PROCEEDINGS OF SOCIETIES

NEW YORK MINERALOGICAL CLUB

Regular Monthly Meeting of November 18, 1925

A regular monthly meeting of the New York Mineralogical Club was held in the East Assembly Room of the American Museum of Natural History on the evening of November 18, 1925. The President, Dr. George F. Kunz, presided and there was an attendance of 35 members.

The committee on membership reported favorably on the names submitted for membership at the October meeting. It was voted that the recording secretary cast one ballot for the election of these gentlemen. They were declared elected.

The following names were submitted to the membership committee: Dr. B. T. Butler, College of the City of New York, New York City; Mr. James Morton, Paterson Free Public Library, Paterson, New Jersey; Mr. George Carpenter, 210 West 7th St., New York City.

The committee on the resolutions regarding the death of Mr. William G. Rothe asked for more time to prepare their communication.

Captain Miller invited the Club to attend the meeting of the Newark Mineralogical Society on Sunday, December 6th when Dr. M. Twitchell, Assistant State Geologist of New Jersey would speak on the Geological Story of New Jersey.

The election day committee reported that the election day field excursion to the West Paterson quarries was attended by about 12 club members. The club extended a vote of thanks to the owners of the quarry for their courtesy in opening their quarry to the club on this occasion.

The President then introduced the speaker of the evening, Mr. Samuel G. Gordon, who addressed the Club on "*Mineral Collecting in the Bolivian Andes.*" Mr. Gordon described the expedition which was sent out by the Philadelphia Academy of Sciences, and which was known as the Third Vaux Academy Expedition. He left New York in February 1925 for the west coast of South America, visiting many of the famous mineral localities in Bolivia and Chile. The account of his journey, which he illustrated by some unusual lantern slides, included the tin mines at Llallagua, Bolivia, where he obtained cassiterite in beautiful specimens, bismuthinite, wavellite, paravauxite and strikingly beautiful vivianite. He also visited Colquechaca—where penrosite a new nickel copper-lead selenide was obtained— Oruro, Las Pas and Potosi. At the Araca tin mine beautiful clear cassiterite was obtained, and at Tarapaca, Chile, the new mineral trudellite. Mr. Gordon described in a most interesting manner his experiences in collecting from the underground workings and the incidents connected with his journeys which were often highly adventurous.

At the close of his address a vote of thanks was tendered to the speaker for his most interesting and valuable account.

HERBERT P. WHITLOCK, Recording Secretary

Regular Monthly Meeting of December 16, 1925

A regular monthly meeting of the New York Mineralogical Club was held in the East Assembly Room of the American Museum of Natural History on the evening of December 16, 1925. The Vice President, Mr. George E. Ashby, presided, and there was an attendance of 20 members.

The committee on membership reported favorably on the names submitted for membership at the November meeting, and added to them the name of Mr. H. Julian Knox, of William Wise & Son, Inc., 10 Flatbush Avenue, Brooklyn, New York. The Recording Secretary was instructed to cast a ballot for these names: Dr. B. T. Butler, Mr. James Morton, Mr. George Carpenter, and Mr. H. Julian Knox who were declared elected to membership.

The committee on the resolutions regarding the death of Mr. William G. Rothe, submitted the following communication:

The New York Mineralogical Club spreads on its records and conveys to the family of the late Wm. G. Rothe the following appreciation.

Mr. Rothe was one of the original members of this Club, having associated himself with it in 1887. He retained his membership during thirty-eight years until his death June 26, 1925, in his eighty-seventh year.

Mr. Rothe was born in Germany, and came to New York City while an infant. After a period in Newark he moved to Brooklyn in 1868 and associated himself with E. R. Squibb & Son of which company he was Treasurer when he retired in 1907.

His interest in minerals dated from his early years. He was a discriminating and tireless collector, sparing neither time nor money to get noteworthy specimens. He attended the collection trips and meetings of the Club regularly during its earlier years, and was also active in the Mineralogical Dept. of the Brooklyn Institute of which he was President for several years.

His extensive and notable collection was well displayed in an entire room at his home and personified Mr. Rothe's ambition toward perfection. Then in late life he disposed of his collection, many gladly profited at the opportunity to obtain specimens of his high standard. The older members of the Club who knew him marveled at his enthusiastic interest in mineralogy, admired his collection, valued his friendship, and emulated his example of painstaking care, thoroughness and dependability.

This Club loses a member who linked us with its birth, and did it credit both as a mineralogist and a man.

> Signed for the Club: GILMAN S. STANTON, GEORGE E. ASHBY, JOHN A. GRENZIG. The Committee

New York, N. Y., December 16, 1925.

Capt. Miller reported that addressograph plates can be supplied for about $4\frac{1}{2}$ cents apiece. Mr. Stanton moved that the treasurer be authorized to order the addressograph plates and that they be placed in the custody of the recording secretary. Capt. Miller invited the members of the Club to the meeting of the Newark Mineralogical Club on the first Sunday in January on which occasion Mr. Radu and Mr. Lee would speak on Gem Minerals.

