

CHEMICAL PROPERTIES

In o.t. yields SO_2 and a ring of Sb oxide. In c.t. melts and yields sublimate of S, Sb oxysulfide, and Sb sulfide. Soluble in hot concd. HCl. Analysis gave: Pb 40.77, Cu 0.75, Fe 0.46, Ag 7.40, Sb 30.61, S 20.81, Sum 100.80 per cent.; corresponding to $(\text{Ag}, \text{Cu})_2\text{S}:5(\text{Pb}, \text{Fe})\text{S}:3\text{Sb}_2\text{S}_3$ or $\text{Ag}_2\text{Pb}_3:(\text{Sb}_2\text{S}_3)_3$. Mineragraphically homogeneous.

OCCURRENCE

In a quartz vein immediately associated with small amounts of pyrargyrite, sphalerite and sericite in white quartz, in the Poorman Mine, Silver City district, Owyhee County, Idaho. This county is mineralogically noteworthy as containing also the only American localities for naumannite, miargyrite, pyrostilpnite and xanthoconite; and it has also produced the most remarkable specimens of crystallized proustite (one crystal weighing 240 kg.), cerargyrite, and ilvaite yet found in the United States.

DISCUSSION

In the original description of this mineral, above cited, the lead and silver were tentatively considered isomorphous, and as it then agreed in ratio more or less with some jamesonite, which it resembles in physical properties, it was provisionally classed as a silver-bearing variety of that mineral. In a recent reclassification of the sulfo-salts, however, Wherry and Foshag¹ point out that in these minerals lead and silver are not isomorphous but present in definite relative amounts. Accordingly, they place jamesonite and this "silver-jamesonite" in different divisions (and groups). A species name is therefore needed for the latter mineral, and is supplied in this note.

The formula here given agrees even better with the analyses than did the one previously suggested. Burton's "argentiferous jamesonite" had the same formula and was no doubt also owyheeite.

ABSTRACTS—MINERALOGY

METEORIC NICKEL-IRON AND THE POLYMORPHISM OF CARBON-IRON. G. TAMMANN. *Nachr. Ges. Wiss. Göttingen* 1918, 258-266; thru *Chem. Abstr.* 14 (7), 913-914, 1920.

A discussion of the meteoritic minerals on the basis of crystal structure. E. T. W.

THE BLOWPIPE AS A PYROMETRIC APPARATUS. P. J. HOLMQUIST. *Geol. Fören. Förh.* 39, 709-720, 1917.

The melting points of minerals can be determined by observation of their behaviors in a certain type of blowpipe flame. W. F. Foshag.

CONTRIBUTION TO THE GEOLOGY OF GALICIA. A NEW OCCURRENCE OF BERYL. RAMON SOBRINO-BUHIGAS. *Bol. Soc. españ. Hist. Nat.*, 16, 541-543, 1916; thru *Rev. Géol.*, 1 (4), 138, 1920.

At Pontevedre, Galicia, there has been found a fairly perfect crystal of beryl 3 dm. long and weighing 3.45 kg. E. T. W.

SEARCH FOR NICKEL AND COBALT IN CHROMITE AND NATIVE PLATINUM. S. PINA-DE RUBIES. *Bol. Soc. españ. Hist. Nat.*, 17, 143-148, 1917; thru *Rev. Géol.*, 1 (4), 138, 1920.

The presence of these elements was proved spectrographically. E. T. W.

¹J. Wash. Acad. Sci., 11 (1), 1-8, 1921.

MINERALOGICAL CHARACTERISTICS OF SPAIN. LUCAS FERNANDEZ-NAVARRO. *Ann. Acad. Polytechn. Porto*, **13** (1), 1-19 and 5-23, 1918; thru *Rev. Géol.* **1** (5), 179, and **1** (9), 330, 1920.

Chiefly economic; all known species are listed.

E. T. W.

SOME MINERALS FROM MADAGASCAR. A. LACROIX. *Bull. soc. franc. min.*, **41**, 186-96, 1918.

Descriptions are given of cymophane, monazite, zircon, uranothorite, molybdenite, quartz, cosalite?, topaz, and spinel (picotite).

E. T. W.

THE GYPSUM FROM CERRO DE LOS ANGELES, MADRID. FRANCISCO PARDILLO. *Bol. Soc. españ. Hist. Nat.*, **17**, 535-537, 1917; thru *Rev. Géol.*, **1** (6), 223, 1920.

The gypsum crystals are thought to be hypostatic pseudomorphs after calcite rhombohedrons (0221) and (0332). E. HERNANDEZ-PACHECO AND J. ROYO-GOMEZ. **17**, 572-574, 1917; thru *Rev. Géol.*, **1** (7-8), 269, 1920. The pseudomorph theory of preceding abstract is opposed. L. FERNANDEZ-NAVARRO. **19**, 260-266, 1919; thru *Rev. Géol.*, **1** (5), 179-180 and **1** (9), 331, 1920. The gypsum crystals discussed in prec. abstr. are considered to be metasomatic pseudomorphs after glauberite. F. PARDILLO. **19**, 400-401; *Rev. Géol.*, **1** (10), 378. Upholds the calcite theory.

E. T. W.

MINERALS FROM SIERRA DE ALGAIREN. PEDRO FERRANDOMAS AND JOSE-L. DE ZUAZO. *Bol. Soc. españ. Hist. Nat.*, **18**, 400-401, 1918; thru *Rev. Géol.*, **1** (9), 331, 1920.

THE ASSOCIATES OF DIAMOND. E. HUSSAK AND J. B. DE ARAUJO-FERRAZ. *Private Publ.* by the 2d author. 56 pages. Rio de Janeiro, 1917; thru *Rev. Géol.*, **1** (10), 377-378, 1920.

Comprises descriptions of the minerals occurring with diamond in Brazil.

E. T. W.

A NEW OCCURRENCE OF DUMORTIERITE. EBERHARD RIMANN. *Ann. l'Ecole Mines Ouro Preto*, No. 15, 19-21, 1917; thru *Rev. Géol.*, **1** (10), 378, 1920.

AMBLYGONITE FROM UTÖ. H. BACKLUND. *Geol. För. Förh.*, **40**, 757-775, 1918; thru *Min. Abstr.*, **1**, 75, 1920.

The optical orientation of a crystal embedded in a Li pegmatite from Utö agrees with that of amblygonite proper, $[\text{Li}(\text{Al F})\text{PO}_4]$ but the refractive indices approach the values of montebrazite, $[\text{Li}(\text{AlOH})\text{PO}_4]$. The specific gravity is 3.065. An analysis gave, however, F 11.10 and H_2O 2.18%. A study of the refractive indices and sp.gr. of 9 samples from various localities shows that the refractive indices increase more rapidly with increasing (OH) at the amblygonite end of the series than at the montebrazite end, which explains the apparent discrepancy.

W. F. H.

NEW MINERAL NAMES. W. E. FORD. *Am. J. Sci.*, [4], **47**, 446-448, 1919.

A list of 8 minerals, with properties, all noted in this magazine.

E. T. W.