

bold and striking plan of Alderman Turner for the reorganization of the finances of the city, deserves the favorable consideration of the citizens.

THE FRENCH MARINE AND CANADIAN SHIPS.

The decline of the naval marine of France, from the second to the sixth rank among the nations, is a subject of uneasiness among shipowners, economists and statesmen. Some find consolation in the reflection that the decline is relative, not absolute; that it has been brought about by the more rapid progress made by other nations. The aggregate tonnage of the vessels that left the ports of France in 1876, was 8,731,566, of which 5,583,904, or 63 per cent., sailed under foreign flags. Of 4,400,000 tons freight exported, 3,000,000 goes out under foreign flags. The commercial marine of Germany, which is of very recent date, employs 1,044,257 tons in the trade of that country with France, the share which falls to the latter being only 92,948 tons. This is a strong illustration of the fact that the loss of France is the gain of other nations. The life seems to be leaving the marine of France; and of the reality of its decadence there can be no question. In one branch—steamship tonnage—France still holds the third rank. But even this position is held by the precarious tenure of privileged companies, which receive millions in the way of subsidy from the state.

For some reason or other the vessels of other nations are able to carry cheaper than those of France; and unless there be some change in the construction and equipment of French vessels, it is difficult to believe that their rates of freight can be lowered. It may be as alleged, that some of them are fitted out at unnecessary cost, and any economy which might be made in this respect, would tend to make a reduction in freights possible. The charges payable on the change of ownership operate as a drag on this branch of national activity; and the provision made out of wages, for superannuated sailors is burdensome. Besides, a spirit of timidity and a want of enterprise among shipowners are said to be not without injurious effect.

Free traders and protectionists dispute over the proper remedy for a state of things which they unite in deploring. The latter favor state subsidies, the former oppose them; but neither of them seems clearly to see that it is largely a question of cheap construction or purchase. In this particular England has an advantage over France, and in wooden ships Canada has an advan-

tage over England. We can sell wooden ships to England cheaper than she can build them. The Cobden Treaty is to be allowed to expire, and then France will find herself buying dearer vessels, with the inevitable result of a still farther decline in her commercial marine. To admit untaxed Canadian ships to register would be the most effectual way of recovering the ground the commercial marine of France has lost. This would be found to be a much better way of preserving the rank which France holds among the maritime nations than any artificial or hot-bed system.

OUR WEATHER SERVICE.

The storm-warning system of the Dominion appears to have improved gradually in extent and efficiency from the time of its commencement in 1871: It was the means of warning shipping of nearly every storm which occurred last year. The weather probabilities, too, were of service, in warning farmers and merchants when to expect rain or sunshine. The meteorological survey is looking for a further grant from Parliament to enable its operations to be extended and made more complete.

The monthly weather review, issued by the Meteorological Office, gives an intelligent description of the movement of each storm centre; and its course is traced as it passes over the country, from the time of its first appearance at the outlying stations, which report by telegraph thrice in the day, till its final disappearance, either by dissipating or moving off the Atlantic coast. Sometimes these storms make their appearance in the north-west, and sweeping downward across the lakes, take a more or less easterly course over the Maritime Provinces, and so out to sea. Others, appearing to the south or west, and having the same eastward tendency, move with varied speed across the continent. Scarcely a storm originates on this continent, which does not influence Canada and Canadian shipping. All these storms are carefully watched, and telegrams forwarded, when required, to hoist the cautionary storm-signal at all stations which are situated in the district likely to be affected by them, and thus shipping is warned of the approaching danger.

There is an erroneous impression abroad that if a storm signal is displayed a storm should be experienced at that particular place, and some people do not consider the warning verified if such is not the case. At many ports, owing to the formation of the surrounding country, it may be comparatively calm, although a storm is raging at the time within a few miles. The order-

ing up of the cautionary storm signals, as stated on the notices published, is intended to warn those connected with shipping, "that a storm will probably occur, either at the place at which the signal is displayed, or within such a distance that ships leaving port may be affected by it."

A marked decrease in the number of casualties to Canadian steam or sailing craft, and in the loss of life occasioned by them, is manifest from the Marine & Fisheries Report for 1877 compared with that of the previous year. In 1876, the lives lost numbered 117, the casualties 396, and the loss of property reached \$2,290,914. In 1877, there was a decrease of \$350,000 in the loss by marine casualties, and fewer lives were sacrificed. The friends of the weather bureau claim, and probably not without grounds, that the storm warnings given had something to do with this result.

The appropriation allowed by Government for the meteorological service, of which the storm-warning system only forms a part, is \$37,000, or a tax, as it were, of less than one mill on the dollar of the value of shipping belonging to the country, and less than two per cent. of the losses in one year. We see by the supplement to the above report, that improvements have been made within the last year, but there is still much needed to bring the Bureau up to the requirements of the country. In the opinion of the Superintendent, this would be accomplished if an increased number of telegraphing stations were allowed, so that more data might be given on which to base the predictions.

BUTTER MAKING AND THE COST OF CREAMERIES.

The question of greatest interest to our dairymen is probably this: In what manner can they dispose of their milk to best advantage. Three courses are open to them: To make the milk into butter at the dairy; to sell it to the cheese factories; or to establish creameries to manufacture it into butter.

The first named is the least likely to give satisfaction as things now exist. Dairy butter has been found for the most part to be only medium in quality, and this is not the grade in demand. If we had a number of large and well appointed dairy farms where care and method were used, it would be a very different matter, but the bulk of the butter made on our farms is undeniably inferior owing to the small quantity of milk that can be treated at one time, upon an ordinary farm.

The next alternative is to send the milk to the cheese factories. This course has