

## New Steamboat for C.P.R. Kootenay Lakes Service.

The C.P.R. recently awarded a contract for the construction of a vessel for its Kootenay Lakes service, to the Western Dry Dock and Shipbuilding Co., Port Arthur, Ont. The chief dimensions will be as follows: Length between perpendiculars, 200 ft.; beam moulded, 40 ft.; beam over guards, 43 ft.; depth, 8 ft. The hull will be of steel, with wrought iron stem, square stern with two longitudinal water tight bulkheads, one longitudinal truss and seven transverse bulkheads. Three steel interchangeable rudders will be fitted in place, and one spare one will be supplied. The deck will be of  $\frac{1}{4}$ -in. plate throughout, all flush rivetted,  $\frac{1}{4}$ -in. straps, all longitudinal seams single rivetted and transverse seams double rivetted. There will be openings from the deck to each compartment, with light plate door flush with deck. The stem will be of wrought iron  $1\frac{3}{4}$  by 7 ins., to extend 18 ins. above the main deck. The transverse bulkheads will be  $\frac{1}{4}$ -in. thick with single 3 by 3 by  $\frac{3}{8}$  ins. angle frames, stiffeners flanged  $2\frac{1}{2}$  ins., spaced 3 ft. vertically, and one  $3\frac{1}{2}$  by  $2\frac{1}{4}$  by  $\frac{1}{4}$  ins. horizontal plating. The longitudinal bulkheads will be of  $\frac{1}{4}$ -in. plates attached to shell plate and deck by  $2\frac{1}{2}$  by  $2\frac{1}{2}$  by  $\frac{1}{4}$  ins. angles, angle stiffeners 3 by 3 by  $\frac{3}{8}$  ins., spaced  $3\frac{1}{2}$  ft. apart under hog posts. The engines will be of the tandem compound type with cylinders  $16\frac{3}{4}$  and  $35\frac{3}{8}$  ins. diam., by 96 ins. stroke. Centre to centre of engines to be 25 ft.  $8\frac{1}{4}$  ins., and they will be of ample strength for a working steam pressure of 200 lbs.

## Stranding of the s. s. Earl Grey.

Following is a summary of the judgment delivered by L. A. Demers, Wreck Commissioner, concurred in by W. R. Lugar, Examiner of Masters and Mates, Halifax, N.S., and Capt. W. McKenzie, Pictou, N.S., Apr. 23, re the stranding of the Dominion Government s.s. Earl Grey at the River John in the Northumberland Straits, Apr. 17.

The court finds that Capt. Angus Brown was unable accurately to determine the speed of his ship, as the day of the stranding was the first occasion that she had been navigated in clear water, following the loss of her propeller blades, and that realizing the unreliability of his calculation with regard to the speed he should have adopted all available methods of establishing his position. His action in proceeding at full speed in a dense fog, without sounding, despite the fact that the vessel was equipped with a machine capable of determining the depth of water while proceeding at full speed, as well as his failure in insisting that a lookout be kept on the fore-castle head, constitute, in the opinion of the court, grave errors of judgment. Further, it is held, that instead of relying almost entirely on assistance from other sources, he should have utilized the wire remaining unused in his hold, to lay a bower anchor, and in the event of the wire not being of sufficient strength to dislodge the vessel, it would have acted as a deterrent against the vessel being driven ashore by strong gales. The reason given by the captain for the non-usage of the wire, to the effect that the chain attached to it, combined with its own weight, could not be sustained by the boats, cannot be accepted, for the mate in his evidence stated that he had procured spars from which to suspend the anchor between the boats to be utilized in hauling the vessel off. The captain's statement that he issued verbal orders for the speed to be reduced prior to the stranding remains uncorroborated, and the mode of procedure which he claims

to have followed cannot be countenanced. The court therefore suspends the captain's certificate for three months from Apr. 22. The court also holds that the pilot, McGregor Fraser, whose license extends from Pictou to Prim Point, was guilty of negligence through his failure to exercise necessary precautions with regard to the navigation of the vessel, and a copy of the finding will be forwarded to the Pictou Pilot Commissioners in order that they may deal with him. The second officer, F. P. Gallant, is considered to be insufficiently experienced in steamship navigation to occupy such a responsible position.

## Lake Vessel Insurance Rates.

Largely owing to the Canadian Lake Protective Association's very successful work last season insurance rates on the Great Lakes and contiguous waters have been materially reduced this year directly in the premium charged and indirectly by the lowering of the valuation at which ships will be insured.

