

- Miss Isabel H. Tuthill, Rocky Point, N. Y.
 John F. Vanartsdalen, Willow Grove, Montgomery Co., Pa.
 George Vaux, Jr., Gulph Road, Bryn Mawr, Pa.
 M. Vonsen, Petaluma, California.
 Albert J. Walcott, Bausch & Lomb. Opt. Co., Rochester, N. Y.
 W. A. Waldschmidt, Rapid City, S. Dak.
 P. Walther, 648 Wyoming Ave., Elizabeth, N. J.
 Alfred Wandke, Geological Museum, Cambridge, Mass.
 William J. Webb, 75 Buckingham Road, Yonkers, N. Y.
 E. Weidhaas, 408 West 42nd St., N. Y. City.
 Lewis G. Westgate, 124 Oak Hill Ave., Delaware, Ohio.
 Edward Wigglesworth, Boston Society Natural History, 234 Berkley St.,
 Boston, Mass.
 Eugene Willcox, 2224 Hazel St., Butte, Mont.
 Mrs. Franklin D. Williams, 24 Dean St. Taunton, Mass.
 Herman L. Willig, 140 E. Vine St., Lancaster, Pa.
 Ernest H. Wilson, 37 Forest Avenue, Caldwell, N. J.
 Charles R. Winn, Box 577, Butte, Mont.
 Joseph P. Wintringham, 153 Henry Street, Brooklyn, N. Y.
 Mrs. Samuel C. (May G.) Witherspoon, 127 4th Street, Carney's Point, N. J.
 James R. Withrow, Ohio State University, Columbus, Ohio.
 John Frank Wright, Geological Survey, Ottawa, Canada.
 Walter J. Yeaton, 509 Washington Blvd., Urbana, Ill.

PROCEEDINGS OF SOCIETIES

NEW ENGLAND INTERCOLLEGIATE GEOLOGICAL EXCURSION

As reported in *Science* of November 12, 1920, the Sixteenth Annual New England Intercollegiate Geological Excursion was taken in the vicinity of Middletown, Connecticut on October 8th and 9th. The pegmatite dikes at Collins Hill, Portland, were visited, and the party was fortunate in collecting, among other minerals, excellent transparent purple apatite crystals. At an evening meeting at Wesleyan University, Professor Foye exhibited a collection of the minerals from the pegmatite dikes.

NEWARK MINERALOGICAL SOCIETY

Meeting of Sunday, December 5th, 1920

At the December meeting Dr. Colton, being present, was requested to preside and called the meeting to order with twelve members present. One application was favorably acted upon. The Secretary and Treasurer were informed that an appropriation of \$5.00 had been made to each in appreciation of their past efforts in behalf of the Club, this amount to be used in purchasing a specimen for their collections. An appropriation of \$10.00 for specimens to be added to the School collection was also made. Mr. P. Walther then read a paper on the topic of the meeting, "Pseudomorphs." It was announced that at the January meeting Mr. Charles Hoadley will read a paper on "Eastern Localities," and Mr. Wm. H. Broadwell will demonstrate the making of cardboard trays for specimens.

WM. H. BROADWELL, *Secretary*

PHILADELPHIA MINERALOGICAL SOCIETY

Wagner Free Institute of Science, December 9, 1920

A stated meeting of the Philadelphia Mineralogical Society was held on the above date with the president, Dr. Hawkins, in the chair. Fifteen members and six visitors were present.

Dr. J. Volney Lewis addressed the society on "Notes on the zeolites." The older theories ascribing their origin to weathering processes were reviewed. In northern New Jersey, zeolites occur locally in the Palisade diabase sill, and in the basalt of First Watchung Mountain, being quite absent in the other diabases and later basalt flows. They usually occur in well defined fissures, shear zones (often brecciated), or in the glassy breccias about pillow lavas, or forming amygdules in the latter. Attention was called to the presence of B and F in datolite and apophyllite, and to B, F, and Cl in minerals often developed by the contact metamorphism of shale by intrusive masses of diabase. It was concluded that the zeolites were deposited by solutions emanating from diabase during the last stages of cooling. The talk was illustrated with many interesting slides.

