

drawn to the fact, and can be depended upon to use effectively any powers it has to stop that contraband traffic. As it is, no nickel produced from Canadian ores can be going forward to enemy countries except in disregard of the Canadian Government's authority. By an order-in-Council passed and brought into force several weeks ago, the Government prohibits the exportation of Canadian nickel to any but friendly countries, and an arrangement for checking exports from United States refineries using our matte is being carefully carried out by Canadian Government officials.

"If nickel of Canadian origin continues to reach Germany despite this prohibition, and these precautions, then the Government cannot refrain from the thoroughgoing course of completely barring the exportation of nickel ore, matte and refined metal to any country save the United Kingdom. That would be an effective and simple way of eliminating the risk of the enemy's getting any benefit of our nickel resources. By adopting that course our Government could assure itself as to the destination of every pound of the product of our nickel mines that is shipped out of the country. The moment that exports get beyond our Government's control the danger of diversion from the markets of friendly countries to those of the enemy becomes hard to guard against. No matter how good the faith of United States refiners may be, they cannot be expected to guarantee against mischances and smuggling on the part of carriers or dealers in whose honor they have to trust. By restricting nickel exportation to accredited persons or firms in the United Kingdom, our Government would not only baffle German bargainers, but it would save the British Government much trouble and spare it much friction with neutral Governments. If no Canadian nickel ore or matte were allowed to enter the United States, there would be no chance of United States merchant vessels engaging in a contraband trade in Canadian nickel. There would then be no need for British warships to halt United States merchant ships for the purpose of ascertaining whether or not they were carrying Canadian nickel to the enemy. Hence, there would be no hazarding of the good relations between Britain and the United States on that account. By prohibiting nickel exports to foreign countries we can best stand by Britain in the premises."

The Mail and Empire is correct in stating that to completely bar the export of nickel ore, matte and refined metal to any country save the United Kingdom would be an effective and simple way of eliminating the risk of the enemy's getting any benefit of our nickel resources. But, like the Toronto Star, the Mail and Empire seems blind to the fact that most, if not all, of our present trade is with friendly countries, and the Mail and Empire does not offer any evidence that Canadian nickel is reaching the enemy.

In the same editorial we find the following:

"At the present time the naval construction yards and armament works of Germany are being operated

to their maximum capacity. The shipbuilders, the ship armorers, the manufacturers of big guns for Dreadnoughts and super-Dreadnoughts are straining every nerve to add to Germany's naval strength. Construction is being accelerated at a headlong rate, so that when the time for fighting comes Germany's line of battle will be as formidable as it can be made. For every ounce of nickel it can buy the German Government is now prepared to pay double or treble the market price. Nothing this Government can do to keep Canadian nickel out of Germany's reach should be left undone."

Does the Mail and Empire imagine that activity in construction is confined to Germany. If the Allies and neutral countries found it necessary to buy nickel before the war, do they not need nickel now. Are they so frightened of Germany that they are willing to do without what they want in order to prevent any possibility, and it is a mere possibility, of Germany obtaining nickel from the same source.

## REFINING NICKEL IN CANADA

The Toronto Star asks, "How long would it take to establish a nickel refinery in Canada." We regret to be unable to give a very satisfactory estimate. Nickel refineries are not common, and those in existence are the result of many years' growth. We might expect an experienced company to be able to erect a plant in a few months. How much longer it would take to "establish" it we cannot venture to guess.

We suppose the Star has in mind a refinery which can be economically operated. Such a plant was very much desired by the Canadian Copper Company before that company was merged with the Orford and other companies in the formation of the International Nickel Co. Back in 1889 Dr. Peters, the company's metallurgist at that time, proposed a refinery at Cape Breton, where supplies could be more cheaply assembled than in Ontario. After some study of conditions the proposal was dropped. Then in 1890 the Canadian Copper Company retained Jules Garnier to do his utmost to solve the refinery problem. Mr. Garnier's experiments cost \$150,000, and the results were unsatisfactory.

Later a plant was erected at Hamilton by the Hoepfner Refining Co. This attempt also failed.

In 1895 the Canadian Copper Co., still anxious to establish a refinery in Canada, sent its metallurgist to Wales to study the Mond process. This, after a year's study, was not thought suitable for a local establishment, however. The process is being now satisfactorily used by the Mond Nickel Co., but not in Canada. Both companies were evidently of the opinion that the Mond process could not be economically successful if the refinery were located here.

There is no doubt whatever that nickel can be refined in Canada, and we sincerely hope that in the near future it will be. Up to the present, however, the In-