

Occurring near the lithiophilite is dark bluish-green apatite. A sample was selected by careful hand picking and the manganese determined. There was 8.52% MnO present. Associated with the apatite were albite, quartz, columbite and muscovite.

When more of these phosphates are found it is hoped that a complete chemical investigation may be undertaken. In conclusion I wish to express my thanks to Professor W. G. Foye for the lithiophilite for analysis and to Professor H. W. Foote for his advice and encouragement during this investigation.

## PROCEEDINGS OF SOCIETIES

### PHILADELPHIA MINERALOGICAL SOCIETY

*Academy of Natural Sciences of Philadelphia, February 11, 1926*

A stated meeting of the Philadelphia Mineralogical Society, attended by twenty-one members and six visitors, was held on the above date. Vice-president H. W. Arndt presided.

An amendment to the By-Laws, providing that hereafter stated meetings shall be held on the first Thursday instead of the second Thursday of each month, was unanimously adopted. It will go into effect with the April meeting.

The society was then addressed on the subject of *Mining Districts in Michigan and Ontario* by the secretary, who described his experiences in collecting minerals while attending the summer session of the University of Michigan at Ann Arbor in 1925, and a subsequent three weeks trip through the iron and copper districts of northern Michigan and the nickel and silver regions of Ontario, returning to Philadelphia by way of Toronto and Niagara Falls.

Among the localities visited from Ann Arbor were Maybee, Monroe, and Oakwood, Michigan, and the crystal cave on the island of Put-in-Bay, in Lake Erie.

The speaker then travelled northward to Ishpeming, Michigan, and visited the Holmes Mine of the Cleveland Cliffs Iron Company. In the Keweenaw Peninsula copper district, centered about Houghton, Michigan, many mines were found to be closed down, but a few specimens were collected.

In the Sudbury nickel district of Ontario the Creighton and Worthington Mines were visited, as were also the smelters of the International and the Mond Nickel Companies. At Cobalt, Ontario, many specimens were collected from the dumps and stamp mill of the Nipissing Mine.

An enjoyable sojourn at the Frontier Mine, Silver Centre, Ontario, as the guest of the Mining Corporation of Canada, Ltd., was followed by an interesting three-day hike through the woods in the vicinity, after which the journey southward to Toronto was made by rail. After a visit to the Royal Ontario Museum of Mineralogy at Toronto, and a sojourn of a few days at Niagara Falls, the speaker returned to Philadelphia.

The talk was illustrated by numerous lantern slides and by a large number of specimens, including samples of celestite, halite, iron ores, native copper, copper arsenides, pentlandite, gersdorffite, niccolite, smaltite, wire silver, and argentite.

HORACE R. BLANK, *Secretary*