PROCEEDINGS OF SOCIETIES

PHILADELPHIA MINERALOGICAL SOCIETY

Academy of Natural Sciences of Philadelphia, May 2, 1935

Dr. Gillson, president, called to order a stated meeting of the Philadelphia Mineralogical Society, with 43 members and 30 visitors present.

Members on the field trip to Vanartsdalen's quarry on Sunday, April 7, reported finding graphite, titanite, wernerite, phlogopite, apatite, hornblende, microcline, salite, pyrrhotite, coccolite, and blue quartz; and at Finney's quarry: garnet, blue quartz, zircon, and traces of malachite. Other trips reported were: Easton (aragonite and asbestos); Mineral Hill (actinolite); Bridgeport (malachite, sphalerite); Parlin and South River, N. J. (petrified wood, pyrite, amber on pyrite and lignite); Stanley County, N. C. (limonite pseudomorph after pyrite).

Mr. Charles R. Toothaker addressed the society on "Recollections of Mineral Collecting," in which he related in intimate fashion his experiences while in the employ of Dr. A. E. Foote, one of the greatest of all mineral collectors. He told how the business was established in 1876, the methods of acquiring specimens and collections, and how they were distributed to famous private collectors and museums. Many of the famous finds of superlative specimens in Guanajuato, Sardinia, Laurium, Meteor Crater, and elsewhere, were described.

W. H. FLACK, Secretary

NEW YORK MINERALOGICAL CLUB

Condensed Minutes of Meetings Held from October 1934 to March 1935

October Meeting

The New York Mineralogical Club held a regular meeting on October 17, 1934, in the Academy Room of the American Museum of Natural History. The meeting was called to order by President Gilman S. Stanton.

The Club learned with sorrow of the deaths since our last meeting of the following members:

- Mme. Marie Sklodowska Curie, of Paris, France, on July 4, 1934; reported by Pres. Gilman S. Stanton.
- Mr. James Walker, of Brooklyn, N. Y., on July 25, 1934; reported by Past Pres. George E. Ashby.
- Mrs. Richard Durkee, of New York, N. Y., reported by her brother, Mr. C. W. Hoadley, on Oct. 17, 1934.
- Mr. Erwin F. Gross, of Brooklyn, N. Y., reported by the Post Office Department on Sept. 25, 1934.

Memorials were read by Mr. H. R. Lee for Mme. Curie and by Mr. George E. Ashby for Mr. Walker. These were ordered spread upon the minutes and copies forwarded to the families of the deceased.

Memorial for Marie Sklodowska Curie

The New York Mineralogical Club at the meeting of Oct. 17, 1934, records on its minutes with regretful sorrow the death of its notable and esteemed honorary member Madame Marie Sklodowska Curie on July 4, 1934.

Her gracious acceptance in person of membership on May 17, 1921, after her election at this Club's April 20, 1921, meeting did us the greater honor. The membership certificate then presented to her stated in part: "The New York Mineralogical Club... desiring to express its fullest appreciation of the eminence attained by her in the field of science, and her transcendent service to humanity through the discovery of radium... and her many and great contributions to the science of radioactivity, hereby confers upon MARIE SKLODOWSKA CURIE honorary membership...."

A cablegram of condolence was sent her daughter, Madame Irene Curie-Joliot, on July 5 and the death recorded by this Club in both the *Herald Tribune* and the *New York Times* of July 6, as follows:

CURIE, Marie. A great loss to science and humanity is recorded with sorrow and shared in the passing of our distinguished member.

NEW YORK MINERALOGICAL CLUB, Gilman S. Stanton,

President

Well knowing that we can add nothing to what the world has acclaimed, it is sorrowfully ordered that this record be spread upon the Club's minutes and copies forwarded to the daughters of Madame Curie with the sincere sympathy of the Club.

NEW YORK MINERALOGICAL CLUB, by Gilman S. Stanton,

President Daniel T. O'Connell,

Secretary

MEMORIAL FOR JAMES WALKER

James Walker, an esteemed member of the New York Mineralogical Club since 1892, died July 25, 1934, at the age of 91, after a long illness.

He had lived in Brooklyn for many years and was a veteran of our Civil War, N. Y. 62nd Zouaves, and a member of Grant Post No. 327 G.A.R. He was born in Belfast, Ireland, and never had married.

An expert in time devices, he was enthusiastic and thorough in his varied interests in mineralogy and microscopy. He was beloved by all who knew him.

His minerals had been given to the Brooklyn Children's Museum; his microscopical apparatus to the Microscopical Society, and his horological library to the Seth Thomas Clock Co., with which he was for many years associated.

This Club was represented at his funeral services by President Stanton and Vice-President Varni, and a floral tribute which has been gratefully acknowledged by his cousin, Miss Rebecca Miller.

Mr. Walker's portrait is the bearded one in plates 120 and 123 in Manchester's "The Minerals of New York City and Its Environs."

NEW YORK MINERALOGICAL CLUB, by Gilman S. Stanton,

President

Daniel T. O'Connell,

Secretary

The meeting was turned over to the members of the Club, who reported on their summer prospecting experiences and collections.

Mr. Arthur Montgomery described his experiences in the Thomas Range, Utah, and Devil's Head, Colorado.

Miss Catherine Schroder described her sojourn in Paradise Valley, Washington.

Mr. Charles W. Hoadley described his New England collecting and exhibited chrysoberyl from Hartford, Conn., and beryl from Norway, Me.

Mr. Stephen Varni exhibited the Mt. Mica green tourmaline discovered by Loren B. Merrill of Paris, Maine, considered Maine's finest gem—422 carats without a flaw.

