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.

NEW MINERALS

SPHENOMANGANITE.


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) SiO₂ 0.11, Sb₂O₃ 0.25, Fe₂O₃ 0.35, MnO 79.60, O 8.76, MgO 0.87, CaO tr., PbO 0.10, H₂O 10.16, sum 100.22. (2) Fe₂O₃ 0.7, Mn₂O₃ 81.1, MnO 8.1, MgO 0.6, BaO 1.6, H₂O 7.3, sum 99.4 per cent. Sp. Gr. = 4.29.

OCCURRENCE

Occurs on calcite and barite at Långban (Långbanshyttan).
This should be classed as a variety of manganite until more work is done on the crystallography of that mineral. W. F. Foshag.

**PYROBELONITE.**


**NAME:** From the Greek words for fire and needles, in reference to its color and form.

**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.

**PHYSICAL PROPERTIES**

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

**CRYSTALLOGRAPHIC PROPERTIES**

Extinction parallel, elongation positive, pleochroism very faint, c = b; 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 Manzolius on small portions gave: (1) V₂O₅ 19.81, P₂O₅ 0.05, PbO 48.99, FeO 0.51, MnO 25.03, MgO 0.62, CaO 0.96, H₂O ——, SiO₂ 0.22. (2) V₂O₅ 20.26, PbO 48.74, FeO 0.48, MnO 24.99, MgO 0.53, CaO 0.96, H₂O ——, SiO₂ 0.22. Formula calculated to be 2PbO. 2MnO. V₂O₅ + 3(PbO. 4MnO. 2H₂O. V₂O₅). [Simplified, becomes 11 (Mn, Pb) O.3H₂O. 2V₂O₅.]

**OCCURRENCE**

Pyrobelonite occurs with hausmannite and barite on calcite. Other minerals more or less associated with it are native lead, barysillite, 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 descozite, 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 : H₂O : V₂O₅ = 11 : 3 : 2 as given, from which no reasonable formula can be obtained, it may be 5 : 2 : 1, as in dihydroxide, (5CuO. 2H₂O. P₂O₅), or 4 : 1 : 1, as in descozite, 4RO. H₂O. V₂O₅, the crystallographic relations favoring the latter. W. F. Foshag.
BAEKSTROEMITE.


NAME: In honor of Helge Bäckström, Professor of Mineralogy at the Stockholm Advanced School. Since neither å 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 material was largely altered to manganite.

CRYSTALLOGRAPHIC PROPERTIES

Orthorhombic. a : b : c = 0.7393 : 1 : 0.6918. p₀ = 0.9357, q₀ = 0.6918.

<table>
<thead>
<tr>
<th>No.</th>
<th>Lette</th>
<th>Oqtt.</th>
<th>Miller</th>
<th>q</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>b</td>
<td>0∞</td>
<td>010</td>
<td>0°00'</td>
<td>90°00'</td>
</tr>
<tr>
<td>2</td>
<td>m</td>
<td>∞</td>
<td>110</td>
<td>53 31</td>
<td>&quot;</td>
</tr>
<tr>
<td>3</td>
<td>l</td>
<td>2∞</td>
<td>210</td>
<td>69 42</td>
<td>&quot;</td>
</tr>
<tr>
<td>4</td>
<td>d</td>
<td>01</td>
<td>011</td>
<td>0°00'</td>
<td>34 40</td>
</tr>
<tr>
<td>5</td>
<td>q</td>
<td>02</td>
<td>021</td>
<td>54 08</td>
<td>&quot;</td>
</tr>
<tr>
<td>6</td>
<td>y</td>
<td>12</td>
<td>121</td>
<td>34 04</td>
<td>59 05</td>
</tr>
<tr>
<td>7</td>
<td>z</td>
<td>13</td>
<td>131</td>
<td>24 16</td>
<td>66 17</td>
</tr>
<tr>
<td>8</td>
<td>u</td>
<td>15</td>
<td>151</td>
<td>15 08</td>
<td>74 24</td>
</tr>
<tr>
<td>9</td>
<td>x</td>
<td>21</td>
<td>211</td>
<td>69 43</td>
<td>63 23</td>
</tr>
</tbody>
</table>

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 bæckstroemite 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 Maerzelius: Altered bæckstroemite: Sb₂O₃ 0.07, TeO₂ 0.14, Mn₂O₃ 77.80, MnO 11.59, MgO 1.68, CaO 0.14, PbO 0.04, H₂O (+ 130) 5.16, H₂O (− 130) 3.24, Sum 99.86. Partial analyses on three other samples gave O₂ 8.19, 8.15, 8.67; H₂O (+ 130) 8.59, 9.05, 8.57; H₂O (− 130) 3.54, 3.27, 3.65. Partial analysis of altered pyrochroite: O₂ 8.26, H₂O (+ 130) 8.31, H₂O (− 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 bæckstroemite on the face (010) give a figure similar to pyrochroite on (0001), indicating that the bæckstroemite has changed to the rhombohedral modification after its original formation. The crystals investigated then are double pseudomorphs, bæckstroemite → pyrochroite → manganite.

OCURRENCE

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

DISCUSSION

The evidence that bæckstroemite is a distinct species seems adequate.

W. F. FOSHAG.