

those, whose care in constructing treatises on mineralogy should be to prevent information we are already in possession of, from perishing. Very frequently, indeed, they may be excused for having followed that course, when the description given was so indeterminate, that no remarkable points of difference from other species could be deduced from them, or when no description at all was given.

Trona has been very much in this situation. I have been indebted to Dr Hope for the specimens which have enabled me to ascertain some of its characters, and so far to supply the defects in the former descriptions, that it may in future be considered as a particular mineral species. The difference between the common carbonate of soda (the hemi-prismatic natron-salt of the method of Mohs) and the Trona of Fezzan, had already been pointed out by Klaproth; but it seems that even the chemical mineralogists have not paid that degree of attention to his correct determination which it deserves, because there was yet wanting the exact statement of those characters, which it possesses in its natural state, and upon which alone the determination of the species can be founded.

ART. XXIX.—*Description of Levyne, a New Mineral Species.* By DAVID BREWSTER, LL. D. F. R. S. Lond. and Sec. R. S. Edinburgh.

THE mineral of which I propose to give a brief description, was kindly transmitted to me for examination about a year ago, by Mr Heuland. In the memorandum which accompanied it, Mr Heuland stated that he suspected it to be new, and upon examining its optical properties, and comparing it with those minerals with which it seemed to be most closely allied, I had no doubt that it constituted a new and interesting species.

This mineral occurs in the cavities of an amygdaloidal rock, from Dalsnypen, in Faroe, and sometimes accompanies the Chabasie and Analcime, but particularly a new variety of the Heulandite.

Although this mineral is evidently a compound one from the distinctness of the re-entering angles, yet this composition is not seen when examined by polarised light, through the faces perpendicular to the axis. This circumstance would of itself have been sufficient to show that it has only one axis of double refraction, but I determined this to be the case, by the direct examination of the polarised rings. Its double refraction is negative, like that of calcareous spar, and other obtuse rhomboids, and though not great, yet the images may be easily separated. Its ordinary refraction is a little greater than that of almond oil, and very nearly the same as that of Primitive Chabasiae.

I have sent a specimen, containing a few minute crystals of this substance, to M. Berzelius for analysis, but I have not yet received the results which he has obtained from them.

It is not soluble in acids, nor does it gelatinise with them. It whitens and intumescs with heat like Chabasiae and Mesotype, and, according to Mr Haidinger's observations, it yields with salt of phosphorus a transparent globule, which contains a skeleton of silica, and becomes opaque on cooling.

For the following crystallographic observations I have been indebted to Mr Haidinger.

Rhombohedral. $R = 79^{\circ} 29'$.
 $a = \sqrt{8.38}$.

Simple forms. $R - \infty (o)$; $R - 1 (g) = 106^{\circ} 4'$; $R (P)$; $\frac{3}{4} R + 1 (n) = 70^{\circ} 7'$.

Character of Combination. Rhombohedral.

Combination. $R - \infty$. $R - 1$. R . Fig. 4. of Plate VIII. represents two individuals composed parallel to $R - \infty$, the individuals being continued beyond the face of composition, as in Chabasiae. Inclination of o on $g = 136^{\circ} 1'$, of o on $P = 117^{\circ} 24'$, of o on $n = 109^{\circ} 13'$.

Cleavage, indistinct, parallel to R . Fracture imperfect conchoidal. Surface, $R - 1$ and R streaked parallel to their common edges of intersection. $R - \infty$ uneven, and often curved, so that the opposite faces are often inclined on each other at an angle of $2^{\circ} - 3^{\circ}$.

Lustre vitreous. Colour white. Streak white. Semi-transparent.

Brittle. Hardness = 4.0.

I propose to distinguish this species by the name of *Levyne*, in compliment to Mr A. Levy, M. A. of the university of Paris, who is already well known to mineralogists, by his crystallographic acquirements, and by his determination of several new and interesting mineral species.

ART. XXX.—DECISIONS ON DISPUTED INVENTIONS AND DISCOVERIES.

IN discharging the duties which the present series of papers has imposed upon us, we are glad to find that the principles we have laid down, as well as our method of applying them, have already obtained the sanction of those whose approbation will always be our highest reward.

As these pages can never be stained with personal allusions, nor the decisions which they bear influenced by any other feelings but those which truth inspires, we are not without the hopes, that the greater number of those whom we may place in the list of second inventors will acknowledge the justness of our sentence, while those who have a less veneration for the even-handedness of justice, will know in time to respect a tribunal to which they themselves may confidently appeal, and before which their own usurped rights may be vindicated.

To persons of inferior candour, and particularly to selfish plagiarists, we would recommend the perusal of the first paper in this Number, in which one of our most eminent Philosophers freely renounces to a foreigner the merit of discoveries which he had published, and believed to be his own; and also the communication from Mr Nicholas Mill, in p. 338 of this Number, in which he fixes the precise share which he and other philosophers have had in the improvement of the Platina Air Pyrometer.

1. *The Daily Variation of the Barometer not discovered by Colonel Wright.*

It will doubtless seem strange to our scientific readers, that the discovery of the daily variation of the barometer should be now, almost for the first time, made a question for discussion. Their wonder, however, will not be diminished, when we inform them, that a grave charge has been brought against the Editor of this work, against Mr Brande, and against Baron de Ferussac, for transferring the honour of this discovery from M. Godin to Colonel Wright of Ceylon; and when we give them the additional information, that this charge was made by M. Arago, one of the editors of the *Annales de Chimie*, at the time when he was occupying the President's chair in the Royal Academy of Sciences, our readers will see the necessity of repelling a charge, which, had it come from any other quarter, would have received that silent treatment which it merits.

As the notice which gave rise to this charge appeared originally in our Journal, and was merely copied from its pages into the *Quarterly Journal*, and into Baron Ferussac's *Bulletin*, it is necessary that the defence should