

"When quarrying into the solid rock began, it was carried on in the ordinary Indian fashion, namely, by heating the rock, pouring water on it, and breaking up the fragments thus obtained, with stone hammers; perhaps using these hammers before the application of fire, so long as effective work in this manner was feasible or profitable. The hammers were rounded water-worn boulders, carried up from the lake shore or from the lower valleys. Modern work has shown that some excavations thus made were fully twenty feet in depth; and it is quite possible that others which have not yet been cleared out are much deeper."—Fowke, Ohio, 710-11.

The author, who in 1885 himself conducted investigations in certain parts of the Lake Superior country, can attest to the truth and value of the foregoing observations. Hundreds if not thousands of these now partly filled pits and trenches have been located, but no shafts or tunnels, or anything that could be considered mining in the generally accepted meaning of that term. When cleared of debris these pits were found to be from less than ten feet to a large diameter. In some of these great numbers of the stone mauls or hammers have been found. Many of these were grooved for the attachment of a handle and are of large size and considerable weight.

Wooden bowls, employed for baling out the water, remains of bark baskets, used in removing the loose rock and dirt, and portions of timber thought to have been employed as skids and ladders have also been found in the pits among the rubbish. Some copper chisels, probably employed in cutting up pieces of mass copper, have also been recovered. Paddles or shovels, of white cedar, resembling those now in use by the Chippewa for propelling their canoes, are reported by Whittlesey (Mining, 7-10) as having been found in the pits. All of the mechanical contrivances employed were of a very simple nature, and the workings themselves illustrate nothing more than the endurance and patience of the Indian miners in their endeavors to possess the ore. With levers and men to use them the elevating of even the largest masses of copper which could be disengaged, could be accomplished without the application of any principle not understood by the most savage tribes.

The American Indians are known to have mined deposits of other materials, which required fully as much toil as did the securing of the copper at Lake Superior. The catlinite quarries of Minnesota, were worked until within a generation,