

fluxes, and yields only to borax and microcosmic salt, with which it yields a clear glass.

## 3d Family.

## Oriental Sapphire.

Its colour, Berlin blue, but often decreases so much in intensity as to become almost white, and then called *lux sapphire*.

Its internal lustre, 3 or 4. Transparency, 3, 4, 2. Causes single refraction.

It is found crystallized in the same form as the preceding families, and often in rounded masses, the angles being worn off by friction.

Its fracture foliated.

Its hardness, 17. Its sp. gr. 3991.

It is infusible at  $168^{\circ}$ , and generally preserves its colour. It is affected by the usual fluxes, as the preceding gems. By the heat of pure air it forms an enamel.

The sapphires, found amidst the ferruginous sand of Expailly, near Puy in Velay, seem of this species. Their colour, hardness, and transparency being similar, and their sp. gr. 4,076. They are very small, their form somewhat irregular from the friction they must have encountered.

According to Mr. Bergman, this stone contains 0,58 argill, 0,35 flex, 0,5 aërated calx, and 0,02 of iron. By Mr. Achard, 0,5833 argill, 0,3333 flex, 0,0666 calx, 0,0333 of iron.

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