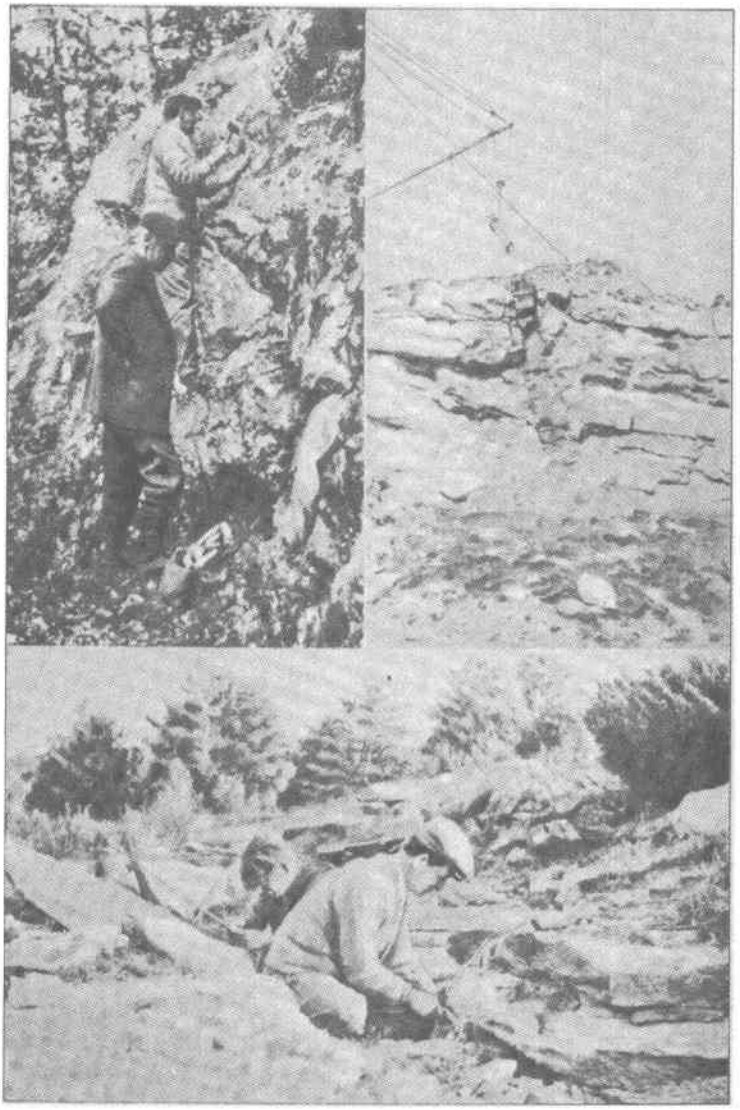
PLATE 16.



Photos J. G. Manchester.

MAINE MINERAL LOCALITIES.

1. Noyes Mine, Greenwood.
2. Trap Dike, Berry Mine, Poland.
3. Orthoclase Deposit, Ordway Farm, Norway.

PROCEEDINGS OF SOCIETIES

THE NEW YORK MINERALOGICAL CLUB

Excursion and Special Meeting

An afternoon meeting of the New York Mineralogical Club which had been contemplated for May, but deferred in order that a Saturday half holiday might be available for it, was held on June 8, 1918, in the Hall of Geology at Rutgers College, New Brunswick N. J., from about 2.30 to 6 p.m.

The members and guests on arrival from various points were received by the Curator, Dr. W. S. Valiant, Dr. J. Volney Lewis, Mr. John A. Manley and Mr. Frederick H. Baumann, and then dispersed thru the Hall to examine the Chester[1] and Beck[2] Collections (the principal object of the excursion) and four special exhibits which had been provided for the occasion and were displayed on tables for close inspection.

The first of the special exhibits was by Messrs. Valiant and Lewis and consisted of the following items: (1) A series of specimens of mica (chiefly phlogopite) from several old mica mines; (2) scapolite, serpentine, and ophicalcite from Ringwood; (3) ilmenite crystals, Princeton; (4) vivianite in crystals, laminated ferrous phosphate and limonite crusts, all in glauconite rock from Telegraph Hill; New Jersey; and (5) fibrous tremolite and serpentine minerals from Easton, Pa.

The second and third were by Mr. John A. Manley, and were two supplementary series of zeolites, prehnite, and copper minerals, from the Chimney Rock Quarry near Bound Brook, N. J., one of cabinet the other of microscopic specimens. An attractive feature of them was the occurrence of native copper in slender needles bounded and terminated by crystal planes penetrating thru and protruding from the hemispheres of mammillary prehnite, the facets beautifully discernible under the stereo-binocular microscope provided to show them.

The fourth exhibit was by Col. Washington A. Roebling and in charge of Mr. Frederick H. Baumann. It consisted of 41 specimens all very rare or otherwise of interest, 28 from Franklin Furnace, N. J., the remainder from both foreign and domestic localities. Of these a purple apatite crystal of superb color, from Auburn, Me.;[3] leucophoenicite in small transparent crystals, labeled "best in the world"; two specimens of gageite crystals; hodgkinsonite, manganosite xld, friedelite and nasonite, among the Franklin minerals; retinite from Roebling, N. J., and phenacite from Brazil attracted much attention.

By the late afternoon 25 persons had registered as attending, notable visitors among them being Mrs. Georgiana W. Chester, Mr. A. H. Chester, Jr.; Dr. M. W. Twitchell, Associate State Geologist, and R. B. Gage, Chemist to the Geol. Survey. of N. J.

