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1825.

Siphonaria angulata. Testa convexo conica, angulata radiato-costata; intus fusca. long. 15-10 unc.

PARMOPHORUS *elegans.* Emarginula breviusculas, *Sow. Gen.* f. 2, certainly not Parmophorus breviusculus of Blainville, as that shell is in the Museum, and is only slightly antiquated. Inter Parmophoros et Emanginulas.

EMARGINULA *cristata.* Testa convexo-conica, antice costa media cristata ornata.

(*To be continued.*)

ARTICLE X.

An Account of a new Mineral. By M. Lévy, MA. in the University of Paris.

(To Mr. Children.)

DEAR SIR,

THROUGH your kindness and that of Mr. James Sowerby, I have been enabled to examine some well-defined single crystals of a substance found at Snowdon, which had been classed by some with rutile, by others with sphene, but which certainly differs from both, its forms being derivable from a right rhombic prism, whilst the primitive form of rutile is a square prism, and that of sphene an oblique rhombic prism. The forms of this substance I have observed are represented by figs. 2, 3, and 4, and although I have not drawn the inferior summit, some of the planes which belong to it occur in some of the crystals. They are flattened parallel to the planes h^1, and some are more than half an inch in breadth and length. They cleave easily in a direction parallel to the plane g^1, but the face of cleavage is rather dull. All the natural planes are sufficiently brilliant to be

Fig. 2.

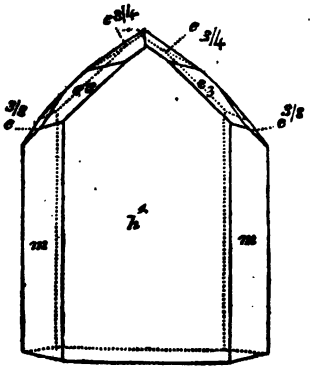
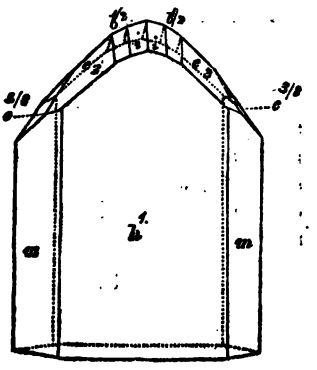


Fig. 3.



measured by the reflecting goniometer, with the exception of the plane h^1, which is strongly striated longitudinally. Some of the crystals are opaque, and of a pale red colour; others are translucent and transparent, and of a deep orange red colour, somewhat like the cinnamon stone. Fig. 4 represents a beau-

Fig. 4.

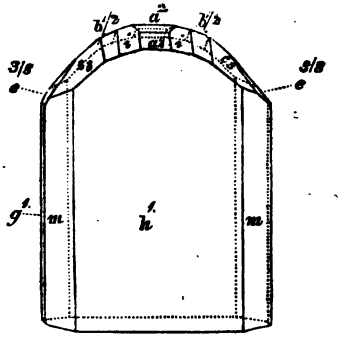
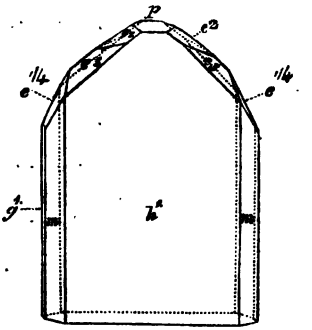


Fig. 5.

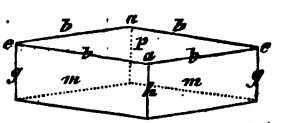


tiful crystal of this colour placed on a group of rock crystal in the collection of Mr. James Sowerby.

Upon a group of rock crystals from Dauphiny, in the collection of Mr. Turner, I observed with lamellar crichtonite some flat very brilliant brown translucent crystals, the form of which is represented by fig. 5, and which belong to the same species as those above described; they present, however, new modifications which are the planes designated by p, e_2, and $e^{\frac{1}{4}}$; but all the other planes m, h^1, g^1, and e_3, measure exactly the same angles as those marked with the same letters in the crystals from Snowdon.

I have taken for the lateral faces of the primitive form the planes marked m, which are inclined to one another at an angle equal to 100°, and by assuming also that the planes marked e_3, the incidence of which upon m is equal to 134°, is the result of a decrement by three rows in breadth on the lateral angles e of the primitive, I have found that one side of the base was to the height nearly in the ratio of 30 to 11. A right rhombic prism, fig. 1, of 100°, and of such dimensions, may therefore, be considered as the primitive form of this substance. The other planes are marked with the signs corresponding to the decrements of which they are supposed to be derived, and the incidences calculated from these laws agree within very narrow limits with the observation. The faces

Fig. 1.



marked i are the result of an intermediary decrement, the sign of which is $(b^1, b^{\frac{1}{5}}, g^{\frac{1}{3}})$.

m, m	=	100°	0′
m, e_3	=	134	0
$m, e^{\frac{3}{5}}$	=	120	4
m, e	=	124	45
$m, e_{\frac{9}{4}}$	=	121	58
$m, e^{\frac{1}{4}}$	=	124	31
$m, b^{\frac{1}{2}}$	=	126	0
p, m	=	90	0
p, e_3	=	132	38
$p, e^{\frac{3}{5}}$	=	128	48
p, e	=	141	41
$p, e_{\frac{9}{4}}$	=	143	2
p, e	=	118	12
$p, b^{\frac{1}{2}}$	=	144	0
p, a^1	=	150	56
p, a^2	=	164	28
p, i	=	147	30
e_3, e_3	=	135	46
e, e	=	150	0
$e_{\frac{9}{4}}, e_{\frac{9}{4}}$	=	154	21
$b^{\frac{1}{2}}, e_3$	=	162	58
$e_3, e^{\frac{3}{5}}$	=	156	29
e_3, i	=	156	0
e_3, e_3	=	101	37
e, e	=	109	21
$e_{\frac{9}{4}}, e_{\frac{9}{4}}$	=	112	3
i, i	=	149	35

This substance I propose to call *Brookite*, in honour of Mr. Broke.

We hope to give the characters of this mineral before the blowpipe, and its chemical analysis, in our next.—C. and P.