

pilot station at Father Point, so that pilots will be promptly advised of the locality of inward bound vessels.

Marine and Railway Work in Toronto.

The Polson Iron Works has contracted with the Dominion Government for a large hydraulic dredge for the St. Lawrence. The dimensions are 160 ft. long, 42 ft. beam, and 12 ft. 6 ins. deep. She is to be built of steel, and when completed will class 10% above A1 at Lloyds. Her pump suction is to be 36 ins. diameter, and will have a capacity of 2,000 cubic yards an hour. To drive this massive pump it will require 1,200 i.h.p. furnished by a triple expansion engine with cylinders 20, 31 and 50 ins. diameter x 25 ins. stroke. Steam will be furnished by 4 boilers of the locomotive type, 6 ft. diameter x 25 ft. long.

The following orders are under construction at the Polson Iron Works: A steel passenger ferry for the Sault Ste. Marie Ferry Co., 104 ft. long, 26 ft. beam of hull, 33 ft. over the guards, with a draft aft of 10 ft. She will be fitted with a fore and aft compound jet condensing engine, having cylinders 18 ins. and 36 ins. diameter x 24 ins. stroke, and a Scotch boiler 11 ft. diameter x 12 ft. long. This boat is very strongly constructed so as to withstand the ice, and is designed similar to the ice crushers in the Sault.

Two very handsome launches, one a composite launch for W. J. Gage, Toronto, to be used on Lake Muskoka. She is 56 ft. long, 9 ft. beam, with a draft of about 3 ft. 6 ins. Power will be supplied by a fore and aft compound engine with cylinders 4½ ins. and 8 ins. diameter x 6 ins. stroke, and a vertical

submerged tubular boiler. The other is a very pretty little gasoline launch for E. Leadley, of Toronto, 25 ft. long, 5 ft. beam and drawing about 2 ft. of water, to be fitted with a double cylinder 6 h.p. Sintz gas engine (for which the Polson Iron Works is Canadian agent) and will make about 7 to 8 miles an hour.

A marine outfit for Jos. Mayers, of New Westminster, B.C., consisting of a fore and aft compound surface condensing engine, having cylinders 12 ins. and 26 ins. diameter, 18 ins. stroke and Clyde boiler 9 ft. diameter x 10 ft. long to pass Government inspection for 150 lbs. steam.

A Clyde boiler for str. Van Allan, belonging to the Toronto Electric Light Co., boiler to be 10 ft. diameter x 11 ft. long, containing 1,200 sq. ft. of heating surface; 2 furnaces each 40 ins. diameter, built to pass Government inspection for 125 lbs. steam.

For J. Playfair, of Midland, Ont., a Fitzgibbon boiler 66 ins. diameter x 12 ft. long, containing 88 tubes 3 ins. diameter x 10 ft. long, to pass Government inspection for 140 lbs. steam.

For the steamer Persia of the Toronto and Montreal Steamboat Co., a steel marine boiler 8 ft. 6 ins. diameter x 14 ft. long, containing 2 furnaces each 5 ft. 6 ins. long, with centre water leg and a combustion chamber at end of furnace to be 2 ft. long. From the end of the combustion chamber to the back smoke connections are 2 flues, one 26 ins. diameter and one 12 ins. diameter x 4 ft. long. Tubes running from the back connection to the front head 3½ ins. diameter x 11 ft. 6 ins. long. Boiler to be made and stayed to pass Government inspection for 125 lbs. working pressure.

A small marine outfit for H. L. Christy, Pittsburg, Pa., to be used in the upper Muskoka lakes, consisting of engine vertical, 4 ins. x 6 and vertical boiler 33 ins. diameter x 48 ins. high, to have 140 tubes 1½ ins. x 25 ins. long and to be built for a working pressure of 125 lbs. steam.

A vertical marine engine 9 x 9 for Austen Bros., Halifax, N.S.

The Polson Engine Works has just completed and shipped to the C.P.R. 2 pairs of hoisting engines having cylinders 8 ins. diameter x 12 ins. stroke and 2 fire box boilers each 48 ins. diameter x 84 ins. long with outside part of fire box 4 ft. long, having dome 30 ins. x 30 ins. These outfits are placed in cars specially built and fitted up for pile drivers and used in construction work.

Steel Shipbuilding in Canada.

By W. E. Redway, of the Polson Iron Works.

