

As indicating the broad-minded policy by which the affairs of the United States Geological Survey are governed, it may be noted that many of the scientific results of the survey's operations are frequently first published either in technical periodicals or in the transactions of scientific societies. The director explains in his annual report that this practice presents an opportunity for the free discussion of scientific theories and problems that otherwise would not be feasible.

MARITIME PROVINCE IRON ORES

In our last issue we noticed editorially the excellent work that was done last year by the Nova Scotia Steel & Coal Company in its Wabana mines, Bell Island, Newfoundland. The Wabana ore, as our readers are doubtless aware, is shipped to the Scotia blast furnaces at North Sydney.

Encouraging as is the progress made by the above-mentioned company, it is even more encouraging to learn that the local iron mines of New Brunswick and Nova Scotia are to produce more ore during 1913 than ever before.

For various sufficient reasons, the Torbrook and Nic-taux mines (Nova Scotia) belonging to the Canada Iron Corporation produced only 30,000 tons of washed ore. As a matter of fact, the washing plant was in commission for only two months. Its capacity is about 18,000 tons per month. It will run steadily throughout the current year. Already orders for 100,000 tons of washed ore have been booked, and there seems to be a ready market for the product, not only in Europe but in the United States.

The mines are being equipped for an output of 1,000 tons per day.*

Near Bathurst, New Brunswick, where are situated the other Maritime properties of the corporation, a similar washing plant has been erected. After the completion of the plant, 90,000 tons of washed ore were shipped, late in 1912, to United States ports. Orders for 1913 have been booked to the extent of 200,000 tons. Additional equipment will bring the plant's capacity up to 1,500 tons per day. Stripping by means of steam shovel will much facilitate this year's quarrying. Tide water docks at Newcastle are distant about seventeen miles.

The bold, though sound, development policy of the Canada Iron Corporation will enable it to place upon the market about 300,000 tons of high-grade non-phosphatic magnetite and, roughly, 200,000 tons of excellent phosphatic hematite and grey calciferous magnetite. This, of course, implies that the mines will live up to expectations. That they will do so appears assured.

This being the case, Nova Scotia and New Brunswick will immediately leap into the forefront of Canadian iron-ore producing provinces. But more than

this will follow. No enterprises of this kind are successful without bringing in their train other new concerns, together with a general increase of the country's prosperity.

MINING AND RAILWAYS

Some very illuminating facts are contained in a recent Government blue book, the Annual Report of the Department of Railways and Canals for the fiscal year ending March 31, 1912. In a tabulated statement of the principal freight carried over the Intercolonial Railway, it is observable that the direct products of the mine supply almost 33 per cent. of all the freight handled. The commodities falling into this category are as follows: Coal and coke, ore, sand, stone, salt, slate and granite, and phosphate. Petroleum, all iron products, brick, lime, and cement come under the head of manufacturers. It is a notable fact that, even with this arbitrary classification, the products of mines furnish more than any other class of freight. Manufactures yielded about 31 per cent. of the total, as against the 33 per cent. mentioned above. Products of the forest, products of agriculture, and products of animals followed in the order indicated.

Tapping a region of immense mining possibilities, there is not the least room for doubting that the Intercolonial will depend more and more largely upon the products of the mine for any rapid growth in its freight traffic. The whole situation is worthy of study.

If this argument should be supposed to require further explication, it is only necessary to add that some of the largest items under the head of manufactures are the semi-finished or finished products of smelting and metallurgical establishments.

A thorough investigation of the situation would assuredly repay any reasonable expenditure.

INTERMITTENT CYANIDATION

A short article published on another page deals with this timely subject. It is claimed by the author that intermittent cyanidation has not had fair consideration at the hands of metallurgists. It is pointed out that, theoretically at least, the advantages are in favour of intermittent as compared with continuous cyanidation. Continuous treatment is not ideal. The finer pulp is treated too long, the coarser, since its transit is too rapid, is not treated long enough.

These conditions are corrected by the simpler system of intermitten decantation, which provides proper agitation as a part of the process.

We hope that some of our readers will send in their opinions on this matter.

EDITORIAL NOTES

The King Edward mine at Cobalt, as mentioned by our Northern Ontario correspondent, is showing symptoms of good ore. The King Edward is now being

* (See special N. S. issue, Sept. 15, 1912, p. 637 et seq.)