

SUDBURY PRODUCTION ENORMOUS THIS YEAR

Two Companies to Produce Fifty Millions in Nickel and Copper an Estimate.

HISTORY OF CAMP

Building of C. P. R. Caused Discovery of Metalliferous Rock.

The Sudbury mining district is the oldest and, in the world, the most productive in Ontario. With the war-time demand for, and high prices of, nickel and copper, the output for 1915 will approximate \$50,000,000. This is all by only two corporations, the Canadian Copper Co. and the Bond Nickel Co.

The nickel region has been studied by very many experts and its bibliography is somewhat extensive. Two able and exhaustive monographs, however, have lately been published by the department of mines, Ottawa. One of these is by the late Dr. B. S. Howie, M. A. D. Sc., who unfortunately, lost his life when the Empress of Ireland went down.

The other author is the well-known Dr. A. P. Coleman of the University of Toronto. Both these scientists have devoted a great deal of time to the study of the nickel range.

Sudbury is not as unique as Cobalt. It has counterparts, not on a smaller scale, in other parts of the world, still it has features of its own and its ore bodies are so large they furnish three-fourths of the nickel now consumed in the world.

Discovery of Ore. The development, and, to some extent, the discovery of the nickel range are largely due to the construction of the Canadian Pacific Railway. At first it was not intended to lay the steel around the north shore of Lake Superior, but in 1883 the road was under construction from Pembroke to Sault Ste. Marie, Ont., via the present route of Sudbury. One day in that historic year, McNaughton, the stipendiary magistrate for the district, was lost on the adjacent shore of the lake on a hunting trip. A search party, headed by Dr. Howie, eventually found him seated on a small eminence, which then marked the site of what is now known as the Murray Mine, situated about four miles west of the town. Dr. Howie had some knowledge of mineralogy as well as an enquiring mind, and he at once noticed the gossan, or decomposed ore characteristic of pyrrhotite, which, when analyzed, was found to contain 60.4 per cent. They, however, overlooked the fact that it was of any value. The large percentage of iron rendered it useless as an iron ore and prior to that time less than 1/2 per cent. of nickel had been found in one of this description. It was fairly common in several parts of Canada.

Turned Aside. Selwyn, who thought that nothing good could come out of the Canadian Nazareth anyway, he turned aside from the path of glory and of usefulness in the nickel range. The geological conditions present at the Murray mine, pyrrhotite by itself had little value, which was not obtained sulphides of nickel and copper due to the unusual character of the country rock. It looked like diorite, but it also contained what is now known as the Murray Mine, which is therefore described as norite, and it has since been proved that pyrrhotite in this formation usually carries payable percentages of nickel and copper.

The following year, however, the C. P. R. changed its route and started out boldly westward by way of the north shore of the great lake. The roadbed was soon blasted thru the "eminence" on which McNaughton had been found, thus disclosing more fully the character of the deposit and eventually this, and other mines, were taken up by copper.

In his monograph on the region Dr. Coleman states that the first important mining was done in 1885 at Copper Cliff, Ont., and until 3000 tons were shipped to Constance Hook for treatment the presence of nickel was not suspected in Canada and the United States there are many instances of valuable minerals finding places on the waste dumps, and even this is true of the nickel industry and possibly Cobalt and Porcupine would still be unknown.

For its outlay on railways the country has been repaid a hundred fold. We have in Ontario alone three great mining fields and the output to date from Sudbury or Cobalt would build the C. P. R. from Montreal to Vancouver and the T. & N. O. Railway from North Bay to Cochrane.

The apathy of Canadians has long been the subject of comment. Again, and yet again, they have failed to grasp great opportunities. Heretofore the world has been getting the bulk of its platinum from the placers in the Ural Mountains and this notwithstanding the fact that the richest ore of platinum and palladium ever found occur in the Sudbury district. At page 14 of Dr. Coleman's monograph it is stated that ore from the Vermilion Mine carried a minimum of six ounces of platinum and eight ounces of palladium, worth, at present prices, over \$1000 per ton of ore, and yet no special effort is being made to mine for these rare and valuable metals and large quantities of sulphur are wasted yearly, while the iron in the form of slag from the blast furnaces is used as road metal.

The Sudbury ores are rather complex and there are difficulties in recovering all valuable elements. But I hope that the future will bring a better use of our great natural riches. Another factor in the nickel more fully with conditions on the nickel range, which is now engaging no much public attention.

PRICE OF SILVER

LONDON, Sept. 27.—Bar silver is unchanged at 32 1/2-1/4. NEW YORK, Sept. 27.—Commercial bar silver is unchanged at 69 1/2.



