Due to the torrential character of the streams, the roughness of the country, and bad weather, Mr. Manley was obliged to forego active mineral collecting. It was rumored that the Iceland spar locality on the eastern coast was practically exhausted. A large number of pictures, and products of the island were exhibited. Upon the close of his interesting communication the speaker was tendered a vote of thanks.

Mr. Gordon exhibited a specimen of a new occurrence of thomsonite, as a druse of minute crystals, with natrolite, from Lenni, Delaware County. Mr. Warford exhibited spencerite from British Columbia, and several other minerals.

SAMUEL G. GORDON, *Secretary.*

MINERALOGICAL SOCIETY OF AMERICA

Committee on Affiliation with the Geological Society of America

At the invitation of the Council of the Geological Society of America, President Kraus of the Mineralogical Society of America appointed a committee of three, Messrs Kraus, Wherry, and Whitlock, to meet with a Committee of the Council of the Geological Society. The meeting took place in the office of secretary Hovey in the American Museum of Natural History, New York City, on Saturday, February 14, 1920; the representatives of the Geological Society present were Messrs. Hovey, Mathews, Shaw, David White and President I. C. White.

The matter of affiliation was fully discussed, and a tentative agreement was reached. This is to be taken up at the next meeting of the Council of the Geological Society of America, after which announcement will be made of the details of the plan of affiliation adopted. E. T. W.

NEW MINERALS

SPHENOMANGANITE.

G. FLINK: Sphenomanganit von Långbanshyttan. (Sphenomanganite from Långbanshyttan. *Geol. Fören. Förh.*, **41** (4), 329–336, 1919.

NAME: from the fact that it is a manganite of sphenoidal habit. This name is put forward provisionally; should it later be shown that all manganite is sphenoidal, the prefix may be dropped.

CRYSTALLOGRAPHIC PROPERTIES

Same as for manganite, except that the crystals show a sphenoidal habit. The prominent sphenoid is 121 on right hand side. Rarely an ill defined left sphenoid is observed. Some of the crystals are of thick tabular habit. One new form s(140) is present.

CHEMICAL PROPERTIES

Analyses by Mauzelius on small samples gave: (1) SiO_2 0.11, Sb_2O_3 0.25, Fe_2O_3 0.35, MnO 79.60, O 8.76, MgO 0.87, CaO tr., PbO 0.10, H_2O 10.16, sum 100.22. (2) Fe_2O_3 0.7, Mn_2O_3 81.1, MnO 8.1, MgO 0.6, BaO 1.6, H_2O 7.3, sum 99.4 per cent. Sp. Gr. = 4.29.

OCCURRENCE

Occurs on calcite and barite at Långban (Långbanshyttan).

Discussion

This should be classed as a variety of manganite until more work is done on the crystallography of that mineral.

W. F. Foshag.

PYROBELONITE.

G. Flink: Pyrobelonit, ein neues Blei-Mangan-Vanadat von Långban-shyttan. (Pyrobelonite, a new lead manganese vanadate from Långban-shyttan.) *Geol. Fören. Förh.* **41** (5), 433–447, 1919.

Name: From the greek words for fire and needles, in reference to its color and form.

Physical Properties

Color: fire to deep red. Luster: adamantine to submetallic. Form: long-prismatic needles, seldom over one mm. long. H = 3.5. Sp. gr. = 5.377. Brittle, with conchoidal fracture.

Crystallographic Properties

Orthorhombic. a:b:c = 0.8040; 1 : 0.6509. Habit prismatic. Forms: (100), (110), (120), (210), (001), (011), (031), (111), (221). $110 : 1\bar{1}0 = 77°\ 36'$; $201 : \bar{2}01 = 116°\ 36'$. No cleavage observable.

Optical Properties

Extinction parallel, elongation positive, pleochroism very faint, c = β, b = γ; the a axis is the acute bisectrix, (−), n very high.

