



THE KEWEENAW COUNTY FISSURE MINES

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Copper-bearing “fissure” veins are one of the three primary types of copper deposits (along with conglomerates and amygdaloids) identified in the Lake Superior District. One of the most economically and mineralogically important clusters of these deposits was located in Keweenaw County, Michigan. The four mines discussed in this special issue of the Mineralogical Record are the most important of those. This short article serves as an introduction to the discussion, covering the regional history and geology of this, the world’s most important native copper deposit. Many mineral specimens from the district have lost their provenance and can no longer be attributed to a specific mine. Some of the finest of these are illustrated here.

HISTORY

The articles contained in this issue discuss in detail the four most important copper mines which primarily exploited so-called “fissure vein”-type deposits in what is now Keweenaw County, Michigan. These mines were among the earliest industrial mining efforts in the Lake Superior District. Native American mining, starting as early as 8000 years ago, and French and British attempts in the 1700s, resulted in only trivial copper production by modern standards (Chaput, 1971). Although these mines were only minor producers compared to the massive amygdaloid and conglomerate-hosted lodes to the south which would be developed later, at least two, the Cliff mine and the Central mine, were profitable for a significant part of their history, and their early success brought much-needed capital to the district which allowed for the discovery and development of the major deposits.

As in many new districts, the Keweenaw County deposits also attracted a great deal of speculation that companies took full advantage of. In order to secure funding from investors, companies often exaggerated (or outright lied about) the quality of their deposits. As

a result, misinformation abounds about these old mines, particularly as concerns the earliest part of their histories. While the authors have made their best efforts to make sure that the accounts herein are consistent and as accurate as possible, the reader should keep in mind that some misinformation may have been inadvertently repeated here. In a letter from geologist Jacob Houghton to State Geologist Lucius Hubbard dated July 17, 1897, Houghton describes some of these exaggerated reports in the possession of a Captain Paul (Joseph Paul had been agent of a tiny prospect called the Garden City mine during the 1850s and 60s):

Captain Paul was an excitable, quick speaking Cornishman. One time, in his store near the Cliff mine, I spent an hour or two looking into those volumes [old company reports], and when putting them up on the shelf, I remarked “Captain, those reports are very interesting.” “Pack of lies, pack of lies” retorted the Captain. “Well,” I said, “You wrote a good many of them yourself.” “No difference, no difference, had to lie, had to lie, stockholders wouldn’t pay assessments.”