

PROCEEDINGS OF SOCIETIES

The thirty-ninth regular meeting of the NEWARK MINERALOGICAL SOCIETY was called to order by Pres. Walther, with 11 members present, also 7 members of the New York Mineralogical Club, who had been invited to attend in a body. After the regular routine of business, Mr. Hoadley read a paper on "The More Unusual Minerals of N. J." Hydrophane, apatite, barite, opal, hyalite, and galenite were reported from Jersey City; sphalerite from Snake Hill; siderite, chalcopyrite, microcline, byssolite, gold, azurite, malachite, cuprite, native lead and silver were also mentioned.

Mr. Walther then read a paper on "Chemistry in Relation to Mineralogy" in which he said that most collectors did not know the symbols of the chemical elements, and advised such to study up on this matter. Proposals for membership were made by the secretary of Mr. J. A. Grenzig, of Brooklyn, and Mr. O. I. Lee, of Newark.

WM. H. BROADWELL, *Secretary*

PHILADELPHIA MINERALOGICAL SOCIETY

Academy of Natural Sciences, March 10, 1921

A stated meeting of the Philadelphia Mineralogical Society was held on the above date in its new quarters, the mineralogical laboratories of the Academy of Natural Sciences. The meeting room adjoins the magnificent Vaux Collection, above which is the Pennsylvania collection. The vice-president, Mr. Trudell, presided. Fifteen members were present.

Upon recommendation by the council the following were elected active members: Messrs. Witmer Stone, George Vaux, Jr., Frederick Hilbiber, and John Tallis. Mr. Warford nominated for membership Brother Lucian, of Lasalle College and Mr. Frank Oscar Eriksson. Upon similar recommendation a motion was made and passed that officers should not be exempted from paying dues. Mr. Warford moved that the committee on the publication of Mr. Gordon's "Mineralogy of Pennsylvania" be discharged with thanks, as the Academy of Natural Sciences had accepted the manuscript for publication. The motion was passed.

Mr. Samuel G. Gordon presented an abstract of a paper on "Desilicated granitic pegmatites," describing an abnormal group of pegmatites occurring exclusively in peridotites and serpentines and consisting entirely of albite (albitite), plagioclase and corundum (plumasite), or largely of corundum with other minerals. They are believed to owe their peculiarities to the reaction which occurred between the pegmatitic solutions and the peridotite or serpentine, which resulted in the desilication of the pegmatite and the development in the peridotite or serpentine of zones of biotite (altered since to vermiculite), chlorite, actinolite, and talc. Such an origin has been shown by Du Toit for the Natal plumasite, and a study of the Pennsylvania and Maryland albitites indicate a similar genetic history. The corundum deposits of Pelham, Mass., Chester, Mass., Georgia, and southwestern North Carolina present analogies which include them in this group. The North Carolina deposits have been held to be magmatic segregations in peridotites. The experimental results of Rankin on the system $MgO-Al_2O_3-SiO_2$ indicate that

corundum would not crystallize from a melt of the composition of peridotite, and there is therefore no evidence that magmatic segregations of corundum occur normally in the ultrabasic igneous rocks.

Mr. George Vaux, Jr., addressed the society on "The William S. Vaux Collection." William Sampson Vaux was born in Philadelphia, May 19, 1811, and died there May 5, 1882. When a boy he acquired a strong taste for mineralogy, perhaps thru his uncle, Joseph Sampson (1767-1826) who made probably the first mineral collection in America, which was later given to Haverford College. Mr. William S. Vaux made the magnificent collection which bears his name, having had many opportunities to acquire choice specimens on his numerous European trips, as well as fine things from the early American localities. The collection was bequeathed to the Academy of Natural Sciences, of which Mr. Vaux was vice-president.

The society then adjourned to the mineral hall for an examination of the collection. A case containing the latest acquisitions was exhibited in the rear of the meeting room.

SAMUEL G. GORDON, *Secretary*

NEW MINERALS

FAMILY 7. PHOSPHATES, ARSENATES, ETC.

SUBFAMILY 1. ARSENITES

TRIGONITE

GUST. FLINK: Trigonit och dixenit, två nya mineral från Långbanshytte Gruvor. (Trigonite and dixenite, two new minerals from the Långbanshyttan mines.) *Geol. Fören. Förh.*, 42(7), 436-452, 1920. [Swedish with English summary.]

NAME.—From the Greek *trigonos*, triangle, referring to the crystal habit.

PHYSICAL PROPERTIES

Color pale yellow to brownish; luster vitreous to adamantine. $H. = 2$ to 3 ; sp. gr. 8.28. Cleavage perfect on b (010), less perfect on p (101).

CRYSTALLOGRAPHIC PROPERTIES

Observed only in crystals, up to $\frac{1}{2}$ cm. in diameter, usually markedly triangular in outline.

Monoclinic, domatic. $a : b : c = 1.0740 : 1 : 1.6590$, $\beta = 91^\circ 31'$. Forms: $a(100)$, $b(\bar{1}00)$, $c(001)$, $d(00\bar{1})$, $e(010)$, $p(101)$, $q(\bar{1}0\bar{1})$, $r(10\bar{1})$, $s(\bar{1}01)$, $f(011)$, $g(012)$, $h(014)$, $i(01\bar{1})$, $m(110)$, $k(\bar{1}10)$, $l(210)$, $n(111)$, and $o(1\bar{1}\bar{1})$. The dominant forms are e , forming the base of the apparent triangular prism, and c , q and r forming the sides of the same (the plane of symmetry crossing the center of this prism).

OPTICAL PROPERTIES

$\alpha = 2.08$ and $\gamma = 2.16$, both ± 0.02 , determined by N. Alsén by immersion in mixtures of sulfur and selenium. Double refraction 0.06; optic axial plane $b(010)$; extinction angle in this plane 45° . Non-pleochroic.