Chemical Properties

Composition: a vanadate of manganese and lead with Mn: Pb = approx. 7 : 4. Analyses by Mauzelius on small portions gave: (1) V_2O_3 19.81, P_2O_5 0.05, PbO 48.99, FeO 0.51, MnO 25.03, MgO 0.66, CaO 0.62, H_2O ——, SiO_2 0.22. (2) V_2O_5 20.26, PbO 48.74, FeO 0.48, MnO 24.99, MgO 0.53, CaO 0.96, H_2O ——, SiO_2 0.22. Formula calculated to be $2PbO.\ 2MnO.\ V_2O_5 + 3(2PbO.\ 4MnO.\ 2H_2O.\ V_2O_5)$. [Simplified, becomes $11\ (Mn, Pb)\ O.3H_2O.\ 2V_2O_5$.]

Occurrence

Pyrobelonite occurs with hausmannite and barite on calcite. Other minerals more or less associated with it are native lead, barysilite, manganite, pyrochroite.

Discussion

Flink shows that by changing the orientation of the crystals so that axis a becomes c, not only the crystallographic elements but also the optical properties are in close harmony with those of descloizite, and it probably belongs in the same group. Since the analysis was made on very small amounts of material, too much confidence should not be placed in the ratios derived from it. Instead of $RO : H_2O : V_2O_5 = 11 : 3 : 2$ as given, from which no reasonable formula can be obtained, it may be 5 : 2 : 1, as in dihydrite, $(5CuO.\ 2H_2O.\ P_2O_5)$, or 4 : 1 : 1, as in descloizite, $4RO.\ H_2O.\ V_2O_5$, the crystallographic relations favoring the latter.

W. F. Foshag.

BAECKSTROEMITE.

G. AMINOFF: Uber Bäckströmit, eine rhombische Modifikation der Verbindung $Mn(OH)_2$. [Baeckstroemite, an orthorhombic modification of the compound $Mn(OH)_2$.] *Geol. Fören. Förh.* **41** (6), 473–491, 1919.

NAME: In honor of Helge Bäckström, Professor of Mineralogy at the Stockholm Advanced School. Since neither ä nor ö properly belong in the English alphabet, they are transliterated to ae and oe respectively.

PHYSICAL PROPERTIES

No physical or optical properties can be given, since the the material was largely altered to manganite.

CRYSTALLOGRAPHIC PROPERTIES

Orthorhombic. $a : b : c = 0.7393 : 1 : 0.6918$. $p_0 = 0.9357$, $q_0 = 0.6918$.

No.	Letter	Gdt.	Miller	φ	ρ
1	b	0∞	010	0°00′	90°00′
2	m	∞	110	53 31	"
3	l	2∞	210	69 42	"
4	d	01	011	0 00	34 40
5	q	02	021	"	54 08
6	y	12	121	34 04	59 05
7	z	13	131	24 16	66 17
8	u	15	151	15 08	74 24
9	x	21	211	69 43	63 23

The angles show rather wide variations, but the means agree reasonably well with the calculated values.

Parallel growth of (0001) of pyrochroite upon (010) of baeckstroemite was observed. Some crystals show a good cleavage || to (010). Fairly close in ratios to orthorhombic Ca $(OH)_2$ and to $Zn(OH)_2$.

CHEMICAL PROPERTIES

The mineral was largely altered to manganite. Analyses by Mauzelius: Altered baeckstroemite: Sb_2O_3 0.07, Fe_2O_3 0.14, Mn_2O_3 77.80, MnO 11.59, MgO 1.68, CaO 0.14, PbO 0.04, H_2O (+ 130) 5.16, H_2O (− 130) 3.24, Sum 99.86. Partial analyses on three other samples gave O_2 8.19, 8.15, 8.67; H_2O (+ 130) 8.59, 9.05, 8.57; H_2O (− 130) 3.54, 3.27, 3.65. Partial analysis of altered pyrochroite: O_2 8.26, H_2O (+ 130) 8.31, H_2O (− 130) 3.94. From these analyses it is concluded that the original compound had the same composition as pyrochroite, $Mn(OH)_2$.

Röntgenograms of the altered baeckstroemite on the face (010) give a figure similar to pyrochroite on (0001), indicating that the baeckstroemite has changed to the rhombohedral modification after its original formation. The crystals investigated then are double pseudomorphs, baeckstroemite→pyrochroite→manganite.

OCCURRENCE

Occurs in the limestone at Långban with pyrochroite and fluorite in close association. The baeckstroemite forms earlier than the pyrochroite.

DISCUSSION

The evidence that baeckstroemite is a distinct species seems adequate.

W. F. FOSHAG.