

THE COBALT MINES.

The World's Richest Silver Deposits Found in the Heart of the Canadian Forests.

How the Pure Silver Crops Out of the Rocks—It is Quarried and Shipped Away in Bags—A Lake Underlaid With Silver—Shall it be Drained or Tunneled?—Government Timber Lands and a Rush for the Ore—What Cobalt Silver is—How the Mines Were Discovered And How Fortunes Are Being Made in Them.

(Special Correspondence of the Deseret News by Frank G. Carpenter.)

COBALT, New Ontario.—Three years ago the land about Cobalt would not have sold for 10 cents an acre. Today some of it would bring \$160 a square inch. There is one tract of 40 acres within a stone's throw of where I am writing that you could not buy for \$1,000,000 in cash, and all about here are other 40-acre tracts which their owners estimate at from hundreds of thousands to millions of dollars. Nevertheless, the land lies in the heart of the wildest woods on this continent. It is rocky and swampy, and it would take a quarter section of it to feed a goat.

Its value lies in the enormous silver deposits which have recently been discovered. The rock is stamped with great veins of almost pure silver ore. Three or four million dollars worth of this ore has already been shipped, and carloads of it are now on the way to New York which are worth \$25,000 or \$30,000 a car. A carload of the best picked specimens from a certain mine is said to have sold for \$30,000, another carload for \$50,000 and another for \$40,000.

In the meantime the people here deem themselves rich beyond the dreams of avarice. The land has been staked out for miles in every direction, and hundreds of prospectors with hammers in their hands and great packs on their backs, held there by straps around the forehead, are tramping through the woods looking for new ore fields.

COBALT, THE MINING TOWN.

But first let me tell you where Cobalt is. Take your map of North America and mark a line from the lowest part of Hudson's Bay to Buffalo, Divide it in half, and the middle point will just about strike the Cobalt mines. They are reached by the Grand Trunk to North Bay, and thence over the new railroad just built by the Ontario government about 100 miles above that point. They are about a night and a day from Montreal over the Canadian Pacific and this railroad, and they are, I judge, just about 200 miles from Toronto.

I came here from Ottawa via North Bay through woods as wild as any on the North American continent. The road skirts many lakes, swamps, and what is known as muskeg, which is a kind of a cross between a quicksand and an Irish bog. Now one passes a lumber camp, now an Indian village, and now a station where the tourists go off to hunt in the wild woods. We reached Cobalt at 4 in the afternoon and had to rely on the miners for our accommodation. The town had only

two or three houses last spring. Now it has a hundred or more frame buildings. Log cabins are going up in every direction, a three-story hotel will be completed before this letter is published, and the next year Cobalt will be double its present size.

