

The geology of the region is very complex, one of the principal features is the presence of two series of igneous rocks, one Triassic, forming principally sills and sheets, and one Jurassic, being composed of a great series of bosses and stocks.

As for the genesis of the ore deposits, the large pyrite mass, is generally considered of epigenetic origin. In the extreme northeast, near Kruma, syngenetic chromite is found, but this occurrence is not yet of economic importance. Other types of occurrences are veins and metasomatic iron ores in limestone or shale.

It is the author's opinion that the origin of the large pyritiferous deposits is connected with the Tertiary igneous intrusions. Outcrops of these igneous masses have not been found in the region, but are present in southern Albania and in Greece. Fourteen references are given at the end of the first chapter.

Tj. L. REITSEMA

VERSUCH EINER NATÜRLICHEN KLASSIFIKATION DER IM WEITEREN SINNE MAGMATISCHEN ERZLAGERSTÄTTEN. PAUL NIGGLI. 69 pages, 11 figs. *Abhandlungen zur praktischen Geologie und Bergwirtschaftslehre*, Vol. 1. Berlin, 1925. Published by WILHELM KNAPP, HALLE (SAALE).

The author first considers the general principles of physical chemistry of the magmas forming ore deposits. A curve showing the effect of temperature and pressure on a magmatic system is given. A discussion of the succession of paragenesis of elements and the minerals containing them is presented with a diagram summarizing the information.

The well known associations of metals with certain types of igneous rocks is considered in some detail. The paper should prove of interest to the general reader.

W. H. NEWHOUSE

PROCEEDINGS OF SOCIETIES

PHILADELPHIA MINERALOGICAL SOCIETY

Academy of Natural Sciences of Philadelphia, May 6, 1926.

A stated meeting of the Philadelphia Mineralogical Society was held on the above date, with the president, Mr. Vaux, in the chair. Twenty-nine members and three visitors were present.

Messrs. Biernbaum and Hoadley exhibited datolite and an unidentified crystalline mineral from Patterson, N. J., and reported that there were excellent prospects that these quarries would produce very good specimens in the near future.

Mr. Hoadley reported garnet, apatite, and beryl from the New York City subway excavations. Mr. Warford reported finding apatite crystals in a quarry near Dutton's Mills, Pa., on a trip with several other members of the society. A specimen of crystallized pyrite on stilbite from Moore Station, N. J., was exhibited by Mr. Trudell. Messrs. Vaux and Gordon exhibited a large calcite crystal, and a large specimen of apophyllite colored green by included byssolite. Both were obtained recently at the French Creek Mines, Pa.

The meeting then adjourned to the microscope room of the Academy, where Dr. L. C. Wills, assisted by several other members, had arranged a splendid exhibition of microscopic minerals. Twenty-one microscopes and a large and varied array of specimens assured a most interesting evening for all present.

HORACE R. BLANK, *Secretary*

NOTES AND NEWS

The following have indicated their desire to exchange mineral specimens with other members of the Society: Dr. Henry C. Dake, 793½ Thurman St., Portland, Oregon; Lloyd W. Fischer, Dept. of Mineralogy, Brown University, Providence, Rhode Island; Walter J. Paquette, 253 Worthington St., Toledo, Ohio; and M. Vonsen, Petaluma, California.

Professor W. J. Lewis, professor of mineralogy at the University of Cambridge, died on April 16 at the age of seventy-nine years. In 1899 Professor Lewis published a treatise on crystallography and in 1909 he was elected Fellow of the Royal Society.

Prof. L. A. Wülfing, professor of mineralogy and petrography at the University of Heidelberg, and Prof. O. Mügge, professor of mineralogy at the University of Göttingen, will retire from active service at the close of the present college year.

The Academy of Sciences of Paris has awarded the Cuvier prize in mineralogy and geology to Dr. L. Kober of the University of Vienna.

Prof. H. Mohr of the T. H. at Graz has received a call to the professorship of mineralogy and geology at the University of Brünn.

