INCREASING OUTPUT OF ONTARIO'S MINES

Silver is Exception and Shows Considerable Decline— Labor Scarcity and High Operating Costs Noticeable

The returns from metalliferous mines and works of Ontario have been collected by the Ontario bureau of mines for the three months ending March 31st, 1917, and are given below. It will be seen that most items show a considerable increase, with the notable exception of silver:—

Summary of Metalliferous Production, First Quarter of 1917.

| Product. | Quantity. | | Value. |
|------------------------------|-----------|-----------|-------------|
| | 1916. | 1917. | 1917. |
| Gold (ounces) | 107,818 | 127,692 | \$2,601,760 |
| Silver (ounces) | 5,297,831 | 3,945,957 | 2.831,873 |
| Cobalt, metallic (lbs.) | 36,460 | 84,710 | 78,668 |
| Cobalt oxide (lbs.) | | 83,014 | 66,798 |
| Nickel oxide (lbs.) | | 5,495 | 550 |
| Other Cobalt and Nickel com- | | | |
| pounds (lbs.) | + | 118,292 | 13,695 |
| Nickel, metallic (lbs.) | 11,976 | | |
| Nickel in matte (tons) | 10,032 | 10,141 | 5,070,410 |
| Copper in matte (tons) | 5,491 | 5,063 | 2,025,227 |
| Copper ore (tons) | | 1,507 | 44,097 |
| Iron ore (tons) | 6,573 | 52,694 | 94,718 |
| Pig iron (tons) | 160,749 | 163,020 | 2,743,441 |
| Molybdenite concentrates | | | |
| (lbs.) | | 25,073 | 32,202 |
| Lead (lbs.) | | 263,046 | 27,290 |
| | | | |

Cold and Silver.

Despite the scarcity of labor and high cost of operating gold properties, the production of the northern Ontario gold mines has increased by 18 per cent. over the corresponding period of 1916. Of the nine producing mines the Hollinger, Dome and McIntyre output amounted, respectively, to \$1,315,-034, \$528,787 and \$425,408. Other producers in order were Porcupine Crown, Tough-Oakes, Schumacher, Vipond-North Thompson, Croesus and Dome Lake. The Teck-Hughes mill is now in operation, and precipitates are being shipped to the Buffalo mill at Cobalt until the local refinery is completed. All the above-mentioned mines are located at Porcupine, with the exception of the Tough-Oakes and Teck-Hughes at Kirkland Lake, and the Croesus in Munro township. In addition to gold, 20,465 ounces of silver, worth \$15,321, were recovered from auriferous ores.

A considerable decline in the production of silver is evidenced in the figures presented for the quarter as compared with the first three months of 1916. Deducting silver recovered from gold and copper ores, the total production from Cobalt and Gowganda amounted to 3,924,849 ounces, valued at \$2,816,001. Twenty mines contributed to this total. Those shipping one-quarter million ounces or over are named in order: Townsite City, Kerr Lake, O'Brien, La Rose and Coniagas. Production of bullion by the Nipissing Mine exceeded shipments by 636,182 ounces valued at \$481,438. As this company usually ships to London, no doubt the increase in ocean insurance rates has deterred marketing the entire output. Flotation methods are now in use at several of the mines for recovering silver from tailings dumps. For example, at the Buffalo, 5,444 tons of ore and 21,370 tons of tailings were concentrated. The average New York price of silver for the quarter was 75.69 cents, low 71.75 and high 78.64 cents per fine ounce.

At Delora, Thorold and Welland the refineries treated 1,109 tons of ore and 341 tons of residues from the silver camps. A total of 1,676,617 ounces of silver worth \$1,045,-246 was recovered. In addition, 847,101 lbs. of cobalt metal was marketed, 25,998 lbs. of which was in the form of stellite, a high speed tool "steel" much used in munitions work. Cobalt and nickel in the form of oxides and other compounds add to the total output of the refineries.

Nickel and Copper.

