

prepared according to the methods of the factory. The color matter of one paint for instance known all over as "Johnson's Magnetic Iron Paint" is a natural oxide of iron containing as it is taken out of the mine only eight per cent. of other matter, and is so free from gritty matter that it pulverizes like flour. The company control this mine, which is one of the finest of its class in the world.

The process of canning and packing paints at this factory is quite an interesting study, and when the cans are made closed and labeled they present quite a compact and handy parcel.

The manufactures of the Johnson Company are in demand all over Canada, and the industry they carry on is not one of the hot house plants which can only live on a home protected market. Their goods are shipped to different countries of South America, and to Great Britain itself, where some of their goods have quite a hold upon the market.

Traffic Through the Sault Ste Marie.

The Sault Ste Marie Canal closed last year with 223 days of navigation from April 20, as against 234 days the previous year, yet shows an increase in business of 20 per cent. over that of 1889; last year it showed a like advance on the business of 1888. The principal items of the last two years business are as follows:

	1890.	1889.
Vessels, number	10,597	9,679
Lockages, number	4,970	4,684
Registered tonnage, net	8,454,435	7,221,935
Freight towage, net tons	9,041,213	7,516,022
Passengers, number	24,856	25,112
Coal, net tons	2,078,925	1,629,197
Flour, barrels	3,239,104	2,228,707
Wheat, bushels	16,217,370	16,231,854
Other grain, bushels	2,133,245	2,044,384
Iron ore, net tons	4,774,763	4,095,557
Manufactured and pig iron, net tons	116,327	57,560
Salt, barrels	179,431	169,250
Copper, net tons	43,729	33,456
Silver ore, net tons	3,132	5,947
Lumber, 1000 B.M.	361,929	315,854
Unclassified freight, net tons ..	371,294	312,410

The freight carried was valued at \$10,221,870,000 as against \$3,373,254,715 for that carried in 1889. There was a slight decline in the number of passengers and in silver ore. The decline in grain transported was more than made up by over 1,000,000 more barrels of flour. The total increase of freight, 1,525,190 tons, and of registered tonnage, 1,232,590, was important.

Experiments in the North.

Gough Brick, missionary to the Indians in the Peace river district, has written to the Superintendent General of Indian affairs, asking for a grant of seed grain for the Indians and half-breeds of his mission. He says the only hope for these people now is farming. Many of the Indians have land broken but not a grain of seed. It is quite possible prompt steps will be taken by Mr. Dowdney to meet Mr. Brick's wishes to a reasonable extent. This seems to open the field for a very valuable series of experiments, with a view of testing the agricultural capabilities of our great north country. The value of a large portion of our northern territory is in doubt, as no systematic effort has ever been made to test its agricultural cap-

abilities. Now, these scattered mission settlements seem to afford the means of making experiments in the direction indicated. If the government, through the experimental farm management, or in some other way, would undertake to distribute suitable seeds to the various northern mission settlements, a great deal of valuable information would certainly be secured. The application of Mr. Brick for seeds for the mission under his charge, seems to suggest a policy which might be carried out by the government with valuable results.

Smut Destroyer.

For many years past, sulphate of copper or "bluestone," has been used as a destroyer of smut in seed grain. Within the past few seasons a new and cheaper quality of bluestone has come upon the market, which it is claimed by the manufacturers, is specially intended for farmers' use. This brand is called "Agricultural," and an accurate analysis gives the following as its component parts:—

Sulphate of copper (Blue vitriol)	30.70
Sulphate of Iron (Green vitriol)	69.30

100.00

Last spring an article appeared in a Winnipeg newspaper, stating that this "agricultural" bluestone, while cheaper than the pure article, was destructive of the vitality of the wheat itself. As the matter was a most important one, it was referred to Wm. Saunders, Director of the Government Experimental Farms, and the Chemist of the Department, Frank J. Shutt, conducted a series of careful experiments at Ottawa, to determine the effects of the various kinds of bluestone on the smut and also on the grain itself. Last season the experiments were confined to the effects of the chemicals on the various kinds of seed wheat, but it is not thought advisable to publish the results until the test, as regards the smut itself, is completed.

In view of the fact that it is the "hard stinking," or burnt smut that is chiefly deleterious in the Northwest, and that such rarely occurs in Eastern Canada, it has been decided to conduct this year's investigations at the Experimental Farms at Indian Head and Brandon. When the results are fully determined, they will of course be made known for the benefit of those most largely interested—the farmers. Under the circumstances, it will be wise for the farmers of Manitoba and the Territories to use best bluestone this year. The "agricultural" may be as good,—in fact, the makers claim that it is, but this is too important a matter on which to take chances.

THE new city directory just issued places the population of Toronto at 225,000.

The first batch of Mennonites from Southern Russia, arrived recently for the settlement in the vicinity of Gretna, Man. The head of the family says a large number will come direct to Manitoba. The success of their co-religionists who settled in the province during the seventies has been pretty well circulated among those still in Russia, and the result will be considerable addition to the Mennonite population of Manitoba during 1891.

WINNIPEG'S TRADE FOR 1890.

SOME FACTS AND FIGURES THAT SERVE AS AN INDEX.

In February 1887 the Winnipeg Board of Trade published statistics of the city's trade for the year 1886, which were as a whole of a satisfactory nature, and went to show that the city was surely pulling out of the pit of depression in which it had struggled during the three previous years. Since then no official trade statistics of the city's trade generally has been compiled, although the belief was general during subsequent years, that progress was more rapid than before that date, especially during 1887 and 1888. The year 1889 was certainly not a very prosperous one for the city, and Manitoba generally, and the year just closed, while it has been one in which true progress has been made, has also brought a succession of delays and disappointments, which have led many people to believe, that instead of progressing in a trade sense, the west has actually been losing ground.

A very cursory inquiry into the facts and figures of the past year's trade, disposes of the pessimistic idea above referred to, and if a thorough investigation were made, these ideas would be completely wiped out. It is not our intention in this article to furnish complete statistics of Winnipeg's trade for 1890, but to simply take a peep into some of the leading wholesale branches, regarding which reliable statistics have been gathered, and from these our readers may draw inferences.

The grain and milling business is of course the most important in Winnipeg, and in 1886 the aggregate business done by houses in this branch was \$3,812,319. The full year's figures for 1890 we were unable to secure, but the business done by six leading firms since the first day of December last up to the end of January almost parallels the figures for the entire year of 1886. There are a number of other firms not heard from, who would add at least another million dollars to this, and yet the business done during the early part of the year on the crop of 1889, would not be included in the aggregate. In short the business of this branch from the first of September, 1890, to the same date in 1891, will doubtless show a cash turn over of fully double the figures of 1886. Should eastern markets advance values as many predict they will, the aggregate will be correspondingly increased.

As in 1886 groceries in 1890 came next in importance to grain and milling. In 1886 the fourteen houses of the grocery, provision and produce business showed an aggregate of \$3,559,507. In 1890 there were some seventeen houses in those different sections of this one branch, and their combined business for that year reached a total of \$3,622,620, or just \$63,113 of an increase over 1886. That the increase is so small is due in some measure to the fact that pork packers who figured up well in the statistics of 1886, contributed less than \$200,000 to the figures of last year. Another reason is that at least one leading house does a portion of its far western trade from a western point.

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