

change will be \$100,000,000, all of which will be paid by the railroads. Under a law which has been upheld by the courts, the city can compel the removal of any public nuisance at the expense of the individuals or corporations creating it. Such a ruling cannot be hoped for by any Canadian hater of corporations. The Toronto improvement will necessarily involve some such arrangement as that under which railroad tracks in Philadelphia were raised. The city gave \$900,000 in bonds, besides vacating a whole street for the improvement of the Pennsylvania line. The level crossing in populous places is becoming a barbarous anomaly; which is bad. It is almost as ridiculous as an investment. Which is worse.

Horse-Power Utilized in Canada.

The aggregates and averages of horse-power utilized in the Dominion during the same year in 6,620 manufacturers' establishments was 652,653 horse-power, an average of 98.6 per cent. per establishment. The following are the details for each province.

Province.	Establishments. No.	Aggregate horse-power. No.	Average h.p. per establishment. %.
British Columbia	237	23,646	99.8
Manitoba	152	11,616	76.4
New Brunswick	473	43,742	92.5
Nova Scotia	493	56,691	115.0
Ontario	3,468	284,175	81.9
Prince Edward Island	52	1,778	34.2
Quebec	1,691	227,834	134.7
The Territories	54	3,171	59.0
Total	6,620	652,653	98.6

The various classes of power may be thus divided:

Class of power.	Engines, motors, etc. No.	Horse-power. No.	Rate of power. %.
Steam engines	6,558	380,240	58.26
Gas engines	244	2,078	0.32
Water wheels	2,683	221,642	33.96
Electric motors	2,206	46,461	7.12
Other powers	79	2,232	0.34
Total	11,770	652,653	100.00

In considering the foregoing tables, it must be remembered that five years have elapsed since they were compiled. Much has happened in Canada in the past five years. Its industries, its agricultural and commercial fame were, five years ago, beginning to become recognized. The world knows now that in the Dominion exist numerous unexploited markets. The demand for iron and steel and machinery of all kinds was large five years ago; to-day it is far greater. In another five years it will be greater still. Then again the recent development of the Canadian West has been one of the most remarkable features of Canadian expansion.

Must Have Canadian Agents.

The names of English engineering firms are almost household words the world over. There are big engineering centres in almost every part of Britain, Yorkshire, Lancashire, Scotland, Gloucestershire, and half a dozen other centres.

One error in the campaign work of British firms to which the Canadian Engineer would draw attention, is that too frequently have they imagined that their New York agent can deal with Canada. The sooner the up-to-date firms recognize that Canada is, and must be reckoned as a separate country, the

better for all interested. The general rule has been in the past, to say: "Oh, let the Canadian business be done through our New York or Boston agency." It is seen now what opportunities have been lost in the past. British firms are establishing agencies in the great Canadian cities, which is far from being unwise, foolish, or shortsighted.

There are numerous firms in Lancashire who do no business with Canada, simply because they have no recognized up-to-date Canadian agency. Messrs. Crossley Brothers, whose gas and oil engines, find their way into all corners of the globe, is one of the firms which is not overlooking Canada. They are shipping four to five hundred horse-power gas engines, and two 250 horse-power engines, in addition to the producer plant for driving the same, to Winnipeg for use at the pumping station.

Within three miles of the Manchester Royal Exchange, stand the engineering works of Sir W. G. Armstrong, Whitworth & Co. Their premises cover almost fifty acres. This is another firm which recognizes the possibilities of the Canadian market and the demand from this country for their steel, is rapidly increasing.

Natural Conditions Overcome.

The natural conditions of the Dominion make it rather a difficult matter to use to any great extent, heavy motor wagons. But nature has never been allowed to stand in the way of Canadian commercial progress. If the British firms could build the right kind of heavy propelled wagon, there will be no difficulty in finding a market on this side of the Atlantic for that vehicle.

The Coulthard Motor Wagon Co., of Pereston, Lancashire, have already introduced their motor wagon into this country and are making such mechanical alterations and improvements as are necessary for the conditions existing here.

In Yorkshire there are many reputable engineering firms. That English county has already a big clientele in South America, but as yet its Canadian business is comparatively small. Hunslet, where the smoke of shafts tells a tale of industrial enterprise. agricultural engineering and locomotive building are paramount. Other districts are manufacturing traction engines, steam ploughs, road rollers, horticultural, and agricultural machines, textile machinery, hydraulic and electric cranes, machinery tools, and a hundred other things.

Time and Money not Wasted.

From Yorkshire is exported main line engines for Indian and British railways from Messrs. Manning & Wardle. Light locomotives, transport trains, with agricultural machinery, leave the works of Messrs. John Fowler & Company. To every quarter of the globe, is exported the industrial machinery of Messrs. Greenwood & Batley. The Yorkshire firm who make hydraulic machinery their specialty is Messrs. Henry Berry & Co. Hydraulic and electric cranes are turned out by Messrs. J. Booth and Bros., Limited, of Rodley, Leeds, and Messrs. Whittaker Bros., of Horsforth. This latter firm manufactures a patent steam crane navvie which will excavate daily some 500 to 1,600 cubic yards.

There are many manufacturers of war materials. But Canada happily, big and rich as the country is, has no interest in operations which destroy commercial peace and prosperity.

Dotted all over the British Isles are iron and steel manufacturing firms, expansion in whose business would be but a natural outcome of a study of the Canadian market. A personal investigation of these trade opportunities will be neither a waste of time nor money.