

to overcome that difficulty by equivalent compensation is the problem that has to be solved before the fleet of the future can be built in Canada. It may be taken for granted that no legislation is practicable that would tend to exclude British ships from Canada, consequently the necessary relief cannot be found in that direction. The policy which has been adopted with regard to railways and the production of iron ore appears to be the only one suitable for producing like results in ship-building, (the extent of that assistance and its mode of application to be the subject for consideration) viz., a direct bonus per ton of ships constructed. The tonnage can be calculated in several ways. 1st. On the gross registered tonnage, which means in tons of 100 cubic feet internal capacity. 2nd. On the displacement which is equivalent to the gross weight of ship, cargo and equipment. 3rd. On the total weight of steel used in the construction of the hull. Each section will doubtless have its own advocates, and it will require careful consideration before a fair adjustment can be made. For instance, the advocates of the displacement tonnage would be those who would build heavy cargo steamers with large co-efficients, whereby they would have immense advantage over the builders of fast passenger boats which would carry no cargo, and would have small displacement. On the whole, it would appear as if a bonus paid on the actual quantity of steel consumed would be the nearest approach to a fair distribution, but that, of course, is a matter to be determined after the first principles have been agreed upon.

In discussing government aid to steel ship-building in Canada, Hon. W. S. Fielding, the Minister of Finance, recently said, "While the country would be able to find employment for the wooden vessels turned out, if we are ever to engage in the carrying trade of the world, of which we formerly had so large a share, we must have steel vessels to do it. It would be better that we should buy them abroad than be without them, but it would be still better to build them ourselves, if that would be feasible, and I have a strong hope that we may gradually do so. All that I care to say on that point, or on the general question of aid, is that the Government is most anxious to see the industry carried on in Canada in a large way, and any reasonable proposals looking to a development of that kind would receive very favorable consideration."

As showing the present difference of cost of construction of steel steamers in the U.S. and Great Britain, the following interesting comparison is made in a letter by B. N. Baker, of Baltimore, President of the Atlantic Transport Line, to the U.S. Commissioner of Navigation: "The cost of the English ship (building by Harland & Wolff, of Belfast) will be about £292,000 or \$1,419,120. The same identical ship built at the works of the New York Shipbuilding Co. will be a little over £380,000 (\$1,846,800)," an increase of 30% over the British price. "The cost of two smaller ships now building by the New York Shipbuilding Co. for us is £150,000 each (\$729,000). Two were built by Harland & Wolff, of exactly the same detail, within the last year, one for £110,000 (\$534,000), and the other £100,000 (\$486,000)," or a difference on the average of about 40%.

Assuming that we in Canada, given equal facilities as regards plant and equipment, can build ships as cheaply as ship-builders of the U.S., we have here apparently a fair indication of the amount of assistance necessary to enable Canadian ship-builders to compete with those of Great Britain, in the construction of the class of steamers referred to. What the difference would be in the case of ocean cargo boats from 3,000 to 8,000 tons capacity, has yet to be ascertained.

Mr. Redway's previous article on this subject appeared in our April issue, pg. 122.

The St. Lawrence Route.

A deputation of Montreal shipping men, comprising R. Reford, H. Harling, J. Torrance and A. A. Allan, accompanied by C. J. Smith, General Traffic Manager of the Canada Atlantic Ry., recently waited on the Dominion Government to discuss the present heavy insurance rates on vessels using the St. Lawrence. R. Reford presented a written statement in which it was suggested that the British Government be asked to appoint an experienced hydrographic engineer to survey and report on the waterway from the ocean to Montreal, showing the natural state of the gulf and river, what had been done by the Government to render navigation safe, and what further works, lights or buoys were necessary. Canadian officers should accompany this officer, so that they would be enabled afterwards to supervise the construction of the works recommended. The memorandum also recommended as a necessary part of the project for perfecting the shipping facilities of Montreal, the extension of the I. C. R. to a port on the Georgian bay, and shortening the line by the construction of a cut-off between Riviere du Loup, Que., and Moncton, N.B. C. J. Smith dissented from the suggestion as to the construction of a Government line to a Georgian bay port. In supporting the application Mr. Reford pointed out that the insurance rate on vessels to Montreal was 9 and 10% as against 4% to Boston and New York, which meant a handicap of about \$25,000 a year for each vessel coming into Montreal. The channel between Quebec and Montreal should have a depth of 30 ft., and a width of 500 ft., a continuous line of lighted buoys should be provided along the channel, and modern lights and buoys should be provided at Anticosti island, Cape Race and Belle Isle. Other gentlemen having spoken, the Deputy Minister of Marine stated that a report on the Gulf lights was being prepared for the Minister of Marine. Hon. J. I. Tarte favored the appointment of a British expert, and observed that within two years the whole channel from Montreal to Quebec would be dredged to a depth of 30 ft. for a width of 450 ft. Fifty miles of the work had yet to be done. Five new dredges had been constructed, including the J. Israel Tarte, and a sixth was to be built. The whole matter is to be taken into consideration by the Cabinet.