Showing headframe and plant of West Dome Consolidated Mine.

ANOTHER GOOD VEIN UNCOVERED ON NEWRAY

Fourth Vein, Showing Free Gold, Picked Up in Month Near Hanson Vein.

By Special Correspondent. TIMMINS, Sept. 25.—Another vein displaying free gold has been uncovered on the Newray, the fourth since operations were resumed three months ago on this property. The find was made toward the close of last week, and there has not been time enough as yet to perform work permitting a comprehensive estimate of its worth. The vein looks very handsome, five feet of quartz has been exposed, splashes of gold show up and it was not hard to secure some startling samples to send to Toronto.

The latest discovery lies between the Hanson vein and the mill, in an area of highly promising formation that holds all the Newray's greatest discoveries. It is 40 feet away from the spectacular find of a month ago, and therefore in a position where it can be quickly picked up by crosscutting from the underground levels. From an examination of the ground the conclusion is drawn that still more veins will be picked up in the area mentioned, either on the surface or below. Manager Charles is concentrating his work in a spot already proven to contain as fine ore bodies as could be wished, and just as rich in possibilities. Diamond drill hole No. 3 is reaching toward the good stuff now, being down 200 feet and headed for the ore bodies that surface work has shown exist. Some quartz stringers, in a dip of 15 degrees, have been encountered lately, indicating that the drill bit is close to a wide vein.

MERGING OF INTERESTS ADJOINING HOLLINGER

Inspiration Gold Mines Co. Formed to Open Up Property Well Located.

After years of holding and turning down of large cash offers, the original stakers of the 120 acres directly adjoining Hollinger Consolidated, the Inspiration Gold Mines Co. has been formed. The company will be known as Inspiration Gold Mines, Limited, of Porcupine, with an authorized capital of \$2,000,000, divided into 2,000,000 shares of a par value of \$1 each, of which 1,000,000 shares remain in the newly-formed company's treasury.

A decision was reached last night by the syndicate to underwrite a block of treasury stock to start active development of the properties without delay. The purchase of the right vein opened up in this section of the Porcupine camp indicates the main vein system from the famous Hollinger. The Inspiration is in the north-easterly direction. Engineers conversant with geological conditions of Porcupine have held the opinion that 120 acres is the most ideally located property yet undeveloped in this rapidly growing gold camp. R. L. Shillington and Charles Richardson, the original owners, were content to bide their time with the knowledge of holding such a valuable property immediately adjoining the proven richest quartz gold mine in the world.

Only sufficient surface development has been done to obtain a patent from the crown, but in this limited work several veins of greatest promise have been uncovered, as well as outcroppings, showing high mineralization. The response for the formation of stock offering in this company practically ensure a rapid absorption of the limited amount to be issued.

KERR LAKE REPORT TO SHOW BIG CASH ASSETS

Reliable Report Says Ore Reserves Are Undiminished.

COBALT, Sept. 27.—From evidence that can be relied upon, it is learned that Kerr Lake Mining Company's report for the fiscal year, ending August 31, will show cash and cash assets of a million dollars, and ore reserves undiminished from this date last year.

The past year's production will approximate 2,500,000 ounces of silver, and make a high record since 1910-11, when production was 2,388,420 ounces. At Aug. 31, last year, the estimation of ore reserves was 4,172,000 ounces. Since it shipped one of early shipments of the camp, a car of high grade in the fall of 1905, Kerr Lake has produced \$10,000,000 in silver, and paid out two-thirds that sum in dividends, or over double its capital.

Pete Lake Find is Of Great Importance

A wire from Cobalt yesterday, to a local broker, stated that the new find on Peterson Lake was highly important and the best ever made on the property. Some ore taken from the new vein assays as high as 7000 ounces of silver to the ton. At the company's office here, the report of a strike is admitted, but definite information has not yet been obtained from the mine.

THE PARIS BOURSE.

PARIS, Sept. 27.—Trading was quiet on the bourse today. Three per cent. rentes, 62 francs, 30 centimes for cash. Exchange on London, 47 francs, 30 centimes.

SOME FIRM SPOTS IN IRREGULAR MARKET

Gains Made by Newer Issues—Market Leaders Have Reaction.

The mining market yesterday displayed an irregular tendency, with recession in various parts of the list. On the other hand, there were one or two firm spots, notably Davidson, which sold to 48 1-4 with this figure bid on the close. Lorrain advanced to 49 and Vacuum Gas, another of the new ones, was 37 1-2 bid.