Mr. Hoadley called attention to the occurrence of stilbite and harmotome in the schists of New York. Mr. Gordon remarked that zeolites are frequently found occupying shear zones in granite and diorite gneisses in southeastern Pennsylvania, probably having been deposited by solutions emanating from pegmatites, with which some of the zeolites may be rarely observed. Dr. Hawkins described an occurrence of analcite, natrolite, ilmenite and brookite in a brecciated zone in shale distant from any diabase, near Princeton, N. J. Mr. Frederick Hilbiber exhibited chabazite, stilbite, and heulandite from Perkiomenville, Penna., which were found in veins in the hornfels adjacent to a diabase intrusive.

A rising vote of thanks was tendered to Dr. Lewis for his interesting communication.

SAMUEL G. GORDON, *Secretary*

NEW YORK MINERALOGICAL CLUB

The Regular Monthly Meeting of the New York Mineralogical Club was held in the Assembly Room of the American Museum of Natural History on the evening of December 15, at 8.15 P.M. The Vice-President, Mr. George E. Ashby, presided, and there was an attendance of 17 members.

The minutes of the last meeting were read and approved. The following were elected to membership: Mr. Harold E. Walsh, Mr. Chas. P. Curtis, Mr. B. Halpren, and Mr. R. S. Newshan.

The chairman introduced the speaker of the evening, Dr. George I. Finlay of New York University, who read a paper on "The Minerals of the Pike's Peak Region."

Dr. Finlay spoke of the excellent representation of these mineral occurrences in the collection of the American Museum, some examples of which were used to illustrate his paper. In discussing the topography of the district, which he illustrated by lantern slides of maps and views, Dr. Finlay limited the area discussed to 25 kilometers (16 miles) in radius from Pike's Peak. He described Pike's Peak as lying in a granite range overlaid by about 3,000 meters of sedi-

mentary rocks which have been eroded away. Columbite occurs in the granitic gravels. The intrusive riebeckite granite of the St. Peter's Dome region is characterized by many dikes which afford the rare fluoride minerals, which were discussed later. Gypsum crystals were found in the shales around Manitou and silicified wood to the east of Colorado Springs. In the Garden of the Gods to the south of Cripple Creek, celestite was formerly obtained and the Gorge of the Arkansas River further to the south is the dumortierite locality. Occasionally topaz occurs on the slopes of Pike's Peak in the granite area. Cripple Creek which was the scene of a Miocene volcano is famous for the gold and silver tellurides which here occur associated with fluorite.

Passing to the description of the notable minerals of the section Dr. Finlay spoke at length on the microcline (amazonite), albite and smoky quartz of Pike's Peak and the neighboring region. Among the St. Peter's Dome minerals he described cryolite, pachnolite, thomsenolite, gearksutite, astrophyllite, columbite, tysonite and ralstonite. He mentioned the topaz crystals from the Crystal Peak region and spoke of the smoky quartz as especially interesting crystallographically. These latter occur with microcline, sometimes with albite; and occasionally the rare mineral phenacite also occurs on the quartz and with microcline. The microcline crystals are twinned according to the Baveno law.

Mr. Wintringham asked the speaker regarding the roughness of certain planes on the topaz, as to whether this was due to growth or to etching; he also spoke of the luminescence of quartz pebbles and of limestone containing fluorine.

On a motion by the Recording Secretary a vote of thanks was tendered to Dr. Finlay for his interesting and valuable paper. The meeting was adjourned at 9.20 P.M.

HERBERT P. WHITLOCK, *Recording Secretary*

NOTES AND NEWS

The National Research Council announces that an Alloys Research Association has been formed, the primary object of which is to furnish "An informational service concerned with metals and their alloys." It proposes to supply to those applying for it, (1) information as to current literature, discoveries, etc. and (2) references and abstracts of all known information upon a given subject. This is of interest to mineralogists and crystallographers because many of the properties of metals are related to their crystal structure [altho this is not mentioned in a list of over 40 properties and phenomena which the Association has tabulated as important].

The Museums Journal reports that on October 16th, 1920, the Buffalo Society of Natural Sciences opened a new museum, at 1231 Elmwood Avenue. Included among the many exhibits are two cases of precious and semi-precious stones.

We regret to learn that Mr. George L. English of Ward's Natural Science Establishment, has been seriously ill; but we trust that by the time this reaches our readers he will be well on the road to recovery.