CANADIAN RAILWAY AND MARINE WORLD.

Concrete Cribs for Pier Construction at Victoria, B.C.

A contract has been let by the Public Works Department for the construction of two piers at Victoria, B.C., which are to be followed by two more of similar size and design. The cost of the two now proposed will approximate \$3,000,000. The piers will be 250 ft. wide, from 800 to 1,000 ft. long and spaced so as to allow a 300 ft. berthing slip between them.

In preparing the foundations the first work will be the dumping of large rock at the site, bringing the water to a uniform depth of 35 ft. The maximum natural depth is 65 ft. After sufficient rock has been dumped divers are to be employed to mark off the foundation and then assist in leveling a strip 35 ft. wide just inside the entire perimeters of the docks. This leveling will be done by dumping small rubble where required and having the divers pack up the surface. The central portion of the foundation area will be left in the rough.

While the foundation is being prepared reinforced concrete cribs, 100 by 35 ft. in plan, with 39 ft. walls, are to be built and launched. These cribs are to be strengthened by two longitudinal walls 11 ft. 8 in. on centres and transverse bulkheads 10 ft. apart and 10 in. thick. The floors and main walls of the cribs are to be 20 in. thick, and sea cocks are to be provided in the floors to admit water for sinking the cribs after they have been floated to the exact location desired over the 35 ft. strip which has been leveled off around the foundation border. These cribs are to weigh 3220 tons each, and are calculated to draw 29 ft. of water.

The cribs will be located end on entirely around the piers, 20 being required for pier 3, twenty two for pier 2, and three for the bulkhead between piers. All of these bulkheads will stand with their tops 4 ft. above low tide level. When the cribs have been sunk in place they are to be filled with rubble, which will then be levelled off to provide a uniform base for the superstructure. The superstructure is to be of concrete and will rise to a height of 12 ft. above the cribs for the full length of the piers. Finally, the area between the superstructural walls will be filled with hard-packed rubble.

It is estimated that 4,334 tons of reinforcing will be used in the cribs, which are to require 66,500 cu. yd. of concrete, while the superstructure will need 18,000 cu. yd. more. The total rock capacity of the cribs will be 161,000 cu. yd., while 1,094,000 cu. yd. more will be needed to fill in between the cribs and behind the bulkhead. • The plans and specifications of the docks have been prepared under the direction of the Chief Engineer of the Department of Public Works. J. S. MacLachlan, District Engineer for the Department, will supervise the construction.

The Abolition of the Quebec Corporation of Pilots.

The Minister of Marine has introduced a bill into the House of Commons, to amend part 6 of the Canada Shipping Act, relative to the Corporation of Pilots for and below The bill provides the harbor of Quebec. that the Minister shall have charge of the examination, licensing, control and management of the pilots and pilot apprentices. pilot schooners and other vessels for the pilotage district of Quebec, of all questions respecting pilotage arising in connection and of the collection of all pilotage dues, and all powers vested in the Corporation are to be transferred to and vested in the Minister. All the powers hitherto vested in the Corporation of Pilots are to be repealed, but the management and disposal of the pilot fund is not interfered with, it being exercised under the supervision of the Minister, as heretofore.

List of Steam Vessels Registered in Canada From Jan. 1 to Apr. 30, 1914.

