CurS.2PbS. The chemical processes resulting in the formation of these products may be inferred as follows: Copper solutions derived from the breaking down of tetrahedrite permeate the galena along the cleavages and the lead sulfide is partially replaced by copper sulfide. After oxidation the copper sulfate is taken away in solution, since it is much more soluble than the lead sulfate.

W. H. Newhouse.

Attention is called to the XIIIth Session of the International Geological Congress to be held in Brussels, Belgium, August 10-19, 1922. Excursions will be conducted before the opening of the Session, also during and at the close of the Session. Fellows or members of the Mineralogical Society of America who expect to attend this Congress are requested to send their names to Secretary Whitlock so that the selection of official representatives of the Society can be made by the Council.

On May 1st the American Museum of Natural History announced the opening of the Morgan Memorial Hall of Minerals and Gems. This collection was presented to the City of New York by George Fisher Baker in memory of his friend, John Pierpont Morgan. Many new display cases have been installed and the specimens have all been remounted on pale buff fiber-board. The gems have been mounted on glass supports designed by Curator Whitlock, who will describe them in this Journal in the near future.

A new major subdivision has been created in the United States Geological Survey by raising the division of Alaskan mineral resources to the status of a branch. The work will continue under the direction of Colonel A. H. Brooks, whose title is chief Alaskan geologist.

Dr. Maximilian Weber of the Munich Polytechnikum has been appointed Professor of petrography at the University of Munich, succeeding the late Professor Ernst Weinschenk.

ABSTRACTS—CRYSTALLOGRAPHY


This is an investigation of the intensity, tone and saturation of the interference colors, for various thicknesses, of quartz wedges. Edw. F. Holden.


The most sensitive tint with gypsum is the purple obtained with a plate of 0.056 mm. thickness. Somewhat less sensitive is the brighter purple obtained with a quartz plate, cut parallel to the optic axis, with a thickness of 0.0575 mm.

E. F. H.


Zinc which has been mechanically worked recrystallizes with ease at high temperatures. E. F. H.

HgI, condensed at a pressure of 0.1 atm., or cooled to the temperature of liquid air, presents a colorless modification. E. F. H.


If an anisotropic liquid, resting on the surface of a solid crystal, be heated above the isotropic fusion point, and then cooled; the anisotropic condition will persist through a small temperature interval, due to the molecular forces at the surface of the crystal. E. F. H.


The orientation of cholestryl caprinate, -benzoate, ammonium- and trimethyl-ammonium oleates on halite, sphalerite, and talc was studied. The optically positive phase of cholestryl caprinate orients itself with its optic axis parallel to the diagonal of (100) on halite; to the longer diagonal of (011) on sphalerite; and on (001) on talc, there were six positions. E. F. H.


Anisotropic liquids placed upon the cleavage surfaces of solid crystals orient themselves in a manner that bears a simple relationship to the symmetry of the solid crystals. C. B. S.


The rate of growth of the crystal faces in salol increases as the temperature falls below its melting point (41.75°). E. F. H.


Salt crystallizes on mica in such a way that a trigonal axis of the cube is perpendicular to the basal plane of the mica, and a zone (100) \( \cap \) (111) of the salt is parallel to the zone (001) \( \cap \) (010) of the mica. E. F. H.


A theoretical discussion of the relations between yellow and red HgI₂. E. F. H.


The last paper is a mathematical discussion of Svedberg's conclusions, that the temperature coefficient of electrical conductivity of anisotropic liquids decreases abruptly at the temperature of isotropic fusion. C. B. S.

The formation of anisotropic liquids from solutions by evaporation produces spherulitic liquid crystals which differ from those produced by fusion of the solid.

C. B. S.

**MINERALOGY**


The two articles above relate to the artificial formation of tridymite and cristobalite.

C. B. S.


The maximum phosphorescence of ZnS occurs at the stage of incipient crystallization.

C. B. S.


A peculiar clay composed of 98.5% minute crystals of dolomite is described.

C. B. S.


The origin of pyrite and covellite is discussed.

C. B. S.


The minerals include fluorite, analcite, mesolite, thomsonite, calcite, and wad.

E. F. H.


Compact natrolite, analcite, and apophyllite from Bohemia, apparently end-products of the solidification of phonolitic magmas, are described.

E. F. H.


The optical properties of the compounds CaO. Fe₂O₃ and 2CaO. FeO are given.

E. F. H.


A summary of the literature is given; and the paragenesis of minerals at high temperatures with the constitution of magmatic solutions, is discussed.

E. F. H.

Mixed crystals of MgSO₄ and ZnSO₄ are composed of alternate layers of each salt and therefore are not solid solutions but only physical mixtures. C. B. S.


Several crystalline hydrated silicates of K and Na were produced synthetically. E. F. H.


Pressure produced gliding parallel to (111) in magnetite; the path of the atoms during the gliding is given. E. F. H.


Mixed crystals of the oxides of Mg, Zn, Mn, Al, and Sn with NiO were obtained by heating mixtures of the oxides at 900°C with an excess of KCl. E. F. H.


By fusing FeCO₃ and SiO₂ small crystals were obtained which were identified by metallographic methods as grunerite. C. B. Lawson.


The “milkiness” produced by the devitrification of certain types of crown glass is ascribed to the presence of sub-microscopic cristobalite. C. B. S.


Leucite and orthoclase were synthesized by heating the constituents with mineralizers under pressure; the latter mineral formed only above 360°C. E. T. W.


Occurrences are noted at 3 localities, with analysis of material from one of them. E. T. W.


Heulandite, scolecite, natrolite, harmotone, and chabazite showed during rehydration a distinct hydrate for each molecule of water present in the original mineral; the water was probably chemically combined. With analcite only the mono- and tetrahydrates were formed; in apophyllite rehydration did not occur. E. F. H.