Smelters at Copper Cliff and Coniston continue operating at the same high rate as last year. For the quarter year 18,905 tons of nickel-copper matter were produced, as compared with 80,010 tons for the year 1916. Ore smelted for the period was 358,961 tons. As a basis of valuation nickel and copper in the matte have been placed at 25 and 20 cents respectively, or the same price as in 1916 for nickel, but an

advance of 1½ cents per pound for copper. Construction of the new refinery of the International Nickel Company at Port

Colborne is proceeding.

The prevailing high prices obtaining have stimulated copper mining, despite labor scarcity and high operating costs. A new shipper of chalcocite is the Hudson Copper Company at Havilah, near Bruce Mines, Algoma district. The main shipper was S. V. Ray, who is operating the Tip Top Mine at Kashabowie, west of Port Arthur. At Mine Centre, Rainy River district, a concentrator is being built by the Connell-Hewitson interests. In the meantime, shipments to Trail smelter have ceased. The concentrating mill and flotation plant of the Kenyon Copper Mines at Massey is being overhauled and shipments will be made in the near future.

Smelting Ontario Iron.

Iron ore from the Helen and Magpie mines which are operated by the Algoma Steel Corporation, was shipped to Ontario blast furnaces. No iron ore was exported. The Algoma Steel Corporation, Canadian Furnace Company and Steel Company of Canada smelted 50,838 tons of Ontario ore and 256,395 tons of foreign ore producing 163,020 tons of pig iron, of which 118,508 tons were used in steel making. Good progress is being made by Imperial Forgings, Limited, on the new electric steel and forging plant located in the Toronto harbor industrial area. It is expected to be ready for operation in July.

Ferro-Molybdenum.

The production of molybdenite for the quarter is greatly in excess of that for the entire year 1916. Concentrators treating Ontario ore are operated by the Renfrew Molybdenum Mines, Limited, at Mount St. Patrick, the International Molybdenum Company at Renfrew, and the Mines Branch, Ottawa. In addition, refineries in operation at Belleville and Orillia produced 41,967 lbs. of ferro-molybdenum valued at \$98,513.

The entire production of lead came from Galetta, Carleton county, where the James Robertson Estate is operating both mine and smelter. A shipment was made from the Frontenac mine by the Indian Lake Lead Mining Company to the King-

ston Smelting Company, but was not treated.

LIVE STOCK IN CANADA

For the twelve months ending February, the value of animal produce exported was \$121,612,208, an increase of 22 per cent. as compared with the corresponding period ending February, 1916, and 130 per cent. as compared with that ending February, 1914. These exports formerly averaged over \$50,000,000 annually, and as far back as 1903 reached \$69,817,542. From that year, however, a steady decline set in until 1913, when the value had fallen to \$44,784,593. The decline was due in a measure to the increase in domestic consumption, but there should be a continued expansion over the average of pre-war times if the present interest in raising live stock is maintained. The prevailing high prices and the anticipation of good prices for some years to come are giving a great impetus to the industry. In Winnipeg last month steers sold at \$10 per hundred weight as compared with \$8 a year ago, hogs at \$15.50, as compared with \$10.95, while eggs, milk and cream show proportionate advances.

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While there are no signs as yet of any decline in the value of the animal produce exported, there is an evident falling off in the number of live stock in the Dominion. In the year 1913 the estimated number of cattle other than milch cows was 3,915,687, and in 1916 only 3,313,519, a decline of 15.4 per cent. Milch cows declined in numbers during the same period from 2,740,434 to 2,603,345, or by about 5 per cent. Swine and sheep also decreased in number. In Eastern Canada the raising of sheep has suffered from lack of co-operation among the breeders, but they are now working together with a view to removing the obstacles to the success of the industry. Except in the case of swine, there has been no decrease in the live-stock in the western provinces, where, despite shipments fully up to the average, the number of live stock on the farms continues to show a fair increase. The movement mentioned in a previous letter, to retain young stock for breeding purposes, is receiving decided encouragement from the provincial governments as well as from the bankers.—Monthly letter of the Canadian Bank of Commerce.

The number of directors of the Sawyer-Massey Company, Limited, has been increased from seven to nine.