

THE OLD LITHIA MINE IN CHATHAM, CONN.

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At several places in North America attempts have been made at one time or another to mine lepidolite for its lithia content. One such lithia mine is located in Connecticut and, while little or no lepidolite from here was ever marketed, several tons were mined many years ago and the mineral still remains in a pile and furnishes abundant fine specimens to any mineralogist fortunate enough to find the locality. The writer was enabled to find the old opening by the aid of careful descriptions kindly furnished by Prof. Wm. North Rice of Wesleyan University. The location is described below.

While in southern New England on collecting trips the writer has experienced the greatest difficulty in finding old and famous localities; a search of the literature on mineralogy yields very little definite information. For instance, the paper on the minerals of Haddam published some years ago in the "*Mineral Collector*" is especially useless in this respect. It is highly desirable that contributors of articles prepared especially for the benefit of collectors should keep in mind the fact, that others will follow with no knowledge of the geography of the region other than that contained in their paper. Points located with reference to recognizable places on a U. S. Geological Survey topographic map are best. Careless, indefinite, phrases are often misleading. For instance, the writer once set out to find a certain mineral occurrence in Massachusetts, which was described as forming a prominent bed "opposite the school southwest of West Ware." On reading this description one would expect to be able to walk up to the bed in the dark yet three whole days were spent searching for the locality without success. For this reason considerable space should be allotted to telling in unmistakable terms just where a given source of minerals is.

In the present instance, the locality is contained in the area covered by the Middletown topographic sheet. On the north line of Haddam or the south boundary of Chatham township a prominent crossroad is shown, one road running north to Middle Haddam, one extending southward past Gillette's quarry to a landing opposite Haddam village, one extending westward to

the river and one extending eastward along the town line. North of the town line and east of the north-south road is a farmhouse not shown on the map. To find the lepidolite locality one must follow a dim road which runs east past the barn alongside this farmhouse up the hill. At the top of the first rise the road, which is somewhat faint and obscure, detours around the south edge of a ledge of pegmatite. By leaving the road here and traversing the top of the pegmatite ledge the spot in question is found in a clump of birches about 30 meters north of the road.

The "mine" is a small cut somewhat filled in with soil and leaves; around it are piled heaps of white quartz and lepidolite. Lepidolite forms more than half of all the material removed from the pit, and large blocks of the pure mineral occur. It varies somewhat in texture and appearance. Some masses are composed of bright small scales of a beautiful deep purple-pink color, intergrown with fine platy clevelandite stained yellow brown by iron, the contrast in colors yielding very showy specimens. Other coarser scaly masses are pale lavender to gray in color and much of the material shows small spheres up to the size of a pea composed of folia of grayish lepidolite embedded in white clevelandite.

The only other abundant mineral in the pegmatite is quartz which is crystalline milky white, and resembles common vein quartz. Potash feldspar is entirely absent. Clevelandite albite occurs in masses of white plates and these contain bunches and masses up to several inches across of a flesh red to brownish red material resembling massive garnet, which upon analysis proves to be triplite. The triplite will be more fully described in another paper. In places the triplite has oxidized to a black manganese oxide, which stains the clevelandite. Occasional crystals of muscovite, which occur in the clevelandite, are penetrated by flat opaque crystals of green tourmaline. This lithia-rich mass seems to form a small segregation of later intrusion in a large dike of ordinary granite pegmatite. A short distance further east across a small swampy basin is a second much larger ledge of pegmatite which has been much explored by blasting. It is devoid of accessory minerals, small blocks of graphic granite of good pattern being the only thing of possible interest to the collector. It seems as tho all of the rarer constituents of the two great pegmatite masses have been segregated in the small vein where the lepidolite occurs. These dikes probably represent

the continuation of the same pegmatite mass opened in the famous Gillette's Haddam neck quarry.

About $1\frac{1}{2}$ kilometers (two miles) north of the lepidolite mine is an old quarry which, according to Bastin¹ has yielded achroite tourmalines, etc. It is located on a low knob just south of an east-west road. It is abandoned, and shows now no sign of tourmaline-bearing pockets, or of cleveandite, lepidolite or other interesting minerals. The quarry face shows normal granite-pegmatite too rich in biotite and black tourmaline to be of economic value. Some small rose-red garnets and specimens of biotite and muscovite in parallel position were the only things brought away from this quarry, which is scarce worth a visit.

NOTES AND NEWS

We regret to announce the death of Professor Alfred J. Moses, of the Department of Mineralogy of Columbia University, on February 27th. An account of his life and work will be published in our pages in the near future.

We regret also to note the deaths of two veteran Pennsylvania mineral collectors: Mr. Thomas Harvey, Boothwyn, Pa., on November 5th, 1919; and Dr. John Fraley Rose, Oxford, Pa., on January 27th, 1920.

Mr. Harvey was an active collector, accumulating a wealth of Delaware County minerals, in particular those from the pegmatites of the Boothwyn District. He presented his collection to The Academy of Natural Sciences of Philadelphia in the spring of 1919. The monazite crystals described and figured in the October, 1919 number of this magazine were chiefly from his collection.

Dr. Rose discovered the peculiar vermiculite named after him by Genth, roselite. His collection is being offered for sale. S. G. G.

A recent issue of the Yonkers (N. Y.) *Herald* announces that Mr. Edwin C. Mott, collaborating with City Engineer Lawrence Griffith, is furnishing the city with a display of minerals for educational purposes. About 700 specimens of minerals, ores and rocks are now at hand, and most of them are on exhibition in cases in the City Hall furnished by the city. Among those who have contributed specimens are Col. William Boyce Thompson, Rev. August Ulmann, Dr. James T. Gibson, Alfred M. Beale, Theodore R. Heinrichs, James Cook, H. Arno Smith, American Museum of Natural History, thru H. P. Whitlock, New York State Museum, thru Harry F. Gardner, Lester M. Clutterbuck, C. W. Hoadley, John A. Manley, C. B. Church, and George B. Dowling. Mr. Whitlock has aided Mr. Mott in arranging the collection, and is to give a series of elementary lectures on mineralogy and related subjects.

¹ *Bull. U. S. G. S.*, 420, p. 47.