

AN AMERICAN OCCURRENCE OF CRONSTEDTITE

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ON a recent trip of the New York Mineralogical Club, under the guidance of the writer, to the Hubbard tungsten mine at Long Hill (Trumbull Township), Connecticut, Mr. George E. Ashby found a specimen of a chlorite, determined by Mr. Lazard Cahn as cronstedtite, $4\text{FeO}\cdot 2\text{Fe}_2\text{O}_3\cdot 3\text{SiO}_2\cdot 4\text{H}_2\text{O}$. The specimen shows a group of black crystals $\frac{1}{8}$ inch in diameter with perfect basal cleavage, hardness = 3.5, and rhombohedral hemimorphic, with the forms c (0001) and x ($\bar{2}021$). This is believed to be the first occurrence of the mineral in the United States, the only known localities cited by Dana being Bohemia, England, and Brazil.

NOTES AND NEWS

We regret to note the death early in November of Professor Oscar C. S. Carter, who since 1880 had taught mineralogy and related subjects at the Philadelphia Central High School. He was the author of several contributions to local mineralogy.

We are also sorry to have to report the death on November 5 of Mr. Albert H. Petereit, the well-known dealer in minerals and gems of New York City.

PROCEEDINGS OF SOCIETIES

THE NEW YORK MINERALOGICAL CLUB

MIDSUMMER EXCURSION

On July 7, 1917, a party of 16 members of the N. Y. Mineralogical Club assembled at the Museum of the Staten Island Association of Arts and Sciences about 2 P. M. in response to an invitation extended to the Club by Dr. Arthur Hollick, director of the Museum, to inspect its collection of local minerals in which the various localities of the Richmond Borough of New York City, and especially the minerals of its serpentine exposures, are attractively represented. Amber of distinctively characteristic quality from certain clay deposits on the Island seemed also of special interest as an addition to the gem minerals occurring within the limits of New York City. After an inspection of the collections, which are housed at present in a former residential building, the attention of the visitors was directed to a nearby site where work upon a new "city building" for the Museum was then in progress.¹

¹ This building is now at time of writing (Dec., 1917) nearing completion and the transfer of the Museum exhibits will soon be effected.

From the Museum the party proceeded by trolley to the "Toedts Hill" limonite bed, formerly an iron mine.² Dr. Hollick led the visitors over the locality and described its important features while they collected specimens of the "shot ore" and earthy limonite, chlorite, talc and other minerals of interest.

THE opening meeting of the season of 1917-18 was held on Oct. 10 at the American Museum of Natural History, New York, with Dr. Geo. F. Kunz, president, in the chair, and an attendance of 23 persons.

Col. Washington A. Roebling, of Trenton, N. J., Mr. Frederick A. Canfield, of Dover, N. J., and Mr. Clarence S. Bement, of Philadelphia, Pa., were elected to honorary membership in the Club. The late Dr. J. Selden Spencer was formerly the only honorary member.

Dr. Edgar T. Wherry, being present, was invited to address the club and briefly explained his new research work in the Bureau of Chemistry. Mr. Samuel G. Gordon described an excursion to localities in North Carolina and Virginia.

In accordance with the announced subject of the evening Messrs. Hoadley, Broadwell, Manchester, Ashby and others then described various interesting exhibits of specimens they had acquired during the summer.

The entire company then adjourned to the "Age of Man Hall" in the Museum to participate in a reception to Mr. Donald B. MacMillan and his associates on the recent "Crocker Land Expedition" and inspect the collections acquired by the enterprise.

As a compliment to Dr. Daniel Strowbridge Martin, one of the founders of the Club, the second meeting of the season was at his residence, No. 644 Monroe St., Borough of Brooklyn, N. Y., on November 14, 1917, with Dr. Geo. F. Kunz in the chair and 22 persons present.

Letters were read from Messrs. Bement and Canfield, thanking the Club for their election to honorary membership and the latter expressing a desire to continue his active membership as well.

After an election of several new members and the disposal of the routine business the President appointed a committee to report upon some way for the Club to participate with other organizations in a proposed celebration of the birthday of the Abbe Haüy.

Dr. D. S. Martin then presented the announced feature of the evening, which was a description of the five separate collections of the Charleston Museum at Charleston, S. C. These are the General Collection; the Ural Collection (minerals of the Ural mountains obtained at an early date from the School of Mines of St. Petersburg); the Shepard Phosphate Collection; the Piedmont Collection (consisting of minerals occurring in the belt of crys-

² For various papers on S. I. serpentine and limonite occurrences see *Proc. Nat. Sci. Assn. S. I.*, vols. 1, 2, 4, 5, 6, 7, 8 and 9; and *Proc. S. I. Assn. Arts and Sci.*, vols. 1, 2, 3, 5 and 6. On the Toedts Hill locality, see HOLLICK, A., *Proc. S. I. Assn. Arts and Sci.*, 2 (Pt. 3), 144-147, 1908; and WOODS, J. O., *ibid.* 3, 48-51, 1909.

talline rocks which extends southeast of the mountains from Virginia to Alabama) and the Carbon Collection, the two latter having been accumulated by Dr. Martin.

Dr. Martin's contribution was illustrated with numerous examples of the explanatory labels used for the collections.

