

which may eventually make paying mines, no new Cobalt has been found, that is, so far as present indications go, though there probably are a reasonable number of important finds to reward the industry of the prospector, and it may be that next year the value of this year's work will be better demonstrated.

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"The deposits are now valued almost entirely for the silver they contain, and the drop in the price of cobalt has little or nothing to do with the ultimate prosperity of the camp."

So far these views do not differ much in tone from our articles of September on the subject. But later visits by observant men cause us to think that, whilst properly cautionary, we were unwarrantably depreciative of the mineral value of the region. For example, the statement made that all the veins (at Cobalt) had "petered out" at a depth of from 40 to 50 feet—a statement practically repeated by Mr. R. G. Leckie in a letter to last Monday's "News"—was certainly too broad, for according to a recent letter from a man who has been on the spot it is seen that the large majority of the mines now in operation, some twelve in number, have not gone down over 20 or 25 feet, and "in the Larose mine, at a depth of 90 feet the vein is as perfect as when they first started to sink the shaft," while the president of that mine thinks there is ore enough in sight to keep the mine running for several years. And there are three other veins in sight running apparently across their entire property. "It is true," adds this letter, "that at the Trethewey mine the ore at 65 feet is of an inferior quality, but it is not uncommon to find these barren spots in a silver vein."

A word now as to the site of the camp. The discoveries made are mainly in the township of Coleman. They centre round the town-site of Cobalt and are practically within a radius of three or four miles. The geological formation is chiefly the Lower Huronian containing the cobalt series, consisting of conglomerate, breccia, quartzites and greywacke-slate. The cobalt-nickel-arsenic-silver veins occur in this series. There is also a considerable quantity of diabase and gabbro and some Keewatin, the richest silver vein which has yet been discovered being in the diabase. A man who lives on the spot and has taken pains to inform himself tells us that he believes every one of a dozen mines will be in operation during this winter, giving employment to between 300 and 400 men. None of the properties are being mined very deeply for the reason that there is plenty of ore near the surface to keep the men employed in winter. From many descriptions given of the mines we choose the following by a man whom we know, who possesses technical knowledge and has visited the locality, but who has no reason to be biased:

The ore is found in veins from two to ten or twelve inches wide running right to the surface of the rock, although the cleft to the depth of two feet or so is sometimes filled with black earth bearing free silver in small nuggets. Below this is the vein proper, consisting as a rule of cobalt and free silver intermixed. In some places nuggets of almost pure silver are found in the ore, whilst occasionally there are unetched plates of silver, which have apparently been "pinched" out of the ore against the side wall. These plates, which are often about 75 per cent. pure, will ring like a silver when struck with the knuck'es. At one mine I saw a vein two inches thick at the spot where it was being

worked, which was asserted to be practically pure silver; in fact, the superintendent said that all that was needed to make it pass as current coin was the King's head. This vein has been traced on the surface a considerable distance, and a shaft 15 or 18 feet in depth has been sunk. This particular vein is at present (September) paying a net profit over all expenses of \$1,000 a day, and the superintendent said indications were that he would continue to draw from that vein alone \$1,000 a day for the next year. There are other veins on the same property which at present are not being developed; though of somewhat lower grade they are immensely valuable. At a claim near this we were shown a quantity of silver nuggets, some of them running to several pounds in weight. This property has been fairly well prospected and several veins discovered, but the surface has been hardly more than scratched.

At another mine, which is just off the railway track a little north of Cobalt, a shaft has been sunk 90 feet deep and tunnels have been run about 110 feet each way at the bottom of the shaft. [This is the Larose mine.] At that depth the vein is, if anything, wider than at the surface, while the ore is as rich. Several other mines were visited but the same general description will apply to each. . . . No one has tested the depth of the more important veins, and no one can say to what depth they may extend. At nearly all the mines preparations are being made to work underground during the winter, and some of the owners are bringing in the necessary machinery now. As, however, the country is a tremendously rough one, steep precipitous hills and numerous small lakes being amongst its principal features, those who can are postponing the introduction of machinery until the winter.

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What the true size and dimensions of the silver deposits may be is yet entirely unknown. I met several experienced miners who have been in every mining camp on the continent—Cripple Creek, Rossland, Greenwood, etc.—and mining engineers, some of whom had worked practically wherever any mining is done. One and all assured me most positively that the conditions in Cobalt are, so far as they are aware, absolutely unique; that geological or metallurgical knowledge is of but little use, and that their previous experience does not help them to infer anything regarding the extent of the deposits, the depth to which the veins may run, or the probability of still further rich discoveries being made in the district. Men who have reputations to lose will give no definite opinions. . . . This much is certain, that there are a good many million dollars in sight.

### DEEPENING WATER COURSES IN THE LAKES.

For many years the United States Government has been spending large sums annually in deepening harbors and the connecting rivers of the Great Lakes to accommodate the modern freight-carrying steamers. Year by year these steamers have been built larger and larger, with deeper and deeper draught, until from an average of ten feet thirty years ago such boats now require from sixteen to nineteen feet of water to float them. The cry was "deepen, deepen, until every river and harbor on the whole chain of lakes will have twenty feet of water." And Congress has spent a score of millions trying to satisfy this cry. But no sooner was sixteen feet water produced by dredging and blasting than somebody would build an eighteen foot boat, and now that twenty feet water has about been reached Congress is besought to do still more in this direction.

At a meeting of the Lake Carriers' Association last week a demand was made for a new lock at the

Sault Ste. Marie enormously expensive. Lime Kiln Cross demands of the "News" to speak

The main point if the public has organization in the demands would find waking from the doubt that, in the name for lower rates its allies will interfere often as Uncle Sam in digging out the ing, the whole been expended now go privileges, sees to savings effected by itself all the result expanded tonnage satiable, the cost proportionate, are, portion, absorbed by the combination to come.

The people of contended, reap this deepening owners have do rest and be the depth of water streams. So the force, that Uncle to more careful nels already pro safety and faci without inordin scanty rewards on the U. S. T being sent from than ever before schemes propo the navigating Clair river announced feasibility Clair through to Lake Erie. river shallows had it in view t canal through the proposed Bay to Lake schemes any Nipissing and mind, as we ca future pressure ward. It is w applied for, but session of Par poration, whos poses to utilize Isthmian Cana Lakes Ontario its advantages to the increase just as there a dredges can ge safety must so