

CANADA'S NICKEL PRODUCTION

Sudbury District Furnishes Large Output of Nickel—
Statistics for 1916

The production of nickel in 1916 has, as usual, been derived from the ores of the Sudbury district supplemented by the recovery of a small quantity of metallic nickel, nickel oxide and other nickel salts as by-products in the treatment of ores from the silver-cobalt-nickel ores of the Cobalt district. The total production was 82,958,564 pounds which at 35 cents per pound would have a total value of \$29,035,497. The total production in 1915 was 68,308,657 pounds showing an increase in 1916 of 14,649,907 pounds, or 21.5 per cent.

The nickel-copper ore, derived from 9 separate mines in the Sudbury district supplemented by a small tonnage of similar ores from the Alexo mine in Timiskaming, is reduced in smelters and converters at Copper Cliff and Coniston to a Bessemer matte containing from 77 to 82 per cent. of the combined metals and shipped in that form to Great Britain and the United States for refining, the product of the Canadian Copper Company going to New Jersey and that of the Mond Nickel Company to Wales. A refinery is now under construction at Port Colborne, Ont., by the International Nickel Company, in which a portion of the matte produced by the Canadian Copper Company will be refined.

Big Corporation Develops Industry.

Although not shipping during the year the British-America Nickel Corporation, Ltd., has been actively engaged in the development of its nickel properties in the Sudbury district and in the erection of a smelter. The total production of matte in 1916 was 80,010 tons, containing 44,859,321 pounds of copper and 82,596,862 pounds of nickel. The tonnage of ore smelted (part being previously roasted) was 1,521,689 tons. The production in 1915 was 67,703 tons of matte containing 39,216,165 pounds of copper and 68,077,823 pounds of nickel.

Nickel was recovered as a by-product in smelters at Deloro, Thorold and Welland, from the silver-cobalt-nickel ores of the Cobalt district, the total nickel contents of nickel oxide, nickel sulphate and metallic nickel produced being 361,701 pounds. The products recovered included 79,360 pounds of metallic nickel; 323,418 pounds of nickel oxide and 232,450 pounds of nickel sulphate having a total reported value of \$132,896. The recovery from these ores in 1914 was 231,634 pounds of nickel.

The exports of nickel in ore matte or other form are reported by the customs department as 80,441,700 pounds valued at \$8,622,179, or an average of 10.77 cents per pound, of which about 83 per cent. were exported to the United States.

Imports 72,611,492 lbs. into United States.

The imports of nickel into the United States during 1916 which included small quantities from other sources as well as from Canada are recorded as 72,611,492 pounds contained in ore, matte, or other form valued at \$9,889,122, or an average of 13 cents per pound. The exports of nickel and nickel oxide, etc., were 33,404,011 pounds valued at \$12,952,493, or an average of 38 cents per pound, of which about 50 per cent. were consigned to Great Britain and 40 per cent. to France, Italy and Russia in Europe. The United Kingdom, it will be observed, has continued to receive through United States refineries a much larger quantity of nickel than is exported directly from Canada to Great Britain. The published records do not show the details "To other countries" for 1916, but a large portion of the 2,906,665 pounds thus exported went to Russia in Asia with smaller quantities to Norway, Sweden and Spain, etc. The value of the exports in 1916 ranged from 37 cents to 45 cents per pound. The average values of the exports in 1915 to different countries ranged from 35 cents to 43 cents per pound, the total average being 38 cents per pound. The total average value in 1914 was 34 cents with a range of from 32 to 38 cents per pound.

Production of Refined Nickel.

The price of refined nickel in New York according to quotations published by the Engineering and Mining Journal remained throughout the year at from 45 to 50 cents per pound for ordinary forms with 5 cents more per pound asked for electrolytic nickel. The following table shows the production of nickel by smelters in the Sudbury district, the exports from

Canada and United States records of imports and exports, for the past three years:—

Production of nickel in Canada:

	1914. Tons.*	1915. Tons.*	1916. Tons.*
Ore mined	1,000,364	1,364,048	1,566,333
Ore smelted	947,053	1,272,283	1,521,689
Bessemer matte produced	46,396	67,703	80,010
Copper content of matte ..	14,448	19,608	22,450
Nickel content of matte ..	22,759	34,039	41,298
Spot value of matte	\$7,189,031	\$10,352,344

Exports of nickel from Canada:

	1914. Lbs.	1915. Lbs.	1916. Lbs.
Nickel contained in matte, etc.—			
Exported to Great Britain	10,291,979	13,748,000	11,136,900
Exported to United States	36,015,642	52,662,400	69,304,800
Exported to other countries	220,706
	46,538,327	66,410,400	80,441,700

Imports of nickel into United States:

	1914.	1915.	1916.
Gross tons of ore & matte	29,564	45,798	59,741
Nickel contents (lbs.) ...	35,006,700	56,352,582	72,611,492

Exports of nickel from United States:

	Lbs.	Lbs.	Lbs.
To France	3,457,157	3,018,354	2,823,132
To Italy	2,715,521
To Netherlands	855,168	129,557	516,331
To Russia in Europe	7,767,875
To United Kingdom	10,836,360	14,801,565	16,674,487
To other countries	12,446,458	8,469,074	2,906,665
Totals	27,595,152	26,418,550	33,404,011

*In tons of 2,000 lbs.

FIRE INSURANCE INVESTIGATION

Deputy Fire Marshal Lewis, of Toronto, presided at an inquiry at Hamilton to ascertain the cause of the destruction by fire on August 18th, 1917, of a stable and two horses on the premises of 271 Bay Street North. The stable and one of the horses belonged to Meola Giglia, the other horse being owned by Joseph Seime, 260 Bay Street North, who said he paid \$130 for his horse and had it insured for \$200. The barn was insured for \$400. Fire Chief TenEyck, after a careful inquiry, decided that the fire should be investigated, basing his opinion on the fact that the barn and horses were insured for amounts considerably in excess of real values.

OUR FISHING INDUSTRY

The run of sockeyes on the Fraser River, British Columbia, this year, has been a disappointment, and it is expected that the pack will be very little, if at all, in excess of that of 1916, and, of course, below that of the corresponding year in the quadrennial cycle. It is impossible at this date to give any figures, but as an indication of the scarcity of this class of fish it may be stated that the cannery have been paying 55 cents per sockeye, the highest price on record. Reports of the catch of codfish in Newfoundland waters continue favorable, and the price paid for the fish so far delivered is from \$9 to \$10 per quintal. There is as yet no relief in sight with regard to shipping facilities, but the government has the matter in hand, and will, it is hoped, succeed in making suitable arrangements. Exporters are disinclined to buy at present prices, and it is impossible to forecast what the situation will be during the next two months.

At St. John, N.B., cod and hake are scarce and prices high. A heavy run of sardines late in the season recently resulted in reducing the price per hoghead from \$40 to \$20 in one day.—Canadian Bank of Commerce monthly commercial letter.