The exhibition of specimens being then in order, Mr. Hoadley circulated the specimen described elsewhere in this number, as representing the first American occurrence of cronstedtite found by Mr. Ashby on Nov. 6, 1917, the occasion of the Club excursion to Trumbull, Connecticut. Mr. Cahn gave a brief description of the crystals.

The Secretary then exhibited the dried, hard and greatly shrunken gelatin from a test tube in which Liesegang's segregation rings of a precipitate had been produced and in which they still persisted.

With a vote of thanks to Dr. Martin, the meeting adjourned.

WALLACE GOULD LEVISON, *Secretary*

THE NEWARK MINERALOGICAL SOCIETY

THE 18th regular meeting of the Newark Mineralogical Society was held at the Newark Technical School on Sunday, November 4.

After a short session meeting adjourned and annual meeting convened with J. Holzmann as temporary president. All the officers were reelected, as follows: President, Dr. Chas. A. Colton; Vice-President, John Holzmann; Treasurer, H. M. Lehman; Secretary, Wm. H. Broadwell.

One application was received for membership and favorably acted upon. Dr. Colton gave a demonstration of testing minerals by acids, which proved very interesting. Several exhibits were shown during the meeting; among them were specimens from Australia, Hungary and Italy. The secretary exhibited a few specimens from W. Paterson, showing aragonite crystals on prehnite, an unusual combination. These specimens were from a large pocket lined with prehnite and, from the indications, had at one time been completely covered with aragonite, but the shot had jarred a large part of the aragonite loose and many crystals were found at the bottom of the pocket; five or six large handfuls of them were taken out in loose form.

On November 3 the secretary in company with Mr. Holzmann visited a spot on 210th St., New York City, where both obtained a quantity of well-formed crystals of malacolite, which were also exhibited at the meeting. This is a new locality, at least to the Newark members, and is well worth a visit by collectors, as that section of the city is being rapidly built up and in a few years it will be difficult to obtain any specimens there.

WM. H. BROADWELL, *Secretary*

THE PHILADELPHIA MINERALOGICAL SOCIETY

WAGNER FREE INSTITUTE OF SCIENCE, NOVEMBER 8, 1917

PRESIDENT LEFFMANN in the chair. Twelve members and two visitors present.

Mr. Harry W. Trudell spoke on "Collecting in North Carolina," describing the incidents experienced by himself and Mr. Gordon on a recent trip to

Hiddenite, Mt. Mitchell, and Spruce Pine, in North Carolina, and to Amelia Court House, Virginia, where they were joined by Dr. Wherry.

Mr. Trudell gave a humorous account of the experiences of the trip, illustrating his talk with numerous colored lantern slides and specimens. [This will be written up as the second of the series of articles on "Famous Mineral Localities" in the February number of this magazine.]

Mr. Gordon reported a trip to Beemerville, Sussex Co., N. J., Amity Orange Co., N. Y., and Paterson, N. J. The Amity region is one that has been pretty thoroly gone over, but a few specimens of small spinels, phlogopite, wernerite, hornblende, tremolite, chondrodite, etc., are obtainable occasionally in the stone fences that mark off the farms of the region.

At Paterson, in addition to material usually obtainable, there was found göthite, in small black balls on quartz (hitherto mistaken, at times, for diabantite). If the balls are broken they show the radiating structure, and are inside brown in color, but covered on the surface with a soft black powdery substance. Stevensite is abundant; but attention is called to the fact that slightly altered pectolite, especially if dark gray, is being called stevensite, whereas this term should be applied only to amorphous waxy material. Minutely crystallized thaumasite is abundant. Specimens were obtained of very minute crystals of anhydrite associated with small crystals of thaumasite and gypsum, the latter sometimes twinned.

Mr. Warford reported the Society's trip to Phoenixville. A few specimens of quartz, pyromorphite, barite, etc., were obtained. One of the old mines, the Montgomery, is to be reopened, the work of pumping it out having begun.

SAMUEL G. GORDON, *Secretary*

ABSTRACTS OF MINERALOGIC LITERATURE

THE GEODES OF THE KEOKUK BEDS. FRANCIS M. VAN TUYL. *Am. J. Sci.* 42 (1), 34-42, 1916; abstract reprinted by permission from *Chem. Abstr.*, 10 (17), 2189-2190, 1916.

The geode bed consists typically of an impure siliceous dolomitic limestone at the base, usually containing large and well developed geodes, followed by an argillaceous shale with more numerous but less perfectly developed ones; both members are about 20 feet thick. The composition of the lower member at Keokuk is given. The primary minerals found in the geodes are quartz, chalcedony, calcite, aragonite, dolomite, ankerite, magnetite, hematite, pyrite, millerite, chalcocopyrite, sphalerite, kaolinite, and bitumen; alteration products are limonite, smithsonite, malachite, and gypsum. Tabulation of 14 mineral successions observed shows the normal sequence to have been: first a thin chalcedonic shell formed, upon which deposited quartz or more chalcedony, followed by calcite and the minor minerals. The alternation of crystalline quartz and chalcedony in some geodes was probably produced by changes in the condition and amounts of SiO₂ supplied; changes in temperature and pressure cannot be appealed to because closely adjacent geodes frequently do not show the same alternations. The position of calcite is subject to variations; it usually rests on an inner lining of quartz or chalcedony; and in some geodes calcite of two generations appears, the earlier often brownish and associated with sphalerite. The geodes have been regarded by many authors