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No.	Name	Port of Registry	Where and When Built	Length	Breadth	Depth	Gross Tons	Reg. Tons	Engines, Etc.	Owner or Managing Owner
TOOL	River B.C. Maid Bellona City of St.	Winnipeg Vancouver, B.C Montreal	Athabasca Landing, Alta	$136 \ 0 \\ 65 \ 0 \\ 340 \ 0$	$ \begin{array}{r} 28 & 0 \\ 14 & 7 \\ 40 & 2 \end{array} $	3 6 5 7 26 8	341 80 2932	$231 \\ 26 \\ 1864$	9n.h.p. pa. 8 " sc. 320 " "	Hudson's Bay Co., London, Eng. A. MacIsaac, Vancouver, B.C. Reid-Donald Steamship Co., Montreal.
$\begin{array}{c} 104606\\ 134230\\ 134111\\ 126659\\ 134251\\ 116572\\ 130387\\ 134119\\ 130279\\ 126660\end{array}$	Boniface Cruizer Edouard G Fispa Granite Rock J. T. Horne John E. Monk M. C. M McKenzie River Minnekahta Northland	Halifax, N.S. Montreal. New Westminster. Midland, Ont. Fort William, Ont. Amherstburg, Ont. New Westminster. Winnipeg. Midland, Ont.	New Westminster, B.C. 1913 Cleveland, Ohio. 1898 Winnipeg 1913 Port Arthur, Ont. 1913 Sandusky, Ohio. 1887 New Westminster, B.C. 1911 Fort Smith, Alta. 1911 West Bay City, Mich. 1893	$\begin{array}{c} 100 \ 0 \\ 150 \ 0 \\ 69 \ 0 \\ 74 \ 0 \\ 324 \ 0 \\ 110 \ 0 \\ 128 \ 6 \\ 72 \ 0 \\ 69 \ 3 \\ 126 \ 0 \\ 328 \ 0 \end{array}$	$\begin{array}{c} 30 & 0 \\ 24 & 5 \\ 16 & 0 \\ 14 & 0 \\ 42 & 0 \\ 22 & 7 \\ 28 & 0 \\ 16 & 5 \\ 17 & 3 \\ 26 & 0 \\ 42 & 5 \end{array}$	$\begin{array}{r} 4 & 0 \\ 13 & 0 \\ 7 & 5 \\ 7 & 5 \\ 19 & 5 \\ 10 & 2 \\ 14 & 4 \\ 7 & 5 \\ 6 & 9 \\ 5 & 0 \\ 20 & 5 \end{array}$	314 380 71 63 2406 214 428 58 73 413 2759	$99 \\ 291 \\ 40 \\ 46 \\ 287$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Lake Winnipeg Shipping Co., Winnipeg. C., and C. G. Brister, J. O., Halifax, N.S. Sincennes-McNaughton Line, Montreal. Minister of Marine, Ottawa, Ont. Great Lakes Transportation Coa Midland, Ont. Lake Winnipeg Shipping Co., Winnipeg. W. O. Matthews, Port Arthur, Ont. J. Fraser, Amberstburg, Ont. J. Mayers, New Westminster, B.C. Hudson's Bay Co., London, Eng. Great Lakes Transportation Co., Midland, Ont.
$ \begin{array}{r} 130719 \\ 87034 \\ 88739 \\ 133939 \\ 13097e \end{array} $	Notin Santa Maria Sindbad Sir John	Vancouver, B.C Montreal Ottawa	Fort Smith, Alta1906Winnipeg1913Govan, Scotland1883Scotswood, Eng1883Sorel, Que1902Athabasca Landing1912Lockport, N.Y1912	$\begin{array}{c} 87 & 0 \\ 48 & 0 \\ 154 & 0 \\ 216 & 2 \\ 81 & 2 \\ 109 & 0 \\ 75 & 5 \end{array}$	$\begin{array}{c} 16 \ 5 \\ 10 \ 0 \\ 22 \ 0 \\ 31 \ 2 \\ 17 \ 3 \\ 22 \ 3 \\ 17 \ 0 \end{array}$	$\begin{array}{c} 6 & 0 \\ 9 & 2 \\ 12 & 4 \\ 13 & 5 \\ 8 & 0 \\ 5 & 0 \\ 8 & 0 \\ \end{array}$	110 18 235 897 94 318 81	59 13 124 539 41 205 55	99 " " 8 " " pa.	Northern Trading Co., Edmonton, Alta. Ross Navigation Co., Pas, Man. W. H. M. Townsend, London, Eng. F. E. Hall, Montreal. Minister of Public Works, Ottawa. Hudson's Bay Co., London, Eng. Minister of Public Works, Ottawa.

List of Sailing Vessels and Barges Registered in Canada From Jan. 1 to Apr. 30, 1914.