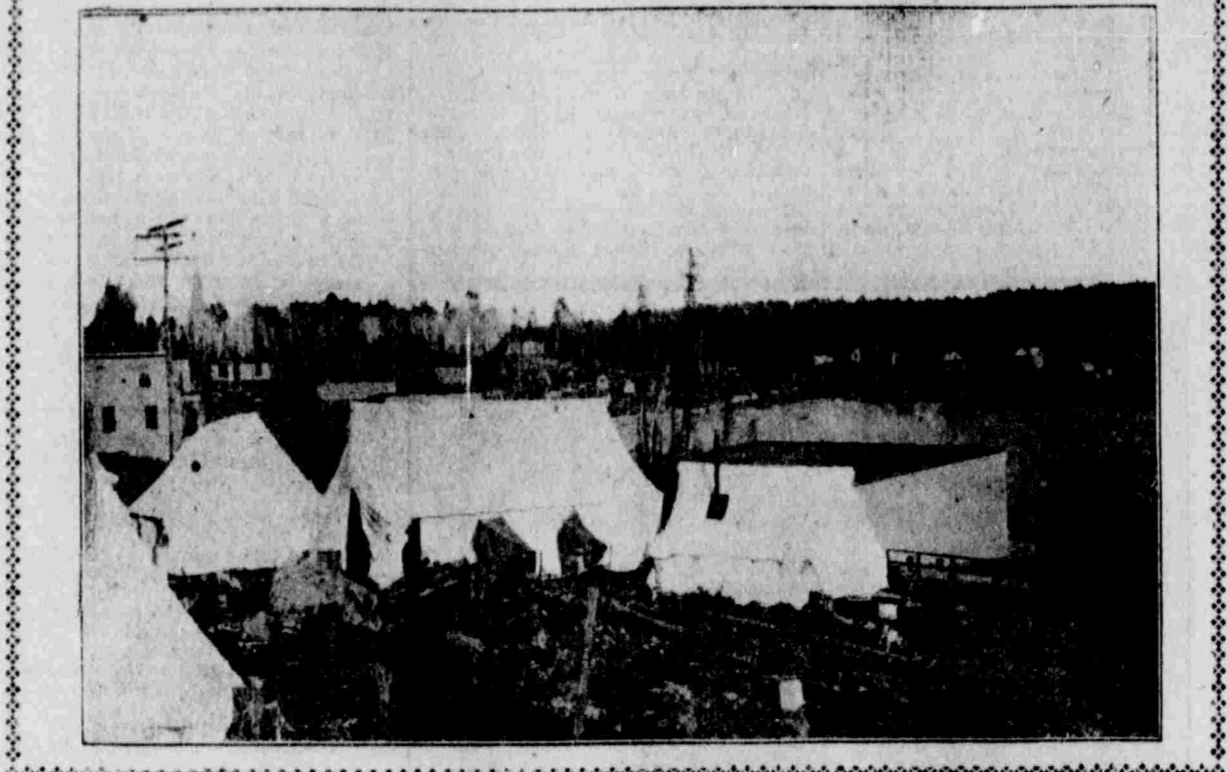
Just now many of the population live in tents. The Canadian Bank of Commerce east of the town has built two of the strongest in Canada, so their business is good, the bankers sleep at night beside the safes with guns near their heads.

Cobalt has yet no streets. The buildings stand along cord-uroy roads which wind through the woods and across the streams. Most of the houses are of pine boards with roofs of tar felt, but on with big-headed tacks. Some of the walls are covered with this black roofing material, so that the houses look like a collection of shacks of black and white.

The settlement runs around a beautiful lake so narrow that you can cross it in a canoe in a few minutes. The mining properties are all around the lake, and they extend back into the woods. A large part of the population still lives in tents. Some of the tents are not more than four feet wide and five feet high. They are merely for sleeping. Cobalt has perhaps a dozen stores, and, strange to say, it has no saloons. It is a dry town. No liquor is allowed to be sold, and no gambling or other wicked games permitted. I have seen one or two drunken men, but altogether the wild revelry of the new mining camps of our west is absent.

THE SILVER STREETS OF COBALT.

I have visited the chief silver regions of the world, but nowhere have I seen silver which crops out on the top of the ground as it does here at Cobalt. The whole region seems to be a vast rock covered with a thin layer of earth, upon which trees and grass grow. The surface of the rock is irregular. It rises and falls, with water in the hollows here and there a lake. In places the rock crops out on the top of the ground, and in this rock a silver vein may sometimes be seen. These veins run for hundreds of feet across the country, and everywhere they show up on the surface. In the Timmons mine, for instance, the earth has been stripped off to the width of a narrow pavement for a distance of 1,000 feet. The rock has been ground smooth by glaciers. When cleaned it looks much like a flagged sidewalk. Running through it in a winding way is a vein of almost pure silver, so rich that you can see the metal shine as though the rock was plated with it. You can rub the vein with your feet and polish it. Indeed, it makes me think



Photographed for the Saturday News by Frank G. Carpenter—Largest Tent in Picture Shows Bank of Commerce.

CANADA'S WONDERFUL NEW SILVER CAMP.

Photographed for the Saturday News by Frank G. Carpenter—Largest Tent in Picture Shows Bank of Commerce.

of melted silver spoons mixed with a little salt poured down in the crevices of the rock. I walked over this silver street for hundreds of feet, securing the precious metal with my shoes as I did so.

BIG SILVER NUGGETS.

