

**REPORT OF ONTARIO NICKEL COMMISSION.**

The Royal Ontario Nickel Commission, appointed by the Ontario Government on the 9th September, 1915, to investigate the resources, industries and capacities of Ontario in connection with nickel and its ores, has presented its report. The Commissioners are Geo. T. Holloway, Associate of the Royal College of Science, London, and Vice-President of the Institution of Mining and Metallurgy, an English metallurgical expert of high repute; Dr. W. G. Miller, Provincial Geologist, and McGregor Young, K.C., a well-known barrister of Toronto. Thomas W. Gibson, Deputy Minister of Mines, acted as Secretary.

After references to the various countries they visited, including the United States, Great Britain, France, Norway, Cuba, Australia and New Caledonia, and to numerous mines, works, plants, smelters, etc., on this side of the Atlantic and on the other, and also to their interviews and conversations with Mr. Bonar Law, then Secretary of State for the Colonies, and other British Government officials, the Commissioners go on to say:

"The two questions that have been uppermost in the numerous discussions that have taken place concerning Ontario's nickel industry during the last twenty-five years, are: (1) Can nickel be economically refined in Ontario, and (2) Are the nickel deposits of Ontario of such a character that this province can compete successfully as a nickel producer with any other country. It will be seen that the Commissioners have no hesitation in answering both of these questions in the affirmative."

The Report goes on to state that the Commissioners are of the opinion:

"(1) The nickel ore deposits of Ontario are much more extensive and offer better facilities for the production of nickel at a low cost than do those of any other country. Nickel-bearing ores occur in many parts of the world, but the great extent of the deposits in this Province, their richness and uniformity in metal contents, and the success of the industry, point strongly to the conclusion that Ontario nickel has little to fear from competition.

(2) Any of the processes now in use for refining nickel could be successfully worked in Ontario, and conditions and facilities are at least as good in this Province as in any other part of Canada.

(3) In view of the fact that practically no chemicals are required, that there is a much more complete saving of the precious metals, especially platinum and palladium, and that electric power is cheap and abundant, the most satisfactory method of refining in Ontario will be the electrolytic.

(4) The refining of nickel in Ontario will not only benefit the nickel industry, but will promote the welfare of existing branches of the chemical and metallurgical industries, and lead to the introduction of others.

(5) The methods employed at the Ontario plants of the two operating nickel companies are modern and efficient, although there are differences in both mining and smelting practice. It is the consistent policy of both companies to adopt all modern improvements in plant or treatment. Even during the present time of acute pressure the Canadian Copper Company has materially increased its output without substantial enlargement of its plant, and the losses in smelting are less, both at Copper Cliff and the Mond plant at Coniston, than they were a year ago.

These companies have each had their experimental stage, neither has asked nor received any government assistance, and both have earned the success which they have achieved.

(6) The present system of mining taxation in Ontario is just and equitable and in the public interest, and is the best system for this Province. Any question of change is rather one of rate than of principle. This important question is dealt with at some length in Chapter XII.

Experiments have been undertaken by the Commission in the production of nickel-copper steel direct from Sudbury ore, and also in the electrolytic refining of nickel. Certain improvements in the latter process have been made the subject of application on behalf of the Government of Ontario for patents in Canada, United States and Great Britain."

The Commissioners are gratified at the assured prospect of the erection in Ontario of two large plants for the refining of nickel; one by the International Nickel Company of Canada, Limited, at Port Colborne, and the other by the British America Nickel Corporation, Limited, probably at Sudbury, if a supply of electric power can there be obtained.

There is reason to believe that the cost of refining in the International Nickel Company's new plant at Port Colborne will be less than at their existing works in New Jersey; and if so, the natural tendency will be to enlarge the refining capacity in Ontario from time to time. Provision for doubling or even quadrupling the initial output of 7,500 tons has been made in planning the refinery.

The question of a market for nickel ore or low grade or other matte by small producers, has received the attention of the Commissioners. Little ore is being mined at present, except by the large companies. Representatives of the British America Corporation have expressed their desire to discuss the subject of custom smelting and refining with the government. An arrangement for custom smelting and refining with this corporation, in which the British Government has a controlling interest, should serve all the needs that may arise.

The suggestion has been made that government ownership would solve many of the questions which have been raised in connection with these deposits. To appropriate the deposits and plants of the Sudbury nickel area would, judging from sales of company shares, probably cost not less than \$100,000,000. This is a sum approximately equal to the total paid-up capital stock of all the chartered banks in Canada. There does not seem to be any good reason why the people of Ontario should be asked to adventure so large a sum of money as would be required for the purchase of the nickel deposits and plants.

There is no certainty that large profits can be made every year from the nickel industry. The present activity is in part due to well understood causes, which it is to be hoped will never recur. In the past the output has had to be curtailed at times. If the price of nickel should fall, profits will naturally decrease. The nickel industry is to a considerable extent dependent for its success on the highly trained and specialized technical men who superintend it, and who command salaries far beyond those which are paid in the government service to the most highly placed employees. Besides, nickel is not a necessity of life nor an article of universal consumption or use, and the nickel business is in no way comparable to those connected with the operation of public utilities, where government ownership may be beneficial or expedient.