

COBALT ORE.

Canada is practically the sole producer of cobalt ore; the cobalt content of the ores mined in the Timiskaming district, Ontario, exceeds 2,000,000 lbs. per year. The market for this, at present, depends altogether on its limited use as a blue coloring substance. Hence there is a large accumulation of cobalt oxide at the smelters and at Cobalt. Under present industrial conditions, the smelters refuse to pay for the cobalt and nickel content and the miner receives nothing for this valuable constituent of the ore. Yet the metal cobalt resembles nickel in almost all its properties. Its density, malleability, ductility, hardness, tensile strength, and electrical properties are, so far as they are known, very similar to those of nickel. These properties of nickel make it of remarkable industrial value in the composition of a great variety of alloys. Of these may be mentioned the high-grade steels, where toughness and hardness are desired; for automobile parts, steel tubes, gun steel, cranks and crank-shafts, boiler-plates, tires, connecting-rods and axles; the nickel-iron wires such as 'invar' and 'platinite,' with low temperate coefficients of electrical resistance and of expansion respectively; and the variety of important nickel alloys with non-corrosive properties, for coins, boat propellers, etc. It would be surprising if cobalt could not be advantageously substituted for nickel to produce a better grade of some of the above products. As these are high-grade products, where superior qualities are desired, a high cost, within certain limits, would not be prohibitive. Hence, if research leads to the substitution of cobalt for nickel, even in the case of one of these products, a market for the metal cobalt at a reasonable price would be assured, and large sums of money would be annually added to the returns from Canadian natural resources. — Mining and Scientific Press.

NOTES.

Construction work on the terminal elevator of 2,500,000 bus. capacity to be built by the Saskatchewan Co-operative Elevator Company at Port Arthur, Ont., will be commenced shortly, and it is expected that the terminal will be completed in time to handle the 1917 crop. The company has secured the services of C. D. Howe, chief engineer of the board of grain commissioners, who will design the elevator and will supervise its construction. The new terminal will be built of reinforced concrete. The first unit, which is all that will be built at present, will have a capacity of 2,500,000 bus., 500,000 for the workhouse and 2,000,000 bus. tank storage. It will be a rapid handling workhouse, with sufficient mechanical capacity to allow of increasing the tank storage from time to time as required. The equipment in every particular will be up-to-date, and excellent dry and cleaning apparatus will be installed.

The wheat crop of 1915 was an exceptionally good one, the total world production being 4,000,000,000 bushels, an increase of 800,000,000 bushels over the production of 1914, according to preliminary figures given in the bulletin of the International Institute of Agriculture in Rome. More than 90 per cent of the 1915 wheat crop, or 3,675,000,000 bushels, was produced in the Northern Hemisphere, while 325,000,000 bushels came from the Southern Hemisphere.

The total grain elevator capacity of the plants located in the twin cities of Fort William and Port Arthur, Ont., including those which will be built this year, is 47,085,000 bushels. In addition to this the capacity of the hospital grain elevators is approximately 700,000 bushels.

The production of durum wheat last year in Minnesota and the Dakotas (which produced 95 per cent of the total United States crop at time of last census) was about 37,900,000 bus., compared with 18,900,000 in 1914 and 21,529,000 in 1913. The yield per acre averaged 19.3 bus., whereas other spring wheats averaged 17.4 or about 1.9 bus. per acre.

The Model Elevator Co., Winnipeg, Man., has let the contract for a 500,000-bushels capacity elevator to be constructed of concrete and steel at a cost approximately \$250,000, to be built at Fort William. The contract calls for completion by Sept. 1.

Imports into the United States during January were \$184,192,000, an increase of \$12,000,000 as compared with December.

BOSTON WOOL SITUATION.

The Commercial Bulletin, Boston, under date April 15, says, in part:

"Operations in the wool market during the past week have been within even narrower limits than was true last week. Some manufacturers have been interested in the wools which have been available and others would doubtless have been really enough buyers of wools that are not available had they been within reach.

"Sales have been of very fair proportions for several weeks up to the current week and the total turnover this week will probably not figure less than 2½ million pounds but the lower grade Australasian and South American crossbreds which have been in steady request have very largely disappeared from the market and those lines which are still left are held at slightly dearer prices in not a few cases.

"Prices are firm. Nowhere is there a disposition to sacrifice good wool. Sometimes, it may be that riff-raff changes hands at slight trading concessions, but generally speaking there is no inclination whatever to shade prices nor is it to be expected that dealers will lower quotations in the face of high prices everywhere else and after a continuous business such as has prevailed for several months, even though it may be quieter at the present moment."

DOMESTIC WOOL SITUATION.

Attention is now diverted to the domestic wool clip which will shortly be on the market and dealers are showing increased activity in view of the decidedly urgent demand for wool. Prices for the Canadian product have ruled high during the past few months, but most of the old clip has been taken up either by Canadian or United States mills. There is now some hesitation as to whether an embargo will be placed on the export of domestic wool, due to agitation on the part of other Colonial producers, but as yet no active steps have been taken. Dealers are shading prices, however, as present values are too high for home consumption. It is estimated that the clip will be somewhat larger than usual as most of the farmers have been holding their stock for the wool. Dealers' quotations are as follows: Washed fleece wool as to quality, 42c to 45c per lb. Washed rejections (burry, cotton, chaffy, etc.), 33c to 35c; unwashed fleece wool as to quality, 30c to 32c; northwestern unwashed, according to quality, 21c to 31c.