This is some of the richest of the Cobalt ore so far discovered. Nuggets of silver which are 80 and 90 per cent pure have been taken out of the Timmons mine, and some of the nuggets weigh 300 and 400 pounds each. I saw chunks of silver and rock the size of a paving brick which I could not lift. Indeed, much of the ore makes me think of the almost pure copper nuggets which one finds in the Lake Superior. I walked over this silver ore not regular in width for so they think of the almost pure copper nuggets which one finds in the Lake Superior. I walked over this silver ore not regular in width for so they think of the almost pure copper nuggets which one finds in the Lake Superior.

LIKE A QUARRY.

So far the work here is more like stone quarrying than mining. The vein with the rock on both sides of it is blasted out and the best of the ore bagged up in sacks. The country about is cut up by long trenches from 10 to 20 feet deep and five or more feet wide, which have been blasted and cut out of the rock to get the ore. The sides of the hills are quarried where the vein breaks out, the veins being followed in this way for long distances.

So far no one knows how deep down the silver veins go. The geologists say that the silver will lessen in extent as it descends, and it is claimed that this has been the case in the Trethewey mine and in some of the Earle properties owned in part by the Standard Oil company. The deepest mine so far sunk is the Timmons mine, to which I have referred. In this shaft has been put down beside one of the veins to a depth of 30 feet, and the vein is found to be wider and richer as it goes down. This mine has already shipped about 200 cars of ore in bags, the output being worth at the least \$500,000.

Mr. Joseph C. Houston, the manager of the O'Brien mine, tells me he believes the ore to be a primary rather than a secondary formation, and that it will grow richer as the excavation goes down. Mr. Morrison of the Ottawa Citizen, who has mining properties here, has the same belief as to richness in regard to depth. He considers the camp one of the richest mineral fields of the world. When he came here last spring he published a statement that there was from \$25,000,000 to \$50,000,000 worth of silver practically in sight. He now thinks that his estimate might have been trebled and still be under the truth.

THE EXTENT OF THE MINES.

As to the value of the mines I make no prediction. I know that the silver

is here and that there seems to be vast quantities of it. I have seen thousands of sacks, each holding about a half-bushel of ore which is exceedingly rich, and some of it almost pure silver. I have examined the veins, and have found some that are almost a foot wide, and so rich in silver that I could see it shining out of the rocks. But how much there is of it or how long it will last I do not pretend to say. The geologists may be right in that it will peter out after a hundred feet or so, and the miners may be right in that there are great wide veins in solid masses of the precious metal far down. From what can be seen on the surface there are undoubtedly millions of dollars' worth of silver here, and the camp will increase in value as it is developed.

At present there are about twenty mines working. Some are owned by Buffalo people, some by New York parties, and more by Canadians. The field as far as defined is about three miles square, with the very richest mines within a radius of two miles. It embraces Lake Cobalt, and there has been a proposition to drain the lake into the sea to mine the veins that run under it. This has not been permitted by the government. There are now men digging out quantities of ore within 100 feet of the banks of the lake, and the veins there are so plainly marked that the refuse is carried out in wheelbarrows and dumped on the shores. Tunnels will probably be made under the bed of the lake to get out the ore. Such mining is not impossible. Some of the best mines of the world are under the water. There are 50 miles of tunnels out of which coal has been taken from under the Pacific ocean, in the Bay of Nagasaki, Japan, and a vast quantity of coal is mined under the Pacific off the southern coast of Chile. I have been in both mines and have ridden for miles through the Chilean tunnels on the electric cars used for getting out the coal away down there under the sea.

Prospecting is now going on far outside this three-mile radius, and some mineral is being discovered. Silver mixed with cobalt has been found 20

or 30 miles from here, and another camp is springing up to the northward. Indeed, there is no telling what minerals may not be found in this region, which seems to be a part of the great mineral belt running around Lake Superior and extending on northward toward Hudson's Bay. There is a great deal of iron on the Canadian side of Lake Superior, and some of our richest mines of iron and copper are found on the southern side of that lake. A little more than 100 miles from Cobalt lies Sudbury, which contains the richest nickel deposits of the whole world, and the miners tell me that minerals exist all the way north to James Bay. Prospecting is now just beginning in this region, and there is no telling what may be found.

A RUSH FOR SILVER.

