Chemical Properties

In o.t. yields SO_2 and a ring of Sb oxide. In a.t. melts and yields sublimes 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 (Ag, Cu)S:5(Pb, Fe)S:3 Sb_2S_3 or Ag_2Pb_5: (Sb_2S_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 Foshag 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


A discussion of the meteoritic minerals on the basis of crystal structure.

E. T. W.


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

W. F. Foshag.


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

E. T. W.


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

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

Chiefly economic; all known species are listed. E. T. W.


Descriptions are given of cymophane, monazite, zircon, uranorthite, molydenite, quartz, cosalite?, topaz, and spinel (picotite). E. T. W.


Comprises descriptions of the minerals occurring with diamond in Brazil. E. T. W.


The optical orientation of a crystal embedded in a Li pegmatite from Utô agrees with that of ambygionite proper, [Li(Al F)PO₄] but the refractive indices approach the values of montebrasite, [Li(AlOH)PO₄]. The specific gravity is 3.065. An analysis gave, however, F 11.10 and H₂O 218%. 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 amblygionite end of the series than at the montebrasite end, which explains the apparent discrepancy.

W. F. H.


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