PROCEEDINGS OF SOCIETIES

NEW YORK MINERALOGICAL CLUB

The annual meeting of the Club was held on Wednesday, May 9th, 1917, in its room at the American Museum of Natural History, Mr. James G. Manchester presiding, with an attendance of 23 persons, 17 being members.

The election was postponed until after the papers and exhibits of the evening were presented. The announced paper was by Mr. Samuel G. Gordon on "A Paragenetic Classification of Minerals" consisting largely of a review of a recent paper on the subject by the Speaker and Dr. Edgar T. Wherry jointly.[1]

The paper was illustrated with a series of lantern slides of the various classes and of some of the minerals occurring in each of the chief classes proposed.

Upon the conclusion of Mr. Gordon's paper Mr. J. P. Wintringham commented upon it and stated that in his opinion it was an important contribution to the literature of mineralogy. As no further discussion of the paper followed, the President asked for exhibits of specimens, and Mr. Gordon then exhibited a mass of selenite occluding a selenite pseudomorph, supposed to be after anhydrite, and coated on its faces with small quartz crystals, from West Paterson, N. J.[2]

Mr. David J. Atkins then exhibited a couple of specimens of spodumene from California which were originally the familiar pink variety, but had been changed to a hiddenite green of equal intensity by rays from a special form of x-ray tube, by Mr. H. Rosenthal of the Rosenthal Laboratory, Camden, N. J. Mr. Atkins said he understood that other minerals containing manganese were susceptible to change of color by the same rays. This exhibit greatly interested those present.[3]

The mineralogical events having been thus concluded the President appointed a nominating committee, announced a recess to enable it to consult and report, and for the inspection of the exhibits by visitors; in a brief address he thanked the Club for the compliment of his several re-elections, and expressed a desire to resign the Presidency on account of urgent business exactions. During the recess the visitors, not interested in the election, withdrew.

Upon resumption of the session, the report of the nominating committee was unanimously approved, and resulted in the re-election of the former officers with three substitutions, as follows:

George F. Kunz, Ph.D., Pres.; George E. Ashby, V-Pres.; Gilman S. Stanton, Treas.; Louis P. Gratacap, James G. Manchester, and Frederick I. Allen, Curators; and W. G. Levison, Secy. and Delegate to the academy council.

WALLACE GOOLD LEVISON, *Secretary.*

[1] *Proc. Acad. Nat. Sci. Phila.*, **1915**, 426-457

[2] Figured in *Am. Min.*, **1**, (5), Frontispiece, 1916.

[3] See abstract in this number.

THE PHILADELPHIA MINERALOGICAL SOCIETY

Wagner Free Institute of Science, May 10, 1917.

Mr. Trudell in the chair. Twelve members and four visitors present. Mr. William L. Fischer, of the Commercial Museum, Philadelphia, lectured on "Minerals and Ores of the Andes," illustrated with lantern slides and numerous specimens.

The secretary reported the trip to General Trimbles mine, attended by seven members. This mine has long been abandoned. The pit is filled with water, and the dumps afford a small amount of gibbsite. Small druses of wavellite were found by the party, but thoro search failed to reveal any ceruleolactite. The graphite mines at Chester Springs (formerly Yellow Springs) were also visited.

SAMUEL G. GORDON, *Secretary.*

THE MINERALOGICAL SOCIETY OF GREAT BRITAIN

London, March 20, 1917, Mr. W. Barlow, President, in the chair.

A. HOLMES and DR. H. F. HARWOOD: *The basaltic rocks of Spitsbergen and Franz-Joseph Land.* J. W. EVANS: *A general proof of the limitation of the symmetry-numbers of crystals.* E. S. FEDEROV: *The numerical relation between zones and faces of a polyhedron.* The numerical relation shown by axes of symmetry situated in planes of symmetry pointed out by G. Cesaro in 1915 is only a particular case of the more general one deduced by the author in 1885. A. LEDOUX, T. L. WALKER, and A. C. WHEATLEY: *The crystallization of parahopeite.* Crystals in the Royal Ontario Museum of Mineralogy from the original locality, Broken Hill, Northwestern Rhodesia, are triclinic with the axial ratios $a : b : c = 0.7729 : 1 : 0.7124$; $\alpha = 93°22'$, $\beta = 91°12'$, $\gamma = 91°22'$. Thirty-two forms are recorded. The crystals have a perfect cleavage parallel to the brachypinacoid, and show lamellar cleavage parallel to the macropinacoid. The angle of optical extinction on the cleavage is 10° with reference to the twin-lamellae. *Nature*, **99** (2474) 97–98, 1917.

ABSTRACTS OF MINERALOGICAL LITERATURE

HALLOYSITE FROM COLORADO. ESPER S. LARSEN, U. S. Geological Survey, and EDGAR T. WHERRY, U. S. National Museum. *J. Wash. Acad. Sci.* **7** (7) 178–180, 1917.

Analyses of two halloysites from the upper workings of the fluorite mine at Wagon Wheel Gap, Colorado, associated with creedite and gearksutite, respectively, were found to differ in their water content. Experiment showed the water to be held in part mechanically, being given off very readily, the resulting partially dehydrated material being near kaolinite.

"The close approach of this and many other analyses of halloysite to the composition $Al_2O_3.2SiO_2.2H_2O.Aq$, combined with the results of optical examination . . . , indicates that the material called halloysite is the amorphous (isotropic) mineral corresponding to crystalline kaolinite, holding thru capillarity or adsorption more or less excess water." S. G. G.

NEODYMIUM AS THE CAUSE OF THE RED-VIOLET COLOR IN CERTAIN MINERALS. EDGAR T. WHERRY, U. S. National Museum. *J. Wash. Acad. Sci.* **7** (6) 143–146, 1917.

Examination of red-violet calcite from Joplin, Mo., Rossie, N. Y., and Sterlingbush, N. Y. showed them all to yield the characteristic absorption spectrum of the rare-earth metal neddymium and it is believed that the red-violet color is due to this element. Evidence is brought forward to show that manganese, to which there is a tendency to attribute all such colors, cannot be the coloring agent in these calcites. Violet apatite does not usually show an absorption spectrum, but the well-known brown variety from Ontario, Canada, and red-violet material from the San Diego Mine, Mesa Grande, Cal. yield that of neodymium. In the former case the violet color is obscured by a green, due to iron. S. G. G.

ON THE CALCIUM-PHOSPHATE IN METEORIC STONES. GEORGE P. MERRILL, U. S. Nat. Mus. *Am. J. Sci.*, [4] **43** (4) 322–324, 1917.

Unmistakable evidence of the presence of a calcium phosphate, tentatively designated francolite, has been found in 16 meteoric stones. This material differs from normal apatite in its optical and physical characteristics: "Occurrence, sporadic, without crystal form, very brittle, colorless; cleavage for the most part lacking tho sometimes imperfect and interrupted, showing angles of 60° and 120°; optically biaxial and positive (?), birefringence weak, less than 0.005, refractive indices $\alpha = 1.623 \pm 0.002$ and $\gamma = 1.627 \pm 0.005$; no