Mr. Whitlock addressed the Club on the subject of "Symmetry, an Old Law of Crystallization in the Light of New Research." The speaker emphasized and coördinated popular ideas regarding symmetry by the use of a novel device of rotating disks (symmetry targets). He passed from the consideration of two dimensional symmetry to symmetry in three dimensions and to the close packed particle arrangement of beads or balls, pointing out the relation of this to several symmetrical aspects. In conclusion he discussed several atomic structures in the light of physical properties.

In discussion Dr. Allen cited the crystallization of manganosite, which has been considered cubic-holohedral, and stated that he had noted twinned tetrahedrons among its crystals. He also stated that he had noted the same on crystals of uraninite. Mr. Hoadley took issue that the octahedral (111) plane was the only possible twin position in the isometric system.

HERBERT P. WHITLOCK, Recording Secretary

PHILADELPHIA MINERALOGICAL SOCIETY

Academy of Natural Sciences of Philadelphia, Jan. 14, 1926

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

Mr. R. B. Gage, of Trenton, N. J., was elected to membership, and Mr. Ellis Stineman, of Philadelphia, to junior membership.

An amendment to the by-laws was proposed, changing the meeting-night of the society from the second Thursday to the first Thursday of each month. It will be acted upon at the next meeting.

Dr. Benjamin L. Miller, of Lehigh University, Bethlehem, Pa., then addressed the society on "*Economic Minerals of the Limestones of Pennsylvania*." The limestones of Pennsylvania vary greatly both in character and composition, and are very widely distributed over the state. The greatest differences exist between the deposits east of the Allegheny front, where the rocks have been greatly folded and often metamorphosed, and those in the western half of the state, where the strata are nearly horizontal and have been very little disturbed.

In Pennsylvania the limestones are second only to coal among mineral products of economic importance. At the present time they are being studied more intensively from this standpoint than ever before. The cement industry is searching for limestone of high calcium carbonate content, the steel industry for low silica dolomites, and the magnesia industry for dolomites high in magnesium carbonate.

A number of mineral products of economic importance have resulted from the secondary changes to which the Pennsylvania limestones have been subjected. Changes due to regional metamorphism have produced marble and graphite, but with reference to both of these materials the Pennsylvania industry has succumbed to outside competition. Contact metamorphism has been responsible for the formation of the important magnetite deposits at Cornwall, French Creek, and other localities in the state. Upward moving artesian waters have concentrated lead and zinc ores into deposits in the limestones, a few of which, such as that at Friedensville, have been worked. Downard moving surface waters have caused the formation of a very large number of limonite deposits, which were at one time the most important iron ores in the State. Some of them are still being worked for ochre and umber.

Mr. Knabe exhibited a molybdenite crystal from Morton, Pa., and Mr. Vaux displayed specimens of crystallized calcite, pyrite, magnetite, and apophyllite from the French Creek Mines.

The meeting adjourned with a rising vote of thanks to Dr. Miller for his interesting address.

HORACE R. BLANK, Secretary

YALE MINERALOGICAL SOCIETY

During the academic year 1924-25 five regular meetings were held. On October 21, 1924, the first meeting was held. The following officers were elected.

President: J. F. Schairer

Secretary: C. C. Lawson

Asst. Secretary: Donald Selchow

Treasurer: S. A. Northrup

An examination of specimens from the Connecticut pegmatites and discussion followed.

On January 13, 1925, Professor B. B. Boltwood of the Chemistry department gave a paper on "Radioactive Minerals." A long discussion followed.

At the next meeting on February 18, 1925, Dr. John Johnston, Director of the Sterling Chemistry Laboratory gave a lecture on "The Application of Physical Chemistry to Mineralogy and Geology." A discussion and business meeting followed.

On March 24, 1925, Dr. E. T. Wherry spoke on "Volume Isomorphism in Minerals." The lecture was illustrated by slides. A long discussion by members from the chemistry department working along this line followed.

At the meeting of May 5, 1925, Dr. W. M. Agar described the "Mineralogy of Northern New York." He illustrated his lecture with a large suite of specimens.

Four mineral excursions to the pegmatite localities in Connecticut were conducted under the auspices of the society.

The secretary reported thirty-five active members on June 1, 1925.

J. F. SCHAIRER, President

NOTES AND NEWS

On invitation of the Department of Geology and Mineralogy of the University of Wisconsin, the next annual meeting of the Mineralogical Society of America will be held at Madison, Wisconsin, in conjunction with that of the Geological Society of America and other affiliated societies. The exact date has not been determined but will be on or about December 28.

Several members of the Mineralogical Society, including the president, stopped over in Trenton, New Jersey, on the way to or from New Haven and visited Colonel Washington A. Roebling. He is actively engaged increasing his remarkable mineral