population and a larger commerce. That is something which ought to inspire confidence in the future; for adequate transportation lies at the foundation of national growth. We may face the momentous new year without misgivings on that score.

UNITED STATES FACTORIES FOR CANADA

Many More Will Probably Come After the War—Our Location is Favorable

By F. M. SCLANDERS, F.R.G.S.

Here, at the southern extremity of Canada, our long peninsular protrudes wedgelike into the United States. On all sides, save the north, we are embraced by American territory. On our west, we have Michigan; on our south, Ohio; and, on our east, Pennsylvania and New York. Our geographical location probably accounts for the ignorance of many of our own people elsewhere as to what is happening here, at these border cities of Ford, Walkerville, Windsor, Sandwich and Ojibway. We are deemed to be somewhat beyond the beaten track of things. This is apparently accepted as a handicap to any material development. Consequently, it seems instinctively reasonable to classify us along with those points which remain the same yesterday, to-day and forever.

However, a little thought may convince that instead of a serious handicap, our location is really an exceedingly valuable advantage. Obviously, the further south we are, the closer are we to many of the most important industrial centres of a great country of over one hundred million people of extraordinary national genius and amazing enterprise. For, it is to the United States that we must look for our industrial expansion; and, we are not looking in vain. Within the past three months, eight manufacturing concerns have concluded negotiations to establish here; several of them are here already.

"Made in Canada."

The Americans know us better than do our own people. This is indicated by the fact that our development of recent years will compare most favorably with that of the most progressive points in the Dominion.

The existence of the war does not appear to dampen the ambition of the American manufacturer for a Canadian branch. In many instances, it would seem to be the reverse. These far-sighted people to our south know that war cannot last indefinitely. They are confident that matters will take an emphatic turn for the better after the active advent of a large United States army at the front. They are looking well ahead; and one thing they certainly do recognize is, that after the war, that little trinity of simply words, "Made in Canada," is destined to prove the most potent selling slogan that ever paved the path to great commercial possibilities. The American knows that these little words are no longer a mere designation of origin. He realizes that they have now acquired a world-significance deeper and more potent than centuries of conscientious commerce ever could have induced; and that behind them stand the magnificent record and the supreme sacrifice of this young country in the cause of world freedom.

Canadian Branch Factories.

The astute American wants to come to Canada. At the same time, he does not wish to go too far from his United States headquarters. Our location suits him admirably. We are only one hour-and-fifty minutes train journey from Toledo, four hours-and-five minutes from Grand Rapids, four hours-and-forty-five minutes from Cleveland, seven hours-and-fifty-three minutes from Chicago, etc., etc. Therefore, with one set of highly paid executive brains, the American can also operate a Canadian branch factory here, where we are surrounded on all sides save the north, by American territory. Hence the outstanding value, and not the detriment, of our location.

However, the essential object of this article is to point to the most definite movement of American industries toward Canada. Even in passing on the trains through Michigan, Wisconsin and other neighboring States, it would almost seem that, at every point, industrial development stretched out like the fingers of a hand in the direction of our great country.

Everywhere I go among American manufacturers, there is the same keen, intelligent, well-informed interest in Canada and her industrial possibilities and purchasing potentialities. When I say "well informed," I speak mildly. The general knowledge of Canada possessed by the greater proportion of the high officials of large United States concerns whom I have interviewed, would do great credit to the average individual whose ancestors for several generations back, sleep in Canadian soil.

Despite the war, American industries will continue to flow into this country most encouragingly,—but, after the war, we shall experience an invasion of them. This is my whole message; my whole point.

In 1915, Canada's total imports amounted to $629,444,794. Of these, about 75 per cent. emanated from the United States Yet, on account of our tariff, most of the goods thus represented could have been more economically and more profitably manufactured in the Dominion.

I am not afraid to predict that a year or so after the war, a material proportion of the sum of our present annual imports will be added to the value of our industrial production. This desirable change will result largely from the American industrial invasion of Canada.

ONTARIO'S NICKEL RESOURCES

Metal Found in Commercial Quantities in Four Localities in Province—Value of Nickel Steel

By THOS. W. GIBSON.

The most distinctive metal produced in Ontario is nickel. There are other sources of nickel in America, Australasia and Europe, but none of the deposits are worked on so large a scale or form the basis of an industry at all comparable to that of Sudbury. The story of the discovery of nickel in this province is not devoid of romantic interest, and is related in the report of the Royal Ontario Nickel Commission, published in 1917, together with a great body of information on all other aspects of the nickel question, which for so many years occupied the public mind. The building of the Canadian Pacific Railway along the north shore of Lake Huron in 1883, laid bare a deposit of chalcopyrite, or copper ore, the exact spot being what is now known as the Murray mine. Other bodies of a similar kind were found, and mining of the ore began. On sending it to the smelters for treatment, the ore was found to be refractory, and investigation proved that the difficulties were due to the presence of nickel.

It was then realized that what had been discovered in Northern Ontario was nickel ore rather than copper ore; or, more correctly, for both metals are contained in commercial proportions, nickel-copper ore. Long before this, nickel had been detected by Alexander Murray at the Wallace mine (1848), and also on Michipicoten Island, but in very small quantities. Murray, who was the able assistant of Sir William Logan, the provincial geologist, following up a hint given him by Surveyor A. P. Salter, visited a locality about 30 miles north of Lake Huron, where Salter's compass had been greatly affected by magnetic attraction, attributed by him to iron ore in the surrounding rock. Murray found the compass variations to be due to "an immense mass of magnetic trap," specimens of which he carried away with him for analysis—by his co-worker, Sterry Hunt, afterwards one of the foremost of American chemists. The latter found these specimens to contain minute grains of magnetic iron ore, also titaniferous iron ore, iron pyrites and a small quantity of nickel and copper.

In Government Blue Books.

Salter, Murray and Hunt made their reports to the government, as was their duty, and the government in due course put them in print. All this in the year 1856; and for 30 years these precious hints lay in the government blue books unnoted and unacted on. But in 1886, the Creighton mine was discovered, which the Nickel Commission states is the "greatest nickel mine in the world," and also "one of the greatest metalliferous mines of any kind," and, on consulting Surveyor Salter's notes, it was found that Murray's "immense mass of magnetic trap," and the Creighton mine, were one and the same. The shaft of this mine is now hoisting 5,000 tons of ore per day.