[1] For a description of the Chester collection see *Mineral Collector*, **10**, 49–53, 1903.

[2] For a description of the Beck collection see *Mineral Collector*, **7**, 20–24, and 37–40, 1900.

[3] Described by Mr. Manchester elsewhere.

About 5.30 p.m. the meeting was called to order and the appreciation of the Club expressed in resolutions of thanks to Messrs. Lewis and Valiant, Col. Roebling and Mr. Manley for their contributions to the occasion. After some discussion of the eclipse of the Sun then nearly due, the meeting adjourned.

Fifteen of those present assembled at 6 p.m. at Klein's Hotel, New Brunswick, for dinner during which, between courses, the progressing eclipse was a subject of much attention.

WALLACE GOOLD LEVISON, *Secretary*

THE PHILADELPHIA MINERALOGICAL SOCIETY

WAGNER FREE INSTITUTE OF SCIENCE, JUNE 13, 1819

A stated meeting of the society was held on the above date with the president, Dr. Leffmann, in the chair. Sixteen members and one visitor were present.

Mr. Charles Hoadley addressed the society on a trip taken to Haddam, Middletown, Bristol, Trumbull, and other localities in Connecticut. Mr. Trudell reported a trip to Lenni, where chabazite, natrolite, stilbite, and actinolite were obtained. Mr. Hoadley reported a trip to Phœnixville. Altho the mines have been long abandoned, and the dumps hauled away and plowed over, the following minerals were obtained by the party: anglesite, cerussite, pyromorphite, wulfenite, calcite, fluorite, sphalerite, and calamine. The meeting concluded with an exhibition of pegmatite minerals.

SAMUEL G. GORDON, *Secretary*

LITERARY AND PHILOSOPHICAL SOCIETY

MANCHESTER, ENGLAND, APRIL 23, 1918

Mr. W. Thomson, president, in the chair. Dr. E. Newbery and H. Lupton: Radio-activity and the coloration of minerals.

A number of mineral specimens were examined as to their behavior (*a*) on heating, (*b*) on treatment with radium or cathode rays before or after heating, and (*c*) on heating after treatment (*b*). Several brilliant color effects were obtained, among which may be mentioned the complete restoration of the original color to green fluorite, smoky quartz, zircon, topaz, etc., which had been decolorized by heat, the production of a fine deep blue color in a colorless fluorite from Matlock by radium, an intense purple in a colorless fluorite from the Pyrenees by cathode rays, and an indigo blue in transparent barites by radium. A bright green thermo-luminescence was imparted to all the fluorites used, and their original violet thermo-luminescence was also restored if that had been destroyed by previous heating. A Spanish phosphorite gave a brilliant yellow thermo-luminescence which was restored with increased strength by radium or cathode rays. It was concluded that many minerals owe their color and thermo-luminescence to the presence of radio-active matter either in the water from which they have been deposited or in the surrounding rock. Traces of certain inorganic impurities are acted upon by α, β or γ rays

and dissociated, the size and density of the resulting particles determining the color produced. On heating, the dissociated atoms recombine with evolution of light and loss of color to the minerals. *Nature*, **101**, (2532), 198, 1918.

NOTES AND NEWS

We learn that the Bruce Museum, of Greenwich, Connecticut, has an attractive room, fitted with fine new cases, for the display of a mineral collection, but as yet practically no minerals are available. Here is an excellent opportunity for some one to place a moderate sized collection where it will find a permanent home and do a maximum amount of good. If any of our readers feel able to help out, we suggest that they correspond with Dr. Edward F. Bigelow, Sound Beach, Connecticut.

It is with the deepest regret that we chronicle the death early in August of George O. Simmons, of Brooklyn, N. Y. For forty years or more a collector of minerals, Mr. Simmons was, from the inception of this magazine, one of its staunchest supporters. We hope soon to be able to publish a sketch of his life and work.

The chromite mines in the southern part of Lancaster County, Pennsylvania, formerly famous as localities for brucite, kämmererite, serpentine variety williamsite, and many other minerals, which have been idle for many years, are being reopened.

NEW MINERALS

COLLBRANITE

D. F. Higgins; Geology and ore deposits of the Collbran contact of the Suan Mining Concession, Korea. *Econ. Geol.*, **13**, (1), 19, 1918. Previously referred to as ilvaite by S. Koto, *J. Coll. Sci. Imp. Univ. Tokyo*, May, 1910.

NAME: after Mr. H. Collbran and his son, A. H. Collbran, developers of the mine.

Color: black. Form: stellate aggregates of acicular crystals; also massive. Composition: a highly ferriferous pyroxene of the hedenbergite type. Occurs as a contact metamorphic mineral in marble at the Suan Mining Concession, Central Korea. S. G. G.

ABSTRACTS OF MINERALOGIC LITERATURE

AN APPLICATION OF POLYDIMENSIONAL GEOMETRY TO CHEMICO-MINERALOGICAL PROBLEMS; THE COMPOSITION OF TOURMALINE. H. E. BOEKE. *Neues Jahrb. Min. Geol.*, **1916**, II, 109–143; thru *J. Chem. Soc.*, **112**, II, 178–179, 1917.

By plotting the analyses of tourmaline along 4 or 5 dimensions in space the author endeavors to arrive at the true formula of tourmaline. Most of the analyses agree with the general formula of Penfield, $R_{26}Si_4B_2O_{21}$. E. T. W.