

On Lake Baikal, in connection with the Siberian Railway, a steam ferry has been for some years in successful operation, and rendered good service during the recent war with Japan. The steamer is 290 ft. long, 57 ft. beam, and of 4,000-horse power. This vessel has three lines of rails laid on the deck, and carries a superstructure which shelters the railway-carriages and contains extensive accommodation for passengers. The length of the run across the lake is forty miles. Very stormy weather has to be faced, and in the winter the vessel acts as her own ice-breaker.

These examples might be multiplied, but they will suffice for the present purpose, as they afford complete evidence that there would be no difficulty in establishing a successful railway steam-ferry service between the ports of Stranraer and Larne, provided that the necessary expenditure is incurred. At Stranraer it would be found desirable, no doubt, either to extend the present pier in order to secure a greater depth of water, or to select a locality for the ferry station where deeper water would be available. On the Larne side there is ample depth of water. At both terminal ports it would be necessary to secure proper shelter for the steamers, so that embarkation and disembarkation of trains might proceed with despatch and safety. Into details of this portion of the scheme, however, it would be out of place to enter in this report; they represent no engineering difficulties.

In regard to the size and cost of the steamers, it may be stated that the designs must be governed chiefly by the *length and weight of the trains* considered best suited for the proposed passenger service between London and Blacksod Bay and upon the *speed* which it is desired to maintain. The use of turbine engines will enable screws of small diameter to be employed, and comparatively limited draught of water to be adopted, because turbines would work at greater rates of revolution as compared with reciprocating engines. As the length of the open-sea passage is very moderate it might be considered sufficient to have a working speed of fifteen to sixteen knots. This is a point on which the promoters of the scheme will no doubt have formed their own opinion. The designers of the vessels will have no difficulty in meeting any reasonable requirement of speed on a comparatively moderate draught of water, and in carrying the maximum load likely to be required. First-cost and working-expenses must, of course, increase rapidly as the speed is raised. Should it be desired to develop a goods traffic as well as a passenger service, it would probably be found advantageous to build vessels specially adapted for carrying luggage-trains. In these it would be possible to dispense with waiting and retiring rooms which would be essential in the proposed passenger-steamers. In this manner greater deck-space would become available for the railway-tracks, more rail-tracks could be provided, and a larger number of trucks could be accommodated. The additional load would present no difficulty.

In framing the scheme, provision must be made, of course, for a sufficient number of vessels to carry on the full service uninterruptedly, allowing for the fact that at certain periods a steamer must be laid up for overhaul and repair, and to meet contingencies or possible accidents.

When a decision has been reached as to the speed and carrying-power required in the steamers, and the maximum draught of water available at the terminal ports has been determined, it will be possible to estimate with close approximation the aggregate first-cost and the working-expenses of the proposed steamers. The nature and cost of the harbour-works and mechanical appliances for handling the trains at the terminal ports can also be ascertained.

W. H. WHITE.

19th June, 1907.

Enclosure 2 in No. 105.

(See map opposite.)

Enclosure 3 in No. 105.

66 Gloucester Gardens, Hyde Park, London, W., 25th June, 1907.

IMPERIAL ROUTE.—GREAT BRITAIN TO CANADA, AUSTRALIA, NEW ZEALAND, AND HONG KONG.

To the Editor. [Name of newspaper not given.]

SIR,—

Your readers, in common with the majority of Canadians, have doubtless been interested in the information which has from time to time during the last few months been published by the Press of Canada in connection with the proposed fast line of steamers between Great Britain and Canada, Canada and Australasian ports on the Pacific, and between Canada, Japan, and China.

The attention of the Committee which has been promoting what is known as the Blacksod Bay scheme has repeatedly been called to misleading cable messages sent from Great Britain, either by the Canadian Associated Press or special correspondents, to Canadian newspapers, and it has been thought advisable by them in their own interest, and in that of the people of Canada, to briefly indicate what it is that they propose to do. This cannot be better done than through the medium of the leading Canadian newspapers, and I am therefore addressing this letter to you and other editors, trusting that you and they will consider it of sufficient importance to publish it.

A little over a year ago the first steps were taken in connection with this enterprise, the intention of the promoters being to obtain the requisite authority and construct a port at Blacksod Bay on the west coast of Ireland. This bay provides a magnificent natural harbour which has practically been unused, because it is not in touch with the general railway system of Ireland. The proposal involves not only the construction of the port, but also of nearly one hundred miles of railway. To sanction this, legislative powers have to be obtained, and a Bill which was introduced into Parliament early in the present session has already passed through the House of Commons, and been read a second time in the House of Lords. All opposition to the Bill having been withdrawn, it will now go through as