

FABRICATED SHIPS.

Britain's Tonnage Output to Be Increased by Tapping New Sources Inaccessible or Impossible to the Private Shipbuilder.

The change in the British Government's attitude on the question of furnishing information regarding shipbuilding is instanced by a recent incident. The following appeared in the Glasgow "Herald" on April 11:

"The opinion grows that the obscurity in which the merchant shipbuilding side of the Admiralty works is excessive. There is a limit, of course, to the figures which can safely be given, and it would not be wise to give details of the vessels in hand. But the perplexities of ordinary members of the public would be appreciably reduced if, say, the difference between standardized ships and fabricated ships were officially or semi-officially explained. The nature of a standardized ship is not perhaps very obscure, but to the majority of people a fabricated ship is."

"On the other side of the Atlantic there is no disposition to make a mystery of it. An American naval architect recently read a very interesting paper on the evolution of the idea, from which it appears that a fabricated ship is one of which the parts are made in establishments equipped for other purposes than shipbuilding and marine engine manufacture, and transported to the seaboard for assembly. About 70 to 80 per cent of the American ships are 'fabricated.' According to accounts the percentage is much higher in the case of British ships of the type."

POLICY OF SILENCE ABANDONED.

Heretofore suggestions of this character have elicited no response, but the following, which has now appeared in a number of papers and which presumably was furnished by the Official Press Association indicates the changed attitude.

"One of the most interesting but least known developments of the present shipbuilding effort in which Great Britain has led the way is that of 'fabricated' ships. A 'fabricated' ship is a vessel the component parts of which are manufactured in other than shipbuilding yards. These component parts are transported to shipbuilding yards, assembled there and put together as complete ships."

"It is pointed out that when the State undertook the reorganization of the United Kingdom's mercantile shipbuilding industry, the principle of standardization was naturally adopted because in mass production of a specific object the highest possible speed of output is obtainable. A series of standard ships were designed, and contracts to build them were given out to the private yards of the country. As supplies of steel and labor increased and promised a margin over and above the requirements of the existing controlled shipyards, the idea was carried a stage further. The fabrication of ships was decided on and the necessary provision made."

"The aim of the Admiralty Deputy Controller's Department was still further to increase speed of production. As matters stood all the shipbuilding yards, engine factories and boiler shops were largely occupied with standard ship work. There were, however, many other industrial establishments in the country doing work closely resembling shipbuilding and marine engineering. Among them were bridge-building yards and land engine factories. The majority of them were in inland centres and remote from launching water; but, taken altogether, their resources were so great that it was felt that they ought to be used."

LARGER VESSELS PLANNED.

"Fabrication" solved the problem, and a ship was designed the material of which could be satisfactorily fabricated in the bridge yards. It is a bigger vessel than most of the standard ships, and there is not a curved frame in it. Size and weight of unit of construction are limited, so that transport is easy, and powerful gear for placing it in position is unnecessary. To avoid the same difficulties as regards machinery supply, geared turbines have been adopted instead of reciprocating engines. Every part of the complete ship can, in fact, be fabricated in inland establishments selected near the steel mills which have never done ship or marine engine work and can be transported by ordinary means to the seaboard. With all the slips in private yards filled, it was necessary to look elsewhere for sites for assembling yards."

"The national shipyards on the Bristol Channel were laid out for the purpose, and private undertakings of the same character exists or are projected with the concurrence of the Admiralty elsewhere. The objection has been urged that State-owned establishments ought not to have been set up until it was

AMERICAN SHIPYARDS HAVE ALREADY DELIVERED 883,711 TONS OF NEW SHIPS.

Under date of May 1, the statistical department of the Shipping Board reports in full and in detail the ships already launched, completed and accepted, since the shipbuilding drive started. It covers 120 vessels, the largest exceeding 17,000 deadweight tons and the smallest of 2,930 tons. There were 13 of them exceeding 12,000 tons in size, 10 between 10,000 and 12,000 tons, 40 between 8,000 and 10,000 tons, 9 from 7,000 to 8,000 tons, 7 from 5,000 to 7,000 tons, 15 from 3,500 to 5,000 and 24 below 3,500 tons; the aggregate of tonnage being 883,711 tons.

GOV'T RAILWAY SHOWED DEFICIT.

In reply to a question put by the Hon. Charles Murphy, in the House at Ottawa, on Friday last, Dr. Reid, Minister of Railways and Canals, read a lengthy statement with regard to the operation of Government roads during the past year in which he said that the Canadian Government Railway system consisted at the present time, or 4,130 miles of rails, distributed as follows: Intercolonial Railway, 1,513 miles; Prince Edward Island Railway, 275 miles; Transcontinental Railway, 1,811 miles; Lake Superior branch, 191 miles; Intercolonial Railway, 111 miles; New Brunswick and Prince Edward Island Railway, 36 miles; Dartmouth and Dean's Branch, 67 miles; St. Johns and Quebec Railway, 117 miles. There were two general managers in charge of the operations of these roads, one running the eastern and one the western lines.