Notices to Mariners.

The Department of Marine has issued the following notices:

No. 86, Oct. 18.—Ontario—1. Pelee passage telegraph cable relaid. 2. Re-establishment of southeast shoal light vessel. 3. Western passage into Thunder bay, shoals.

No. 87, Oct. 19.—Nova Scotia—1. Charlo harbor range lights. 2. Poulamon lighthouse.

No. 88, Oct. 19.—Newfoundland—1. Cape Race, change of characteristic fog whistle. 2. Plate point light and siren irregular. 3. Gallantry head, irregularity in fog signal.

No. 89, Oct. 22.—New Brunswick—1. Richibucto harbor entrance, changes in aids to navigation.

No. 90, Oct. 22.—Quebec—1. Bécancour beacon, re-erection. 2. Buoyage of ship channel between Montreal and Quebec.

No. 91, Oct. 22.—Quebec—St. Petronelle lighthouse.

No. 92, Oct. 22.—British Columbia—1. Lawyer islands lighthouse. 2. Lawyer Islands group, hydrographic notes. 3. Hazel point, buoy established. 4. Middle passage Skeena river mouth, sailing directions.

No. 93, Oct. 26.—Ontario—1. Uncharted shoal off Blackrock, entrance to Parry Sound. 2. Bar point cut, gas buoy.

No. 94, Oct. 30.—Quebec—1. Change in position of Red islet lightship. 2. Reported derelict in gulf of St. Lawrence.

No. 95, Nov. 4.—Ontario—Change in position of Port Colborne back range light.

No. 96, Nov. 4.—British Columbia—1. Hydrographic notes, Broughton strait, Queen Charlotte sound, Blackfish sound, and Johnstone strait. 2. Rocky patch in Discovery passage. 3. Barkley sound, new dangers, etc.

No. 97, Nov. 5.—Prince Edward Island—1. Improvements in Annandale range lights. 2. Annandale wharf light discontinued.

No. 98, Nov. 7.—New Brunswick—Machias seal island, height of lights, etc.

The U.S. Hydrographic Office has issued the following among others relating to the great lakes:

No. 42, Oct. 19.—Lake Erie—Peelee passage, Southeast Shoal gas buoy, intended removal to Detroit river entrance.

No. 43, Oct. 26.—Lake Erie—Detroit river entrance, wreck eastward of Bar point lighthouse. Lake Ontario—Charlotte harbor entrance, Genesee range front light, increase in arc of illumination.

The Toronto Navigation Co., Ltd.

This Co. made an assignment, Nov. 5, to A. C. Neff, accountant, who called a meeting of the creditors for Nov. 18, and gave notice that he would distribute the assets after Dec. 19. The T.N. Co. was incorporated under the Ontario Companies' Act, May 11, 1901, and on organization the officers elected were: E. L. Sawyer, broker, Toronto, President; A. M. Colquhoun, of Sawyer, Ross & Co.'s office, Secretary; H. C. McLean, publisher, Toronto, Treasurer; and R. S. Hicks, formerly with the Northern Navigation Co., Manager. The capital of the Co. was fixed at \$100,000, and it was reported that a little over \$50,000 of the stock had been subscribed and paid up, partly in cash, some of the stock being issued free from call.

With the capital subscribed two steamers were purchased, overhauled and run from early in July to Sept. 16, between Toronto and Youngstown, N.Y., where connection was made with the Lewiston, Youngstown and Frontier Ry. Co., in connection with which through tickets were issued to Niagara Falls and Buffalo, and from these places to Toronto. For a portion of the time one of the boats ran between Toronto, Oswego, N.Y., and Charlotte, N.Y., the other maintaining the Toronto-Youngstown route. It was reported that the T.N. Co. had an option on the L.Y. & F. Ry. Co. for \$166,000, and had paid \$1,000 on account, but nothing further appears to have been done, and a few days before the assignment the Ry. Co. issued a writ against the Steamship Co. for \$1,755.70 for tickets sold over its line. Other writs are also reported to have been issued.

No particulars are given as to the Co.'s indebtedness, but it is estimated that, outside liabilities to shareholders, it will not exceed \$7,000. The assets consist of two steamers, the Canada and the Niagara. The former was the Queen City, built in 1874, and practically rebuilt within the last four years; and the latter was the Dominion Government cruiser, Druid, built in 1856, which was sold out of the service this year, and converted into a passenger boat, with a license to carry 300 passengers.

Maritime Provinces and Newfoundland.

Bishop & Monroe, of St. John's, Nfld., have placed an order with John French, Burnt Bay, Nfld., for a 130-ton schooner.

The Department of Marine proposes to have a steam launch constructed for the use of the Oyster Inspector of Nova Scotia and New Brunswick.

Attention is being directed to the necessity of regular steamboat communication between