

# PROSPECTUS

OF THE

# Dominion Duryee Furnace and Manufacturing Company

(Limited.)

To be Incorporated under Joint Stock Companies Act for the Dominion of Canada.

Capital.	- - - - -	\$1,000,000.
In 10,000 Shares of	- - - - -	\$100 each.

This Company is formed for the purpose of working "Duryees" process for smelting iron Ores and making steel therefrom, which has already been tested in the United States with perfect success, and where several furnaces are now in operation and in course of construction. It is destined to revolutionize the manufacture of Iron, not only by reducing the cost, but also by utilizing and rendering valuable many vast deposits of Iron Ores, which by the present mode of smelting—owing to the presence of various refractory substances—lie at present undeveloped and without value, but, in addition to this, it will enable us to manufacture all the Iron and Steel which is now imported, and even to export it with profit. The advantage of this process over the present mode of smelting consists in the use of crude petroleum as fuel, instead of Charcoal, Coal or Coke, and by the application of a powerful blast from a rotary blower, an intense column of flame from 60 to 100 feet long can be produced, decomposing the petroleum into its elements of hydrogen and carbon, which, uniting with the oxygen of the air blast, forms an oxyhydrogen blowpipe flame of wonderful power, easily managed and controlled, the heat obtainable thereby being as much as four thousand degrees. The furnace is automatic and continuous in action, only requiring to be supplied with oil and ore to perform its work.

By adding manganese, or pig, the furnace converts ores into steel at a single operation.

Iron ores shovelled into the upper end of a ten foot cylinder with fluxes, come out pig iron in a continuous stream, the process of smelting being very rapid. Slag commences to run in about one hour, and puddled blooms produced within three hours, or so, from the time ore is fed in.

According to experiments made, about 10 gallons of crude petroleum—costing only a few cents per gallon—will reduce one ton of ore, the total cost of fuel for converting ore into malleable iron being about \$2.50 per ton of metal.

Steel made by this process is superior in quality to that made by the Bessemer process, and the cost of furnace and plant is only about one-fourth of the other.

In order to appreciate in some degree the value of this discovery to Canada, it is only necessary to mention that during 1880, the quantity of railway bars and rails imported was 1,539,603 cwts, value \$2,152,633.00, and that the value of iron and steel manufactures amounted to \$10,127,693.00.

The quantity of iron ores exported during the same period was 50,524 tons, and the quantity expected to be exported during 1881 will probably reach the immense aggregate of 400,000 tons.

Taking these facts into consideration it is difficult to over-rate the advantages which this process will confer upon such a country as Canada.

**First.**—By utilizing our own ores instead of exporting them to the United States and then repurchasing them in their manufactured state.

**Second.**—By utilizing, and rendering valuable large deposits of iron at present lying undisturbed.

**Third.**—By creating within our own country a vast and profitable industry, thereby giving employment to thousands of hands and retaining within ourselves the large sums annually sent abroad to pay for the iron required to supply our own wants.

By this process, ores containing Phosphorus and Sulphur, otherwise useless, are utilized, as the heat generated by the blowpipe drains off the Sulphur in 10 to 30 minutes, as completely as can be done in 10 to 40 hours by the old methods.

In order to give a correct idea of the sums annually paid, it is only necessary to refer to the quantities and value of our iron importations during the year 1880, the latter of which amounts to \$16,380,000, nearly all of which could be advantageously manufactured in Canada from our own ores by the Duryee process.

This undertaking is confidently submitted to the public as a most profitable investment for capital, and to give some idea of the results to be expected, it may be stated that the profits made by the "Anderson" Iron and Steel Company, of Pittsburg, Pa. (working under Siemen's Patent) from 1866 to 1880, averaged \$137,000 per annum, and for the first three months of this year, \$54,510.

The "Duryee" process being much superior in every respect, the results will be correspondingly greater. It is proposed to commence by erecting a furnace at, or near, Montreal, and elsewhere as found desirable, for the purpose of manufacturing Iron and Steel, and eventually Rolling Mills, for Steel Rails, if found advisable, and it is confidently expected that this enterprise will do more to develop the industry of the country than any one thing yet put in operation.

The Stock books are now open for subscription to the extent of \$200,000, or 2000 shares of \$100 each (of which a considerable amount is already subscribed), the same being payable as follows, viz: Ten per centum at the date of subscription, or to accompany writn application for stock, the balance during the ensuing twelve months as may be required.

The inventor, to show his faith in the matter, takes the larger proportion of his payment (viz.: four-fifths) in the stock of the Company. Applications for shares and for all information respecting the Company to be addressed to Mr. G. H. PATTERSON, 264 and 266 St. James St., Montreal, who will also register any applications made for shares on receiving the form hereto attached, duly filled up with the number of shares wanted. No application will be entertained unless accompanied with the *ten per cent*, called for; this, or a proportionate part thereof, will be returned in the event of no allotment, or part of allotment being made. The allotments of the stock will be made by the Provisional or First Directors, who reserve the right to reject in part or in whole any application for stock.

McDOUGALL BROS., } Brokers, Montreal.  
A. C. CLARK,

G. H. PATTERSON, Secretary pro tem,  
264 and 266 St. James St., Montreal.