As a result of conferences between the Association's representatives and the underwriters the values have been reduced from £11 or \$53.50 a ton to £10 1s 2d or \$51 a ton. Last year the Great Lakes Protective Association, a United States organization, had a rate of  $5\frac{1}{2}\%$  with U.S. insurance companies, while the Canadian owners were charged  $5\frac{3}{4}\%$  in the U.S. against  $5\frac{1}{2}\%$  by British companies. This year a list of preferred fleets will get a  $5\frac{1}{4}\%$  rate pro rata. On all vessels attaching on and after Aug. 1  $\frac{1}{4}\%$  will be added, and to those attaching on and after Oct. 1  $\frac{1}{2}\%$  will be added.

An agreed policy will be used as in previous years. The Association and the London underwriters will consult and agree as to form of protection and indemnity clause, in view of recent workmen's compensation acts.

## Declaration as to Vessel Ownership.

The British Colonial Secretary has forwarded to the Governor General a copy of a letter issued by the Board of Trade on the subject of the alteration of the form of declaration of ownership required by sec. 9 of the Merchant Shipping Act, 1894, to be made on application for registry of a vessel owned by a body corporate, and requesting to know whether it would not be desirable to bring the new forms into use in Canada. The letter referred to reads:—

"It will be seen that the principal alteration consists in the insertion of a paragraph to the effect that the company on whose behalf the declaration is made 'has its principal place of business at — where all the important business of the company is, in fact, controlled and managed at meetings of directors of the managers of the company.' Recent experience has shown that foreign shipowners who are desirous of obtaining the advantage of the British flag for their vessels without relinquishing their control of them, sometimes attempt to effect their object by registering a company under the British Companies Act and having merely a registered office in the United Kingdom without in fact transacting their business there; and the object of the alteration in the form is to check as far as possible the registration of vessels owned by such companies."

The Inland Lines steamboat Empress of Midland, while running light from Midland to Cleveland, May 5, ran aground at Cabots Head during a fog and was released, May 7, and taken to Collingwood, where she was docked for repairs to about 20 plates.

## Trade and Supply Notes.

The matter which appears under this heading is compiled, in most cases, from information supplied by the manufacturers of, or dealers in, the articles referred to, and in publishing the same we accept no responsibility. At the same time, we wish our readers to distinctly understand that we are not paid for the publication of any of this matter, and that we will not consider any proposition to insert reading matter in our columns for pay or its equivalent. Advertising contracts will not be taken with any condition that accepting them will oblige us to publish reading notices. In other words, our reading columns are not for sale, either to advertisers or others.

The Preston Car and Coach Co., Ltd., Preston, Ont., has been granted supplementary letters patent, increasing its capital stock from \$200,000 to \$500,000.

McKeen Motor Car Co., Omaha, Nebraska, has opened a central sales district office at 1451 Marquette Building, Chicago, Ill., with E. E. Wright as manager.

The Brown Hoisting Machinery Co.'s catalogue J 1912, covers illustrated descriptions of various kinds of hoisting and conveying machinery, including the Brown-hoist pillar crane, hand wrecking crane, mast jib crane, bracket jib crane, pillar jib crane, stationary bridge crane and transfer table. The illustrations include a two ton Brownhoist hand pillar crane, with 15 ft. radius, erected on a car for street railway work, for the Ottawa Electric Ry., a description of which is given in the Electric Railway Department of this issue.

The Robb-Brady Scotch boiler, which is manufactured at Amherst, N.S., and South Farmingham, Mass., was tested recently at the sewerage pumping station, Farmingham, Mass. This boiler is a modified form of the standard Scotch marine boiler, it being claimed that the changes from the standard form greatly increase the circulation. The heating surfaces are arranged as in the standard form and there are the same internal furnace flues, but there are two smaller shells, one above the other, in place of the large one, and an annular circulating passage is formed at the front end by the use of a plate beneath the front neck. This plate guides the cooler feed water around the shell, discharging it beneath the furnaces at the front. The water is heated while passing around the furnaces and among the tubes, and enters the steam drum by the rear neck. In the test referred to the boiler was equipped with thermometer oil wells so that the temperature could be noted at four points, viz., at the top of the shell near the front end, at the top of the shell at the rear just over the combustion chamber, at the front and rear close to the bottom. We are advised that with water in the boiler at about  $80^\circ$  the fires were started and readings of every thermometer taken every five minutes. The temperature of the water at the top of the shell increased steadily until the boiling point was reached. At the bottom the temperatures increased very slowly up to the time the upper thermometer indicated the boiling point. Then the lower thermometer showed sudden rise, jumping to within a few degrees of those at the top. From this time on all four kept within a few degrees until 100 lbs. was reached, at which time practically no difference could be noted at the four points, showing that the circulation was positive and rapid.

**Railway Lands Patented.**— Letters patent were issued during March, covering railway lands in Manitoba, Saskatchewan, Alberta and British Columbia, as follows:—

Canadian Northern Ry. ....	Acre.
Canadian Pacific Ry. ....	6.39
Grand Trunk Pacific Ry. ....	1,352,938
	20.43
Total .....	1,379,758