

firmed by the similarity of atomic constitution exhibited by these bodies. An examination of some very perfect specimens, however, obtained from Phillipstadt in Sweden, has shewn Mr. R. P. Grey (Phil. Mag. March, 1856) that the crystallization is triclinic. The inclinations of the three assumed pinacoids (or terminal pairs) gave, respectively :— $87^{\circ}20'$, $86^{\circ}10'$, $110^{\circ}40'$.

Voigtite:—Under this name (in honor of Voight, a writer who obtained some notice at the close of the last century, as an opponent of the Wernerian doctrines,) Schmid has described a micaceous mineral from a granitic mass, forming part of the Ehrenberg, in the Duchy of Saxe-Weimar. It occurs in small scales, of a brown colour, and opaque; but is usually much weathered. H. a little over 2.0; Sp. gr. = 2.91. Readily fusible. The analysis yielded:— SiO_3 33.83, Al_2O_3 13.40, Fe_2O_3 8.42, FeO 23.01, MgO 7.54, CaO 2.04, NaO 0.96, HO 9.87, = 99.07. It may be regarded, perhaps, as simply a ferruginous variety of Chlorite.

Volknerite:—Rammelsberg has examined the substance originally named Hydrotalcite by Hochstetter—the Volknerite from Snarum in Norway. He confirms Hermann's statement as to the accidental nature of the carbonate of magnesia present in the mineral; but his analysis leads to the formula $\text{Al}_2\text{O}_3, 3\text{HO} + 5(\text{MgO}, 2\text{HO})$ or nearer still, to $\text{MgO}, \text{Al}_2\text{O}_3 + 4(\text{MgO}, 3\text{HO})$ in place of $\text{Al}_2\text{O}_3, 3\text{HO} + 6(\text{MgO}, 2\text{HO})$ given by Hermann.

Boronatocalcite or Ulexite:—Rammelsberg has also analysed the supposed Boroncalcite from the plains of Iquique in Southern Peru. He finds that soda is really one of its constituents; and that when freed from impurities, its composition may be expressed by the following formula: $[\text{NaO}, 2\text{BO}_3 + 2(\text{CaO}, 2\text{BO}_3)] + 18\text{HO}$. This corresponds to BO_3 45.63, CaO 12.26, NaO 6.79, HO 35.32. As the present mineral is thus distinct from Hayesine, Dana's original name of Ulexite should be re-conferred upon it.

Schaumkalk:—This substance has been hitherto regarded as a pseudomorphous variety of calc spar after fibrous gypsum. G. Rose has lately shewn, that it belongs properly to Arragonite; and he calls attention to the fact that it constitutes the first recognized example of an arragonite pseudomorph. Fossil shells converted into arragonite, are, however not unknown.

Torbane-Hill Mineral:—The substance, thus named, still continues to attract, from time to time, the attention of the scientific world. Geuther in his Inaugural Dissertation (Ueber die Natur und Distillationsproducte des Torbanehill-minerals: Göttingen, 1855,) declares, as the result of an elaborate series of experiments, that the matter in question is simply a bituminous shale. This, is the view almost universally adopted in Germany: a view, which in the end we are convinced, will prevail everywhere. It is only by denying altogether the existence of bituminous shale, that the present substance can with any consistency be entitled to the name of coal. Specimens may be seen in the collection of the Canadian Institute.

E. J. C.

ETHNOLOGY AND ARCHÆOLOGY.

CRANIA OF THE ANCIENT BRITONS.

Mr. Joseph Barnard Davis submitted to the British Association at the Glasgow meeting, a series of remarks and deductions relative to the forms of the Crania of the Ancient Britons chiefly founded upon his observations of a skull derived from the