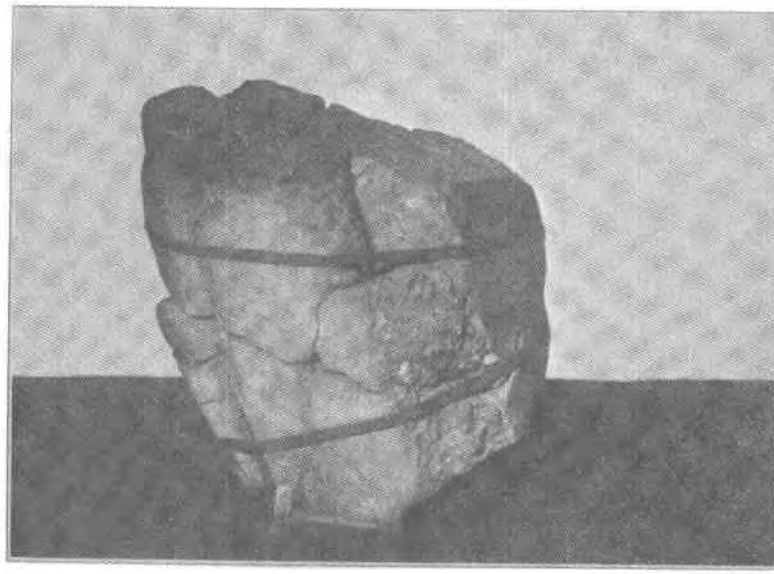
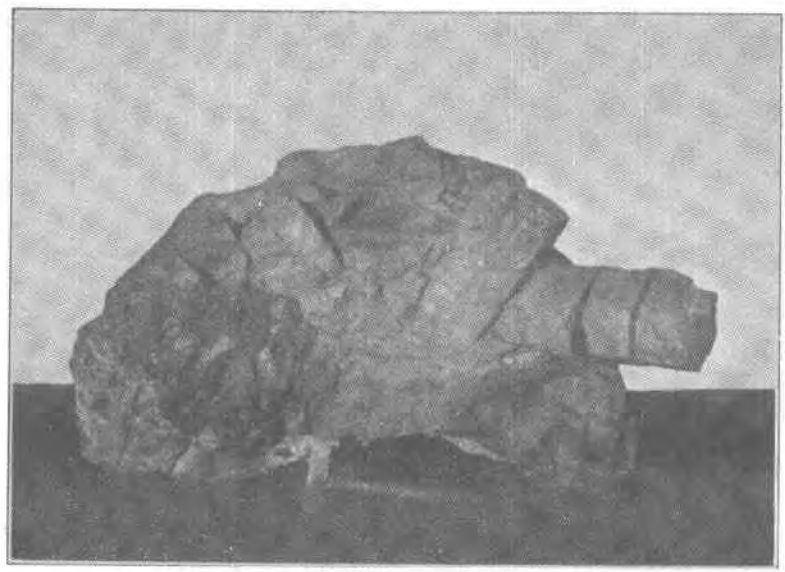
PLATE 3.





LARGE BERYL CRYSTALS, GRAFTON, NEW HAMPSHIRE.
In the collection of the Boston Society of Natural History.

THE AMERICAN MINERALOGIST

VOL. 4 MARCH, 1919 No. 3

FAMOUS MINERAL LOCALITIES: BERYL HILL, GRAFTON, NEW HAMPSHIRE

GEORGE M. FLINT

Boston Society of Natural History

In the article in the December AMERICAN MINERALOGIST by Edward F. Holden, regarding the beryl locality at Beryl Mountain, South Acworth, New Hamsphire, it was mentioned that a crystal from that place on exhibition in the United States National Museum at Washington, is 12 dm. (48 in.) long by 4.5 dm. (18 in.) in diameter. In this connection it is of interest to note that the Boston Society of Natural History, at Boston, Mass., exhibits two unique beryl specimens (see Frontispiece), one a large matrix group of three crystals in pegmatite, weighing about 1,000 kg., which is probably not duplicated by any museum in the world.

The other specimen is a portion of a rude beryl crystal 8 dm. (32 in.) long by 9 dm. (36 in.) in diameter, showing roughly the prism *m*. Both specimens were collected at Beryl Hill, Grafton, New Hampshire, about 1856. For them we are indebted to Francis Alger, Esq., a former curator of the Society, who with great energy caused their removal first to his residence in Boston and, a few years later, to the Museum. This work required extreme care, not only because of the great weight (upwards of two and one half tons for the crystal), but on account of the extreme brittleness of the beryl. The difficulty of transportation from the quarry seemed, for a time, to preclude the removal of these specimens, but finally upon the arrival of winter, ox sleds were employed and they were taken out over the snow, and to this day it is a countryside story how the Boston man quarried and took away the enormous beryl crystal.

Hearing of a still larger crystal (five tons in weight) which was too large for transportation, Mr. Alger purchased Beryl Hill, in which it was located, and had the specimen developed by

drilling away the overlying quartz and feldspar, working on a large scale much as the ordinary collector does in his development of small cabinet specimens. Upon the completion of this work, Mr. Alger considered this beryl as one of the specimens in his collection and found pleasure in showing it to his friends, but the ravages of time and the hammers of collectors have done much to mar the value of this outdoor specimen.

The Grafton locality above mentioned is about 40 km. (25 m.) in an air line, northeast from the Acworth locality and is reached from South Danbury or Grafton stations of the Boston & Maine Railroad, about three and one half hours' run from Boston on the main line, between that point and White River Junction. The Grafton geology is essentially like that of Acworth, in that the beryls are in pegmatite, cutting metamorphic rocks, altho feldspar is more abundant at Grafton than at Acworth; it was this abundance which led to the opening of the Grafton pit, whose product, at one time, was exported to England.

Any information regarding the disposition of other large New Hampshire beryls would be of interest to the Boston Society of Natural History, and it is hoped that we may hear from readers of this note in regard to such specimens.

CRYSTALLOGRAPHY OF SOME CANADIAN MINERALS. STEPHANITE, EPIDOTE, AND CALAMINE[1]

EUGENE POITEVIN

Geological Survey of Canada

5. Stephanite, Drummond Mine, Ontario

The specimen which furnished the material for this note was obtained at the Drummond mine, Coleman township, Ontario, and was kindly loaned by Dr. R. Harvie. It consisted of a confused mass of calcite crystals holding in small cavities crystals of stephanite and pyrite, together with small quantities of wire silver and argentite. Thru the kindness of Dr. Harvie the writer was permitted to remove two small crystals of the stephanite for measurement. The crystal habit is tabular, the base, the brachypinacoid and the unit prism being well de-

[1] Published by permission of the Director of the Geological Survey of Canada. Contributions Nos. 1–4 appeared in the February number.