

Description of a Crystal of Euclase, belonging to my Collection.

By M. GUYOT (de Grandmaison).

(Read December 23rd, 1880.)

THE crystal comes from the mining district of Boa Vista, near Villa Rica (Brazil), where the alluvial diamantiferous strata occur with chloritic schists. It exhibits great regularity in the disposition of its faces and in its physical characters.



Fig. 1.

Its total weight is 15.45 gm. Its dimensions are given by the scale shown on the woodcut (Fig. 1), which is of natural size. Its density is 3.087.

Colour, sea-green, like beryl; lustre, vitreous, nacreous on certain cleavage planes.

Fracture conchoidal, very fragile. Cleavage easy and perfect.

The prism is oblique rhombic, its angle $144^{\circ} 37'$; one termination is complete with numerous modifications, the other fractured, with traces of chlorite schist in the cracks.

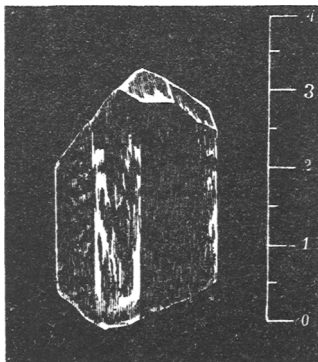


Fig. 2.

Strong double refraction, slight dispersion of the axes.

Inclined dispersion manifested by the unequal brilliancy of the colors in the two systems of rings.

Some of the faces of the vertical zone striated parallel to their mutual intersection, easily seen on the face to the right (Fig. 2).

Becomes electrical on the least friction, and even on simple pressure.

NOTE BY J. H. COLLINS, F.G.S.

With this note M. Guyot has sent a series of photographs and a cast of the stone. The measurements which I have been able to obtain from this are, of course, not very accurate, but they show that the following planes are present.

- a.* 100. a narrow plane.
- a'*. $\bar{1}00$. a wide well-developed plane.
- b.* $\bar{0}10$. apparently a large cleavage plane.
- c.* 001. doubtful whether present or not.
- s.* 110. a large well-developed plane.
- s.* $\bar{1}10$. a well-developed plane, but smaller than the last.
- k.* 210. a large well-developed plane.
- k'*. $\bar{2}10$. a narrow plane.
- f.* 131. a rather small plane.
- f'*. 131. a large plane.
- f''*. $\bar{1}31$. a very large plane.
- r.* 311. a small plane.
- o.* 121. a small narrow plane.
- o'*. $\bar{1}21$. a small narrow plane.

The crystal appears to be a portion only of a still larger one—but it is evident that it was always hemihedrally developed. It is certainly one of the very finest specimens of Euclase which has ever been discovered, and M. Guyot authorises me to say that he will be at all times pleased to show it to his fellow-members.