

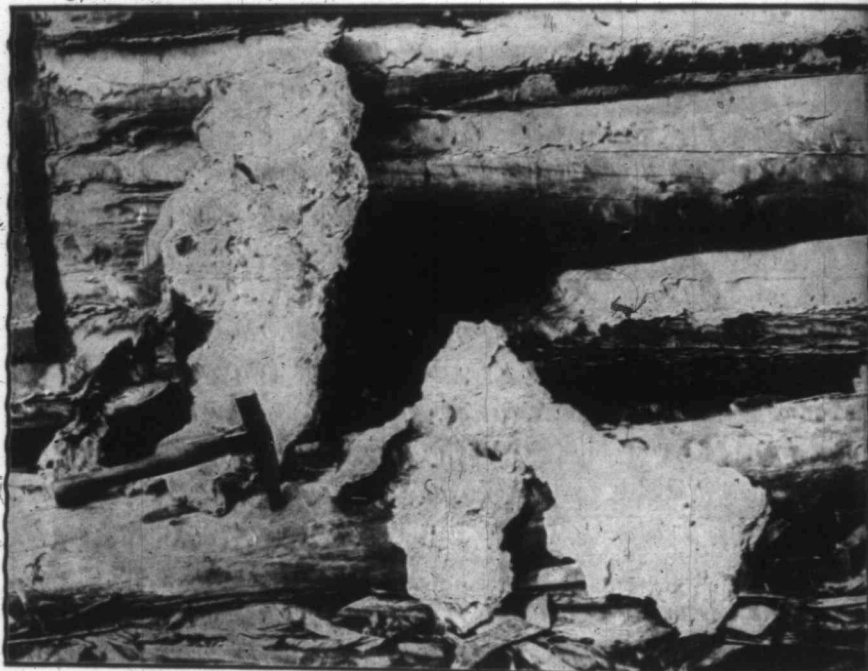
ported to have been assayed in Cobalt. But seeing was believing.

Silver in the Walls.

Thousands of tons of low grade ore are lying around the twenty-odd mines that are producing larger or smaller quantities of silver within three miles of Cobalt station. They do not represent all that is in sight, even if not a single vein were worked a single foot deeper. As a rule the common rock is only removed from one side of the vein. The silver bearing vein is a distinct formation in the original fracture of the rock. But when things were pretty hot in that locality and Mother Earth was puking up silver and cobalt and arsenic, and goodness knows what besides, from her nethermost bowels, silver was injected right into the rock beside the fissures. I examined the walls of several open cuts and found clear silver jutting out here and there. I broke off some pieces. My colleague got a particularly good specimen only by chipping it off with a crowbar.

Occasionally it is reported that veins had been discovered ten, twelve and fourteen inches wide. The innocent supposes that in the fissures of the lower Huronian there is a perpendicular slab of almost solid silver

Two slabs of silver from the Trethewey mine are shown in this picture. That by the pick weighs 79 lbs., borings from which show it to be composed as follows, in per centages: Silver, 66.67; cobalt, 2.15; nickel, .41; iron, 1.60; arsenic, .703; antimony 9.67; sulphur, .22; calcium carbonate, 6.72; magnesium carbonate, 1.23; insoluble, 3.29.



a foot wide, of great length, of depth enough to make a fortune for every lucky being who puts hands on it. The reality is not so. I have seen a vein fourteen inches wide. Rubbing my foot on its surface I polished streaks of silver. Two feet away I might have rubbed for a year and only wasted good shoe leather. But the vein was already proved to be 150 feet long; five or six feet of earth had been lifted off it for that distance, and it probably extends to the next claim.

Vital Importance of Depth.

The width varied considerably. In some places you could see no mineralization. In others the silver was plugged in between the Huronian rocks like filling in a broken tooth. Down below it most likely varies as much as it does on the surface. In places it may disappear, and be found again almost immediately. I have seen men working in a cut on one side of which the vein had apparently petered out. Next morning when I passed that way a vein of calcite four inches wide was being removed, a foot below the spot where there was but apparently solid rock.

The range of values in the ores is wide. Here and there are immense nuggets of almost pure silver in parts of which the metal can be bent exactly as you would bend the lid of a discarded peach can. On my table is a piece which went through the cobbing mill and was only dented in the process. It is not ore, but

dirty silver. I have seen a leviathan block of ore which weighed six hundred and fifty pounds. Finds like this are not made every day. They are the freaks of the camp, if you like, but they are not lone strays.

Place of the Geologist.

The Cobalt silver deposit is not the leavings of some cataclysmic flood which swept over half the world, leaving only a few precious isolated fragments to tantalize humanity. It is the scrawling epitaph of an upheaval from the centre of things. The fountains of the great deep were broken up, and from a molten treasury they were emitted, an uncounted contribution of imperfect coin to the currency of civilization. It has long lain in an immutable bank. No man can stake his life on the depth of these Huronian coffers. The geologist is a commercial asset as well as a gentleman, who goes around tapping rocks with a simple-looking hammer. When he says that the lower Huronian is most likely five hundred feet deep, in a given district, his judgment is cheap, at seven dollars a foot for the work of a diamond drill.

Professor Miller, Geologist to the Ontario Government, has a reputation to lose. He is as far removed from the stock-jobber as the East is from the West.

He does well to be conservative. He expects the Cobalt veins to continue with little material variation, until they strike the Keewatin, and as the Keewatin was probably in place before the Huronian, the silver and cobalt could not very well get into the overlying Huronian without passing through the Keewatin. It is scarcely likely that when the puking planet got over its unpleasantness, the Keewatin was washed clean of silver, and the Huronian above was left in possession of all the attractive matter.

Objection to Open Cuts.

The ultra-doubting Thomases, putting on the most bewildering solemnity, observe that this company and that have gouged all the most valuable ore from the surface, have capitalized on the best possible product obtained in the cheapest possible way, and will leave the poor, unsuspecting public in the lurch. Shafts should have been sunk at the beginning, and ore should have been blocked out. The open cut is not a mine. It defies the rules of the game. And so on and so forth.

There is something in the objection to the open cut. It is splendid to know that away down in the earth there is a long dark tunnel, and that from where you stand down to that tunnel is a vein bearing riches almost enough to satisfy the dreams of avarice. If

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