The question has been asked recently, "Why cannot steel ships be built as cheaply in Canada as in Great Britain? There is no duty on the plates or bars imported for shipbuilding, and the extra freight cannot add much to the cost of a Canadian over a British built ship." A concise but comprehensive answer to this question can be readily given:

In the first place, a steel ship is composed of something more than the mere framework and plating forming her hull. She contains within herself probably a greater diversity of manufactured materials than any other structure. Into the completion and perfection of a first-class passenger boat go the united productions of almost every manufacturing industry, from the coal and iron mine down

C. P. R. LANDS.

The Canadian Pacific Railway lands consist of the odd-numbered sections along the Main Line and Branches, and in Northern Alberta and the Lake Dauphin District. The Railway Lands are for sale at the various agencies of the company in Manitoba and the North-West Territories at the following prices:

Lands in the Province of Manitoba average \$3 to \$6 an acre.

Lands in Assiniboia, east of the 3rd meridian, average \$3 to \$4 an acre.

Lands west of the 3rd meridian, including the Calgary District, generally \$3 per acre.

Lands in Northern Alberta and the Lake Dauphin District, \$3 per acre.

TERMS OF PAYMENT.

The aggregate amount of purchase money and interest is divided into ten instalments, as shown in the table below; the first to be paid at the time of purchase, the remainder annually thereafter, except in the case of the settler who goes into actual residence on the land and breaks up at least one-sixteenth thereof within one year, who is entitled to have second instalment deferred for two years from date of purchase.

The following table shows the amount of the annual instalments on a quarter section of 160 acres at different prices:

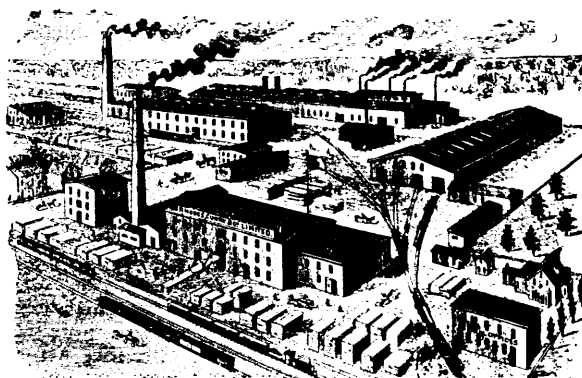
160 acres at \$3.00 per acre, 1st instalment \$71.90, and nine equal instalments of \$60.
160 acres at \$3.50 per acre, 1st instalment \$83.90, and nine equal instalments of \$70.
160 acres at \$4.00 per acre, 1st instalment \$95.85, and nine equal instalments of \$80.
160 acres at \$4.50 per acre, 1st instalment \$107.85, and nine equal instalments of \$90.
160 acres at \$5.00 per acre, 1st instalment \$119.85, and nine equal instalments of \$100.
160 acres at \$5.50 per acre, 1st instalment \$131.80, and nine equal instalments of \$110.
160 acres at \$6.00 per acre, 1st instalment \$143.80, and nine equal instalments of \$120.

DISCOUNT FOR CASH. If land is paid for in full at time of purchase, a reduction from price will be allowed equal to ten per cent. of the amount paid in excess of the usual cash instalment.

Interest at six per cent. will be charged on overdue instalments.

Write for maps and full particulars.

F. T. CRIFFIN, - Land Commissioner,
WINNIPEG.



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Burlington Elevator, St. Louis, Mo.	Capacity.....1,300,000 Bushels
Grand Trunk Elevator, Portland, Me.	".....1,000,000 "
Export Elevator, Buffalo, N.Y.	".....1,000,000 "
J. R. Booth Elevator, Depot Harbor, Ontario	".....1,000,000 "
Cleveland Elevator Company's Elevator, Cleveland, O.	".....500,000 "
Erie R. R. Transfer & Clipping House, Chicago, Ill.	".....100 cars in 10 hrs.
Manchester Ship Canal Co.'s Elevator, Manchester, Eng.	".....1,500,000 "
Burlington Elevator Co., Peoria, Ill.	".....500,000 "
Canada Atlantic Railway Elevator, Coteau Landing, Que.	".....500,000 "
Northern Grain Co., Manitowoc, Wis.	".....1,350,000 "
Union Elevator, East St. Louis, Ill.	".....1,100,000 "
Montreal Warehousing Co.'s Belt Conveyor System	".....

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