Speaking of the extent of the mining field at Cobalt a lively rush will take place here about a year from now. According to the laws of Canada, when timber lands have been leased to lumbermen for the getting out of logs, the lumbermen are charged so much a thousand feet, and no one has any right to prospect or mine upon such lands until the leases have expired. There is a very large tract of timber adjoining the mining territory at Cobalt. This is said to be full of silver. Notwithstanding the law, prospectors are moving about over it now. They have discovered veins richer, it is said, than any of those about Cobalt lake.

"Suppose I had been prospecting in these woods, and knew where there was a million-dollar property, do you think I would stand alone on that line and take my chances in the rush. Not a bit of it! If there was a million at stake, I would hire a gang of a hundred or so to go with me, and would arm them with clubs and revolvers, and you may bet your life we would get our stakes in first."

However this may be, the land will be opened next August, and the rush, while not so great as that of Oklahoma, may be somewhat like it, and it will undoubtedly be for much bigger stakes.

THE COBALT-SILVER ORE.

This cobalt-silver ore is a comparatively new thing in nature. Cobalt and silver are frequently found together, but nowhere in such quantities as here. Cobalt is a mineral somewhat like nickel in its properties. It is used to make paints and pigments, and is generally known as cobalt blue. It forms the color for all of the finest

blue china. The metal is also valuable for toughening steel, and for this reason it can never fall below the value of nickel, which is now worth 30 or 40 cents a pound. It now retails for \$2.50 a pound, and its value in connection with the silver here is estimated at 50 cents per pound. So far the ore here is mined only for the silver, and its price is based upon the silver it contains.

The cobalt can be plainly seen in the ore when the rock is exposed to the weather. It is steel gray originally, but it then turns rose pink, and where it is found in the shape of a powder it looks exactly like rouge. When heated it turns a beautiful blue. There is some arsenic and other chemicals mixed with this cobalt-silver ore, and the ore as a whole is such that it has to be sent to New Jersey for special treatment.

The cost is enormous, and so far only high grade ore has been shipped. There is some talk of building a smelter here, and it may be that the Ontario government, which has undertaken the building of railroads, may put up a reduction plant for these ores. I understand that the nickel trust, which has large smelters at Copper Cliff, may add to their machinery some for the reduction of cobalt-silver. If this is done or a government smelter built the low-grade ore is undoubtedly the rich veins can be smelted and the property will be enormously more valuable.

THE COST OF MINING.

The miners here claim that the cost of getting out this ore is about the lowest known. It can be taken from the mines for 8 per cent of the value of the product, an outlay of \$200 bringing forth \$25,000 or \$30,000 worth of ore. So far it does not pay to ship anything that will yield less than \$200 per ton, and the most of the shipments are much richer.

Speaking of ore values, one of the proprietors of the Glendinning mine said to me today: "I came here three or four months ago with a gang of men and discovered a property. We have been working the mine from then until now, and have just shipped our first car of ore, which will bring us at least \$20,000. Our total expenses all told have been \$2,000, so that we are more than \$2,000 to the good, and have just begun to ship."

HOW THE MINES WERE DISCOVERED.

This cobalt-silver field was discovered about two years ago, but the mines have been kept as far as possible, a secret. This was for two reasons; one was that new prospects might be made by the present holders, and the other, and chief one, was to blind the eyes of the Ontario government and thus circumvent a movement proposed for deman-

ding a royalty to be paid to the government on all ore mined. The mining laws at present are very liberal, but a royalty should be paid on the value of the silver taken out the state would have enormous receipts therefrom.

Indeed, the Ontario provincial government would seem to have a special right to a part of the profit of the cobalt mines, for it was the government that discovered the property. In building the railroad from North Bay to Cobalt, the government was blasted out through the vein was cut, showing the existence of the precious metal. Shortly after this a French blacksmith named Larose staked his toe upon a piece of rock above Cobalt lake, and a silver vein was cut, showing the existence of the precious metal. Shortly after this a French blacksmith named Larose staked his toe upon a piece of rock above Cobalt lake, and a silver vein was cut, showing the existence of the precious metal.

Later on he disposed of the balance of the same parties, receiving for it \$27,000, which secured a fortune to him. It was also a fortune to the purchasers, for they have already sold more than a half million dollars' worth of ore, and I am told that their mine is undoubtedly worth more than a million dollars today.

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