LONDON WOOL SALES.

The third series of Colonial wool sales opened in London on April 11, with prices firm. Since the opening there has been a strengthening tendency, especially on Merinos which advances 5 per cent on French and Russian buying. Crossbreds firmed up ranging from unchanged to 5 per cent higher. Inferior crossbreds are slightly lower. The sales will be closed on April 19, and resumed May 2.

U. S. MANUFACTURERS.

An analysis of the 1915 census returns so far published indicates that the total output of manufactures in 1914, the year covered by the 1915 returns, was \$24,000,000,000, against less than half that amount in 1900.

In manufactures exported the United States is at present leading the world, the total export of manufactures in the calendar year 1915 having been \$1,784,000,000, while that of Great Britain, usually the world's largest exporter of manufactures, was about \$1,500,000,000. Normally, however, the United States ranks third among the nations in the exportation of manufactures, being exceeded in normal years by both Great Britain and Germany.

While no other manufacturing country takes periodical census returns of its manufactures, a census of production taken by Great Britain in 1907 shows her output of manufactures at about \$8,000,000,000, while partial returns by Germany indicate that her output in the year immediately preceding the war was between \$11,000,000,000 and \$12,000,000,000, while that of France is probably about the same as that of Great Britain.

As indicated above the United States leads with \$24,000,000 worth.

THE AGRICULTURAL OUTLOOK.

The monthly commercial letter issued by the Canadian Bank of Commerce discusses the situation as follows:

The incentive of high grain prices and the "Patriotism and Production" movement in 1915 resulted in the Western farmers attempting to get the largest possible acreage under crop, with the result that much land was seeded which ought to have been summer-fallowed. Weather and other conditions prevented the farmers from doing more than about half the usual amount of ploughing last fall. Given an early spring and a sufficiency of power and labor, it will be possible to overcome much of this deficiency by an increased amount of spring ploughing. Conditions as to power are highly satisfactory; feed being plentiful, work horses are in good condition, and have increased somewhat in numbers. At the moment the season is estimated to ten days later than the average and a shortage of labor is reported by a number of our branches, though as yet it is serious in only a few cases. The immigration authorities, however, claim to have the situation well in hand, and it is now thought that the net labor shortage for the Western Provinces as a whole will be quite small.

Even allowing for the reduction in the amount of summer-fallowed and fall-ploughed land to be seeded, and assuming that the farmers will make a strong effort to get a maximum of spring ploughing done, the total acreage in crop this year is unlikely to exceed 80 per cent of that of 1915. As, however, last year's acreage was abnormally large, and was attained at the expense of a decrease of summer fallowing, a shrinkage of about 20 per cent need not be considered unsatisfactory. In the Eastern Provinces the land prepared for seed is slightly less than at this period a year ago, but this will be remedied by the spring work, unless the latter is affected adversely by the labor shortage which is evident in districts adjoining industrial centres.

Efforts are being made to improve the credit facilities at the disposal of farmers in the prairie provinces. To this end negotiations are being carried on in Winnipeg between the bankers and the representatives of the farmers' organizations. One object is to meet the need for greater production, but the farmers, while recognizing this to some extent, desire chiefly the establishment of credit facilities which will free them from the necessity of purchasing so many of their requirements on long and expensive terms.

Under the Agricultural Act of British Columbia, passed last year, there was established under the direction of a Commission, a system of provincial loans to farmers on the security of their land, stock and chattels. To provide funds for this purpose an issue of \$1,000,000 was made last month, the money costing the Commission 5% per cent. As this is the first attempt to meet the demand for Government loans to farmers, the experiment will be watched with interest.

TRADE OF RUSSIA WITH THE UNITED KINGDOM.

From 1898 to 1902 Germany furnished on an average about 35 per cent of Russia's foreign imports, which were valued at £61,000,000 per annum. During the same period the share of the United Kingdom was about 19 per cent. In 1913 Russia's imports from abroad were valued at roughly £145,000,000. Of this amount Germany supplied nearly 50 per cent while the share of the United Kingdom amounted to less than 13 per cent.

NAPOLEON'S SILK SOCKS.

A pair of black spun silk socks worn by Napoleon when an exile in St. Helena has been sent to Prebendary Carlile for sale on behalf of the Church Army's recreation hut work amongst the troops at home and abroad by the incumbent of a north-country parish, whose uncle was a naval surgeon in the St. Helena epoch. — Yorkshire Observer.

JAP LINERS INCREASE RATES.

Three Japanese steamship concerns — Toyo Kisen Kaisha, Nippon Yusen Kaisha and Osaka Shosen Kaisha—have put into effect, from April 1, an increase of about 20 per cent in freight rates on subsidized lines.