

over the irregular exposed surface of the copper-bearing trap. Our track at length lay through a gorge, covered with immense masses of trap and crumbling debris, amid which pine, and the black oak and other hard-wood, had contrived to find a sufficient soil for taking root and growing to their full proportions; while here and there the eye lighted upon some giant pine overthrown by the wind, and turning up its great roots grasping the severed masses of the rounded trap in their convolutions, like the gravel clutched from the ocean's bed in the hands of a drowned seaman. On the summit of the ridge the trap rock rises into a range of cliffs, which, judging by the eye, I should suppose cannot be less than two hundred feet high, and in front of them is a sloping tail, the accumulated debris of ages, on which the trees have in some places attained to an immense size, notwithstanding the apparent poverty of the rocky soil.

In traversing this route the road lies in part along the banks of the Eagle River, and there, some four or five miles from its mouth, I had an opportunity of examining a beaver dam, flooding a part of the river banks, by means of the ingenious structure. No traces, however, gave the slightest indication to the passing traveller that the hand of man had ever wrought any changes on the aspect of a region characterised by features so singularly wild and desolate-looking as those described above. Beyond the cliffs, in a level bottom on the other side of the trap ridge, is the mining settlement of the Cliff Mine, one of the most important of all the mining works yet in operation in this region. The great extent of the works at the Cliff Mine is all the more surprising to the visitor, after finding his way to them through a region where it might seem that human foot had never trod.

I descended the perpendicular shaft by means of ladders, to a depth of sixty fathoms, and explored various of the levels; passing in some cases literally through tunnels made in the solid copper. The very richness and abundance of the metal proves indeed a cause of diminution of the profits arising from working it. I witnessed the laborious process of chiselling out masses from the solid lump, of a size sufficiently small to admit of their being taken to the surface, and transported through such a tract as I have described to the shores of Lake Superior. The floor of the level was strewed with the copper shavings struck off in the effort to detach them, and the extreme ductility of the pure native copper was pointed out to me as a cause which precluded the application of any other force than that of slow and persevering manual labor for separating it from the parent mass. I saw also some beautiful specimens of silver, in a matrix of crystal-