No.	Name Port of Registry R		Rig	ig When and Where Built		Length	Breadth	Depth	Reg. Tons	Owner or Managing Owner
$ \begin{array}{r} 134047\\134118\\134120\\134121\\134172\\134091\end{array} $	Allison H. Maxner Aranoka Atagi No. 1 B. C. T. No. 2 B. C. T. No. 6 Cecil L. Shave	Prince Rupert, B.C. Lunenburg New Westminster, B.C. """ Shelburne, N.S. New Westminster, B.C.	Schr.—Glt Barge Schr	1913 1914 1913 1912 1912 1912 1914	Fairhaven, Cal. Lunenburg, N.S. Mahone Bay, N.S. Steveston, B.C. New Westminster. Shelburne, N.S. Pt. Coquitlam, B.C.	104 2 97 6 50 0 79 6 79 6 96 0	36 0 25 8 25 0 16 0 29 0 29 0 23 0	$ \begin{array}{c} 11 & 9 \\ 10 & 5 \\ 10 & 0 \\ 4 & 0 \\ 7 & 0 \\ 7 & 0 \\ 9 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\ 10 & 6 \\$	92 94 28 147 147 98	Atlin Construction Co., Toronto. E. Maxner, M.O., Lunenburg, N.S. R. Hiltz., M.O., Indian Point, N.S. Atagi, Steveston, B.C. B.C. Transport Co., London, Eng. T. Shave, Burin, Nfld.
$\begin{array}{r} 134237\\ 134122\\ 134123\\ 134234\\ 134240\\ 130766\end{array}$	Don R. E. E. H. II. E. E. H. III. Edward Q. Frank Q. Harriat D.	Montreal New Westminster, B.C. Montreal Montreal	Scow—Chd Scow—Chd Scow—Chd	1914 1913 1913 1913 1913 1911	Montreal, Que Montreal, Que Montreal, Que Montreal, Que Mount Clemens,	117 8 117 8	41 0 28 1 39 8 39 8 28 4 28 2	13 0 8 5 9 2 9 2 6 6 7 2	225 375 375	Coquitlam Shipbuilding and Marine Ry. Co., Port Coquitlam, B.C. Quinlan & Robertson, Montreal. E. E. Higgins, Eburne, B.C. General Contracting Co., Montreal.
134238 133672 133942 134341 133943 133941	J. Henry Mackenzie. Leo B. Lottie R. Russell. Naden. Nap. L. Norman F. Wilson. P. W. D. No. Mid.	Lunenburg Montreal Halifax, N.S. Ottawa Montreal Ottawa	Schr—Glt ScowChd Schr—Glt Scow—Chd BargeChd	1914 1911 1895 1913 1911 1914	N.Y., U.S.A. Lunenburg, N.S. Montreal, Que. Leesburg, N.J. Vancouver, B.C. Montreal, Que. Hull, Que. Lockport, N.Y.	163 9 109 8 110 8 122 8 80 0 110 3 113 0 72 7	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{r} 11 & 4 \\ 10 & 4 \\ 8 & 2 \\ 10 & 4 \\ 8 & 6 \\ 7 & 2 \\ 7 & 8 \\ 6 & 5 \end{array} $	100 199 282 88 174 179	J. Donnelly, Kingston, Ont. W. C. Smith, M.O., Lunenburg, N.S. General Contracting Co., Montreal. C. Brister, Halifax, N.S. Minister of Naval Service, Ottawa. General Contracting Co., Montreal. Ottawa Transportation Co., Ottawa, Ont. Minister of Public Works, Ottawa.
134226 134112 134025	Q. & R. No. 120 R. Charland R. F. No. 5	" Montreal Montreal New Westminster, B.C. Victoria, B.C. Sydney, N.S.	Dredge— Drague BargeChd	1899 1914	Wallaceburg, Ont Ottawa, Ont Montreal, Que Sorel, Que New Westminster Nelson, B.C Lunenburg, N.S	79 0 110 1 108 4 86 0 224 1 85 9	28 0 35 1 23 4 30 0 42 5 24 5	6 8 6 8 7 3 8 1 7 9 8 8	217 431 126 84 681	" " " " " " " " " " " " " " " " " " "