Mr. John C. Smock, for many years connected with the New Jersey geological survey, died April 21 at the age of eighty-four years. Mr. Smock graduated from Rutgers college and later received his Ph.D. from Lafayette. The year 1869-1870 was spent at the Bergakademie and the University of Berlin. His contributions were mainly in the field of economic geology and included studies on clay deposits and reports on building stones and iron ores of New York.

Mr. Ernest E. Fairbanks, mineralogist at the Rare and Precious Metals Experiment Station, Reno, Nevada, has resigned to accept a position on the sales staff of E. Leitz, Inc., of New York City.

Volume one of the International Critical Tables of the numerical data of physics, chemistry and technology is now off the press. These tables were published under the direction of the National Academy of Sciences and the National Research Council. The material has been assembled and evaluated by three hundred experts including chemists, physicists and engineers of the United States, Canada, Great Britain, Belgium, France, Italy, Austria, Germany, Denmark, Switzerland, Holland, Australia and Japan. The special prepublication offer, which closed May 1, brought in subscriptions for 6,500 sets. Of these twenty percent were from foreign countries.

Joint investigations by the Bureau of Soils of the United States Department of Agriculture and the United States Geological Survey to determine the location and extent of potash deposits in the United States and to develop improved methods of recovery are provided for in a bill which has been reported out with amendments by the Senate Committee on Agriculture.

According to Dr. George Kunz the "new" gem mineral recently reported from Santa Rita, Minas Geraes, Brazil, is an azure blue lazulite.

Dr. Horace R. Blank, instructor in chemistry at the University of Pennsylvania and secretary of the Philadelphia Mineralogical Society, has been appointed instructor in mineralogy at Columbia University, New York City.

NEW MINERAL NAMES

Bolivianite

ANTONIO PAULY: Bolivianite und Silesite zwei neue Mineralien der bolivianischen Zinnlagerstätten. (Bolivianite and silesite, two new minerals from the Bolivian tin deposits). *Centr. Min. Geol.*, 43-44 (1926).

NAME: This mineral is called *bolivianite* by the miners.

CHEMICAL COMPOSITION: A tin-copper sulphide. Analysis: Sn 35, Cu 25, S 33, with iron sometimes up to 10 percent. Some samples also show Ge and Ag. Fusible at 4.

CRYSTALLOGRAPHIC PROPERTIES: Trigonal. c = about 0.8 Form, rhombohedrons.

PHYSICAL PROPERTIES: Color black with bluish tarnish, streak brownish yellow. Cleavage, rhombohedral, good. Hd 4-5. Sp. Gr. 4.1.

OCCURRENCE: Found in druses in the tin ores of Quimsa Cruz and Huanuni.

DISCUSSION: (A specimen of bolivianite in the collection of the U. S. National Museum agrees with Pauly's description but is sphalerite partially replaced by covellite. The term bolivianite has already been used for an antimomial silver sulphide. Abstr.)

W. F. FOSHAG

Cannizzarite

F. ZAMBONINI, O. DE FIORE and G. CAROBBI: *Rend. Accad. Sci. Fis. Mat. Napoli*, (3) 31, 24-29 (1925). Also *Annali del R. Osservatorio Vesuviano*, (3) 1, 31-36 (1924).

CHEMICAL PROPERTIES: A bismuth sulphosalt of lead, $PbS.Bi_2S_3$. Analysis: Bi 66.00, Pb 15.79, FeO 0.51 Cu tr., S 17.70 (by difference).

CRYSTALLOGRAPHIC PROPERTIES: Probably orthorhombic. Crystals are striated prisms with the forms b (010), m (110), a (100), n (210), q (130). (010) : (110) = $44^\circ 47'$ to $46^\circ 40'$.

PHYSICAL AND OPTICAL PROPERTIES: Color lead gray. Sp. Gr. 6.54. Hd. 2.

OCCURRENCE: Found in the deeper parts of fumaroles (Temp. $550-615^\circ C$) as flattened acicular crystals on Vulcano, Lipari Islands. The higher levels of the fumaroles carry sal ammoniac, realgar and sulphur.

DISCUSSION: (Very close to chiviatite and is probably identical with it. Abstr.)

W. F. F.