For the fiscal year 1917-18, the total working expenses of the Government railroads were \$32,298,047, as compared with \$24,627,271 in the previous year. The average total expenses per month for the past fiscal year were \$2,691,578, as against \$2,052,272 in 1916-17. The total earnings in 1917-18 were \$27,004,666, and in 1916-17, \$23,468,998. The average earnings per month last year, \$2,250,388, and in the previous year, \$1,955,749. This statement showed that the average increase in earnings during the year was about \$300,000 per month. The result of the operations during the past year was a deficit of \$5,293,280.

Canadian Government Railways, said Dr. Reid, had benefitted by the increased freight rates granted to Canadian roads by the Railway Commission. But, in spite of this fact, he expected there would be a loss at the end of this year.

The total cost of new equipment ordered for the Canadian Government Railways, said the Minister, amounted to \$26,013,000.

The Prince Edward Island Railway showed a deficit of \$488,172 after the year's operations. This was the largest deficit in the history of the road. But it was one of the conditions of Confederation that it would be operated as a public convenience. Owing to the war, he said, it would be impossible to widen the gauge of this road. This work would involve an expenditure of \$2,000,000, which could not be made at the present time.

The disastrous explosion in Halifax had caused a loss of \$1,250,000 to the Canadian Government Railways.

On the Hudson's Bay Railway \$20,161,000 had been expended. Of this, \$6,342,000 had been expended on the Port Nelson harbor works, and the remainder on the railway itself.

definitely known that the contract industry could not provide the required additional facilities. But it should not be overlooked that in carrying out its plans the State has a call on labor which is not available to contractors. The bulk of it is unskilled. Labor is, however, being trained in the use of pneumatic riveters and caulking tools and will be (already it is in a large number of instances) sufficiently expert to put the assembled fabricated ships together.

"The fabrication of the material of ships and engines has now been organized over a considerable area, local committees being responsible in certain districts for definite deliveries of a ship, or a number of ships, in specified periods. Moreover, fabricated ships are taking shape in several assembling yards. Before long vessels of the type should represent a very considerable addition to the tonnage output. In the strictest possible sense of the term they will be additional, for their production will have involved absolutely no interference either with the contract industry or its supplies of labor and material. The State's fabricated ship enterprise increases the tonnage output by tapping new sources which are inaccessible or impossible to the private shipbuilder."

ALGONQUIN PARK.

The Algonquin Park of Ontario is a great reserve of nearly four thousand square miles. It is on the very ridge of the famed "Highlands of Ontario." Its altitude above sea level averages 1,700 feet, while some of the lakes in the Park are 2,000 feet above the sea. Its tonic air filters through millions of acres of pine and balsam and spruce. The fragrant bush, through which roads and trails are constantly being extended, the tree-fringed lakes, disturbed only by sportive bass or trout or the swish of the paddle, the serenity, the impressiveness, and the beauty of it all combine to place the visitor under the spell of this wonderful natural domain.

The park makes an especially strong appeal to the fisherman and canoeist. There are more than 1,500 lakes in the park, and the excellence of the sport draws anglers from every part of the Dominion, and from every State in the Union. Among the special varieties to be caught are the genuine square-tailed brook trout; the gamey black bass of the small-mouthed variety, ranging from half a pound to four pounds, and the black-spotted salmon, or its near relative, the grey trout.

The accommodation in the park is such that the most varied tastes can be pleased. There are hotels, including the well-known "Highland Inn," for those who want to be in the wilderness, yet enjoy all the comforts of good service and social companionship. There are log cabin camps, Nominigan Camp and Camp Minnesing, comfortably furnished and ideal for family parties.

The park is easily accessible by the Grand Trunk Railway from all parts of Canada. It is two hundred miles north of Toronto and one hundred and sixty-nine miles west of Ottawa. For reservations at the Highland Inn, Nominigan Camp and Camp Minnesing apply to Miss Jean Lindsay, Manager, Algonquin Park Station, Ontario. For more detailed information, maps, routes, etc., write to or call on C. E. Horning, Union Station, Toronto.

WHOLESALE REPRESENTATIVE

A merchant with many years experience, having already many customers and being in possession of store and store-house, would like to represent wholesale firms on manufacturers. Good references could be supplied and percentage paid in advances on goods shipped.

Write L. D. Blais, P.O. Box 76, St. Roch, Quebec.



CUNARD LINE

PASSENGER SERVICE
BETWEEN
HALIFAX and BRISTOL

Money Remittances made by Mail or Cable. Apply to Local Agents or The Robert Reford Co., Limited, General Agents, 20 Hospital Street and 23-25 St. Sacramento Street, Montreal.

ANCHOR-LINE
DONALDSON LINE

PASSENGER SERVICE
BETWEEN

PORTLAND, ME. and GLASGOW

Apply to Local Agents or The Robert Reford Co., Limited, General Agents, 20 Hospital Street, and 23-25 St. Sacramento Street, Montreal.