd; and next to them the *Roman* ones, in the Times of the higher Empire.