Mr. Grenzig exhibited a prehnite stalactite from Paterson, N. J.

Mr. Ernest Weidhaas exhibited Mcgovernite, zincite, and ruby corumdum from Franklin, N. J., and a sand spike from Laguna Beach, California.

November Meeting

The New York Mineralogical Club held a regular meeting in Room 201 of the American Museum of Natural History on Wednesday evening, Nov. 21, 1934. President Gilman S. Stanton called the meeting to order.

Mr. Clifford Frondel was introduced by President Stanton, and addressed the Club on the subject of "Selective Incrustation and Selective Coloration of Crystals." (See Frondel, Selective Incrustation of Crystal Forms, *American Mineralogist*, July, 1934, vol. **19**, No. 7, pp. 316–329.

December Meeting

The New York Mineralogical Club held its regular meeting in Room 201 of the American Museum of Natural History on Dec. 19, 1934.

The speaker of the evening was Dr. Daniel T. O'Connell of the Department of Geology of the College of the City of New York, whose topic was the "1934 Rainbow Bridge—Monument Valley Expedition."

The speaker described the geological work of the expedition, which was also interested in archaeological excavations and biological studies, in the far western desert area known as the Navajo Indian Reservation in northeastern Arizona. The base camp of the expedition was at Kayenta, Arizona, at the Wetherill Ranch. Motion pictures and slides showed the expedition's trip across the United States, with stops at Gettysburg, Natural Bridge, Va., and Carlsbad Caverns. One of the important discoveries made by the speaker was the finding of a skeleton of a plesio-saur lying in place on the Mancos shale of Black Mesa, near Kayenta, Arizona,— the first one to be found in Arizona. A white friable mineral found with carbonaceous shale beds near the base of the Mancos shale of Black Mesa, in the same vicinity, has been identified as goslarite $ZnSO_4 \cdot 7H_2O$. This is a new locality for goslarite. Dr. O'Connell also exhibited a natural dyed Navajo blanket rug colored by a uranium black dye made from carnotite.

January Meeting

On the evening of January 16, 1935, the New York Mineralogical Club held its regular meeting with an attendance of 103. The meeting was called to order by President Gilman S. Stanton.

President Stanton introduced the speaker of the evening, Mr. L. H. Bauer, Chief Chemist of the New Jersey Zinc Co., who addressed the Club on "Minerals from Franklin and Sterling Hill, N. J." There have been reported 146 minerals from the vicinity of Franklin, N. J., but only three of these are of economic importance:—Franklinite, willemite, and zincite, although in the early mining at Sterling Hill, calamine and chalcophanite were found. The chief waste minerals are calcite, garnet-variety andradite, tephroite, rhodonite, sphalerite, pyroxenes, amphiboles, feldspars, micas, and spinel. Mr. Bauer described the process of separating the franklinite from the crude ore. He also pointed out the folly of depending on colors in identifying minerals, using as an example the willemite, which is green from Franklin, N. J., brown from Sterling Hill, and also occurs blue and black. The importance of fluorescence was revealed in the many ways this phenomenon has been made use of at the mine.

Mr. Frederick I. Allen described an interesting experiment with franklinite. He stated that after solution of franklinite in hydrochloric acid and precipitation of the sulphides of Fe, Mn, and Zn in alkaline solution, these sulphides could be successively decomposed by progressive acidification—the black FeS disappearing first, the flesh colored MnS next, leaving the pure white ZnS visible. The changes of color and exhibition of the three bases in succession make an interesting experiment, although not useful as a means of separation.

February Meeting

A regular meeting was held on the evening of February 20th, 1935, with a recordbreaking attendance of 147.

President Stanton introduced the speaker of the evening, Professor Alfred C. Lane, of Tufts College, Medford, Mass. He addressed the Club on the subject of "Radioactive Minerals—Measure of Geologic Time." In radioactive substances we have the disintegration of atoms, which is an example of paroxysms occurring regularly. The helium bullets shot off by disintegrating atoms within a zircon crystal for example, will produce the discoloration of biotite, in which it may be imbedded, producing the so-called pleochroic halos which provide a measure of geologic time called the Helium Method, which involves studying the halos under a highpower microscope. The uranium-lead and thorium-lead ratios based on careful chemical analysis of uranium minerals to discover what proportion of their uranium has changed to radioactive lead, provides another measure of geologic time.

Uraninite from Wilberforce, Ont., by this method has been given an age of 1046 million years since the mineral formed. Pitchblende from the Canadian Great Bear Lakes locality, 1277 million years. Dr. Hugh S. Spence, who investigated this latest great radium source for the Canadian government, was present at the meeting and provided a number of lantern slides showing the uranium vein which has been traced for three miles, to supplement the lantern slides shown by Prof. Lane. The various radioactive minerals and their characters were described in detail and representative specimens of each were exhibited.

March Meeting

A regular meeting of the New York Mineralogical Club was held on the evening of March 20th, with an attendance of 117.

Mr. Frederick I. Allen reported for the Nominating Committee as follows: For President: Gilman S. Stanton. For 1st Vice-President: Dr. Horace R. Blank. For 2nd Vice-President: H. R. Lee. For Secretary: Dr. Daniel T. O'Connell. For Treasurer: Miss Catherine Schroder. For Delegate to the New York Academy of Science: Mr. George E. Ashby.

President Stanton introduced the speaker of the evening, Dr. W. F. Foshag. Curator of Mineralogy, United States National Museum, Washington, D. C., who addressed the Club on the subject of "Collecting Saline Minerals in the Mojave Desert and Death Valley," illustrated by lantern slides.

DANIEL T. O'CONNELL. Secretary