

and dissociated, the size and density of the resulting particles determining the color produced. On heating, the dissociated atoms recombine with evolution of light and loss of color to the minerals. *Nature*, 101, (2532), 198, 1918.

NOTES AND NEWS

We learn that the Bruce Museum, of Greenwich, Connecticut, has an attractive room, fitted with fine new cases, for the display of a mineral collection, but as yet practically no minerals are available. Here is an excellent opportunity for some one to place a moderate sized collection where it will find a permanent home and do a maximum amount of good. If any of our readers feel able to help out, we suggest that they correspond with Dr. Edward F. Bigelow, Sound Beach, Connecticut.

It is with the deepest regret that we chronicle the death early in August of George O. Simmons, of Brooklyn, N. Y. For forty years or more a collector of minerals, Mr. Simmons was, from the inception of this magazine, one of its staunchest supporters. We hope soon to be able to publish a sketch of his life and work.

The chromite mines in the southern part of Lancaster County, Pennsylvania, formerly famous as localities for brucite, kämmererite, serpentine variety williamsite, and many other minerals, which have been idle for many years, are being reopened.

NEW MINERALS

COLBRANITE

D. F. Higgins; Geology and ore deposits of the Collbran contact of the Suan Mining Concession, Korea. *Econ. Geol.*, 13, (1), 19, 1918. Previously referred to as ilvaite by S. Koto, *J. Coll. Sci. Imp. Univ. Tokyo*, May, 1910.

NAME: after Mr. H. Collbran and his son, A. H. Collbran, developers of the mine.

Color: black. Form: stellate aggregates of acicular crystals; also massive. Composition: a highly ferriferous pyroxene of the hedenbergite type. Occurs as a contact metamorphic mineral in marble at the Suan Mining Concession, Central Korea.
S. G. G.

ABSTRACTS OF MINERALOGIC LITERATURE

AN APPLICATION OF POLYDIMENSIONAL GEOMETRY TO CHEMICO-MINERALOGICAL PROBLEMS; THE COMPOSITION OF TOURMALINE. H. E. BOEKE. *Neues Jahrb. Min. Geol.*, 1916, II, 109-143; thru *J. Chem. Soc.*, 112, II, 178-179, 1917.

By plotting the analyses of tourmaline along 4 or 5 dimensions in space the author endeavors to arrive at the true formula of tourmaline. Most of the analyses agree with the general formula of Penfield, $R_2Si_4B_2O_{21}$. E. T. W.

NOTES ON NEWLY RECORDED RHODESIAN MINERALS. A. E. V. ZEALLEY. *Proc. Rhodesia Sci. Assoc.*, 16, 17, 1917; abstracted by G. A. J. C., *Nature*, 101, (2531), 174, 1918.

Includes an account of the stanniferous tantalite of the Victoria tinfield, discovered in 1911, but not hitherto described. Two other Rhodesian occurrences of tantalite are noticed. S. G. G.

AN ADDITIONAL NOTE ON THE "OOLITIC AND PISOLITIC BARITE FROM THE SARATOGA OIL FIELD, TEXAS." E. S. MOORE. Pennsylvania State College. *Science*, 46, (1188), 342, 1917.

Information furnished by wells seems to indicate that the barite occurs in a definite geological horizon. It is believed that some of the material formed in the wells after they were equipped. In most cases no definite nucleus could be found. "It would seem to demonstrate that living organisms were not essential to the development of oolites and that these may form where precipitation is taking place in an agitated solution, in the absence of life."

S. G. G.

APATITE FROM THE LAKE LAACH DISTRICT; SULFATE-APATITE AND CARBONATE-APATITE. R. BRAUNS. *Neues Jahrb. Min. Geol., Beil.-Bd.*, 41, 60-92, 1916; thru *J. Chem. Soc.*, 110, II, 532-533, 1916.

Minute crystals in the rocks of this region have been studied crystallographically, optically and chemically. One type contains over 1 per cent. SO_3 , another considerable CO_2 . An excess of CaO is also usually present. The general formula of apatite is therefore $3\text{Ca}_3\text{P}_2\text{O}_8 \cdot \text{Ca} (\text{F}_2, \text{Cl}_2, \text{SO}_4, \text{CO}_3, \text{O}, (\text{OH})_2)$. CO_2 has also been found in noselite. E. T. W.

OBSERVATIONS ON CERTAIN TYPES OF CHALCOCITE AND THEIR CHARACTERISTIC ETCH PATTERNS. C. F. TOLMAN, JR. Stanford University. *Trans. Am. Inst. Min. Eng.*, 54, 402-435, 1917. With a discussion by LOUIS C. GRATON, ALFRED C. LANE, J. T. SINGEWALD, JR., CHARLES P. BERKEY, E. POSNJAK, E. T. ALLEN, AND H. E. MERWIN; *ibid.*, p. 436-442.—(Revision of article abstracted in *Am. Min.*, 1, (1), 15, 1916).

A metallographic study was made of chalcocite from the Kennecott-Bonanza mines, Alaska; Apache Mines, Santa Cataline Mts., Arizona; Bingham, Utah; and Miami, Ariz.

The Bingham chalcocite was found to be meta-colloidal, a variety not heretofore described. The material is porous and shows a marked mammillary structure, typical of meta-colloids.

From this study the writer makes the following general conclusions in regard to etch figures. No isometric etch figures have been found in natural chalcocite, that are not inherited from some antecedent mineral, generally bornite. Regular inherited isometric structures are found in chalcocite formed presumably by ascending solutions, and certainly by descending solutions. Orthorhombic etch structure with one-direction cleavage, or parting distinctly more regular than other directions, is found wherever the structure of the mineral replaced does not govern. The development of a very fine orthorhombic etch structure consisting of minute individuals each lined with parallel striations is suggestive of meta-colloidal chalcocite, all gradations existing between this type of etching and the coarser, more irregular structure. S. G. G.