The Cobalt market was very active, but after advancing to 31-2, eased off to 27. West Dome Consolidated was inactive at 38. Also silver was steady at 89 1-4. The Porcupine list showed a slightly reactionary trend. Beaver went back a little to 45 1-2 and Timiskaming eased off to 64 1-2. Peterson Lake closed lower at 34-2, eased off to 34, firming up a little to 35.50.

BUYING LORRAIN ON REPORT OF RICH FIND

Property Adjacent to Lorrain Runs Into Big Vein of High Grade.

Special Correspondent. COBALT, Sept. 27.—The biggest and richest vein has been made in South Lorrain. Belle Ellen has struck high grade that will assay 2000 ounces to the ton, and which is seven to eight inches wide. Silver was first encountered at 280 feet in winze, at 235 the rich strike was made. Values are consistent over wide intervals. Find was made by the main vein which runs into Lorrain Consolidated, and accounts for north country buying last week. The price of Lorrain shares advanced to 48 1-2, and is now 49 1-2.

The above wire, received yesterday, accounts somewhat for the sharp rise in Lorrain. Inspiration is in the north-easterly direction. Engineers conversant with geological conditions of Porcupine have held the opinion that 120 acres is the most ideally located property yet undeveloped in this rapidly growing gold camp. R. L. Shillington and Charles Richardson, the original owners, were content to bide their time with the knowledge of holding such a valuable property immediately adjoining the proven richest quartz gold mine in the world.

Sensational Surface Showings at Newray

The following wire was received by The Toronto Star yesterday: "PORCUPINE, Sept. 26.—Work at Newray demonstrates the growing possibilities of the property. The shaft on Hanson vein is now down 25 feet and free gold shows abundantly. The Anchor vein is parallel to the Hanson and is a big, wide vein with spectacular showings and assay returns. Panning on this vein invariably brings coarse nuggets of free gold, and a big outcrop of quartz a short distance southwest of the Hanson vein suggests another Dome and a quarrying proposition.

Work on the main shaft will open up both these veins at the 200 and the 400-foot levels. The mine and mill equipment are being overhauled and work on the underground levels will soon start.

The surface discoveries have been sensational and the location of the new find is ideal, as they lie close to the main shaft, and the old workings and their value can be so quickly proven.

Strike at Kowkash

COBALT, Sept. 27.—Men just back report a vein 20 feet wide and which pans gold found on claims adjacent to the King Dods original claims at Kowkash. The Tashorn Company has gone on the two claims a quarter-mile east of King Dods looking for discovery vein. Gold has been found in the claims, and the Tashorn Company declare will be vigorously worked this winter.

A big compressor and other machinery is being set up on Wells' claims at Tashorn.

MAPLE LEAF FEATURES THE TORONTO MARKET

Milling Stocks Strong on Advance of Four Points—Brazilian Suffering From Liquidation.

The upward movement in the Toronto stock market is by no means regular, and the only really strong issue yesterday was Maple Leaf, which made a new record at 108. The opening price was 104, a point advance from the previous day, and the quotation made a steady all-day climb. Nothing new has come out in connection with the company, and it is thought that Maple Leaf is doing well with other milling concerns. Dealings in other listed issues were not large, and any price changes were quite narrow. Brazilian was the only really weak issue, with sales below 57. There has been a steady stream of liquidation in these shares for some time, and no reason has been assigned for the selling. Steels were steadily bought without any attempt to force the price. Steamships took on a new activity, but this had little effect upon the price. The market closed with a good undertone, but without much evidence of what would be accepted as real buoyancy.

STANDARD STOCK EXCHANGE.

	Ask.	Bid.
Porcupine	38	38
Apex	8 1/2	8 1/2
Dome Lake	36	36
Dome Mine	11	10 1/2
Consolidated	11	10 1/2
Poley	71	71
Gold Reef	1 1/4	1 1/4
Deals	7.00	6.81
Homesake	42	42
Jupiter	29	28
Porcupine Imperial	145	144
Porcupine Bonanza	16	15 1/2
Porcupine Tidal	2	2 1/2
Porcupine	42	42
Preston	47	47
Schumacher Gold M.	30	30
Teck	37 1/2	37
McIntyre	42	42
McIntyre Extension	42	42
Moneta	18	17 1/2
Porcupine Crown	73	70
Porcupine Gold	7 1/2	7 1/2
Porcupine	3 1/2	3 1/2
Porcupine Bonanza	16	15 1/2
Porcupine Tidal	2	2 1/2
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