

that the Government should not only endeavor to obtain from the Imperial Government a hydrographical officer to survey the lakes, but one or more, if necessary, to perfect the survey of the Gulf and River St. Lawrence and its coasts, so that there may be some assurance that the directions laid down in the pilot books may be authentic, not with reference to thirty years ago but with reference to today. Now, I know, from the experience of old fishermen and old coasters, that the currents are not the same as they were some years ago; they are stronger in the spring and weaker in the summer, because in the summer we have a drouth and in the spring a great flow of water, neither of which we had to an equal extent in former years, and both of these have an effect upon the currents in the gulf and the river as well as upon the tides. I do not think the Government will be opposed to this application made by the people of the Lakes and of the River St. Lawrence, because this is a matter of necessity. Some people may say that we have our surveyors and civil engineers in this country, whom we send to make plans of any changes on our coasts. That is true; but these plans are useless for the hydrography of this country, and if they were sent to England they would not be accepted by hydrographers, because hydrographical surveying is done on an entirely different principle from common surveying. In order to show the extent of the dangers on the St. Lawrence in the fall, owing principally to the currents, I will cite the rates of insurance charged on ships and cargoes from Quebec to ports in Great Britain: June, July and August, $1\frac{1}{2}$ to $1\frac{1}{2}$ per cent.; August 31st to September 15th, $1\frac{1}{2}$ to $2\frac{1}{2}$ per cent.; September 15th to September 30th, $2\frac{1}{2}$ to $3\frac{1}{2}$ per cent.; October 1st to October 15th, $3\frac{1}{2}$ to $4\frac{1}{2}$ per cent.; October 15th to October 31st, $4\frac{1}{2}$ to $5\frac{1}{2}$ per cent.; November 1st to November 19th, $5\frac{1}{2}$ to $6\frac{1}{2}$ per cent.; after November 19th the rates change daily, according to the appearance of the weather. I could bring many competent witnesses to show that the dangers of navigation in the lower parts of the St. Lawrence and of the maritime coasts would be greatly lessened if the waters were surveyed again by hydrographical surveyors, and the currents laid down on the charts as they really exist. I do not wish to detain the House; I think the importance of this matter will be appreciated by the Government, and I hope and believe they will induce the British Government to take action in the matter, because most of the vessels coming here are British vessels, manned by English sailors. We have young men studying in the Military College at Kingston, and it is said that many of them, when they get out, go to the United States or elsewhere. Some of these young men might be employed in this country. We might have our own hydrographical department, and when England will be convinced that our own people will be able to make the hydrography of this country, she will allow us our own hydrographical department, and she will accept our work as she did in the case of the Board of Examiners for sailing masters and mates. I hope the Government will do their best to bring about this very desirable object.

Mr. DAWSON. I am very glad indeed to see that the hon. member for Gaspé, in bringing this very important matter before the House, has not forgotten the great lakes. It is certainly very necessary that a hydrographical survey should now be made of these lakes, and, as the hon. gentleman has suggested, it should be made in connection with the Admiralty in England. It is now a long time since the first survey was made of these inland waters by Captain, afterwards Admiral, Bayfield, and he certainly did wonders at the time, considering the means at his disposal, and that the country around was then an unknown region. It is not to be wondered at that a good many shoals have since been discovered that were not known in his day. He had chiefly to rely for information on the Indians who coast along near the

shores, very seldom venturing far out with their little canoes into these great inland seas. Latterly, and for some years past, there have been discoveries of shoals in the Georgian Bay and also in Lake Superior. It is very desirable these shoals should be laid down on the charts. The American Government, within the past few years, have made a most careful hydrographical survey of the United States side of these lakes. Every shoal is marked as well as the sounding. The shipping on the great lakes is increasing. As I said the other day, no less than 200,000 tons of shipping were entered at the port of Prince Arthur's Landing in Thunder Bay during the past summer. New steamers are being built constantly. I may mention that the Messrs. Beatty, of Sarnia, who have taken a great interest in the great lakes, and laid out their capital in building ships, have now the largest and finest steamer ever used in these lakes, nearly completed at Sarnia. In view of the immense amount of money being invested in shipping, and the great interests at stake, I certainly join with my hon. friend from Gaspé in recommending to the Government that a survey should be made.

Mr. McLELAN. The papers in connection with this matter will be brought down as speedily as possible. I will say to the hon. gentleman who called for them that I am not aware, since I took the Department of Marine and Fisheries, that any communications have been forwarded to that Department respecting the navigation of the St. Lawrence, except those forwarded by the hon. gentleman himself a few days ago. When the information was given to the Department that in the lakes there were certain shoals, not laid down in Bayfield's chart, I at once took the necessary steps to have a hydrographic officer to take charge of a survey on the inland waters, for the purpose of having anything he might discover laid down on the charts already existing, so that they might be rendered as valuable as possible. Both the hon. gentlemen who have spoken have not over-stated the importance to the country of having the charts by which the gulf and lakes are navigated made as perfect as possible; and I think the hon. gentleman who moved for the papers, and who has made many valuable suggestions respecting the navigation of the St. Lawrence—in fact all the hon. gentleman's suggestions have been of great value to the country—will admit the Government has always shown its willingness to put in practice the suggestions he has made. Many lights have been added, fog alarms and whistles have been placed at different points, and telegraphic communication furnished, nearly throughout the length of the gulf. If anything be wanting to make the navigation of the St. Lawrence more safe than it is, the Government will not be slow to do all that is necessary. We have had an answer to our enquiry, and have been informed that an officer of the Hydrographic Society has been ordered to place himself in communication with us to perfect plans for a survey of the inland lakes.

Motion agreed to.

Sir LEONARD TILLEY moved the adjournment of the House.

Motion agreed to; and (at 4:15 o'clock p.m.) the House adjourned.