

shipping that a storm will probably rage within such a distance, that ships leaving port might be affected by it.

It is of great importance that warnings should be issued with as little delay as possible, as, frequently in the past, owing to the closing of the telegraph offices throughout the Dominion at 8 p.m., warnings despatched in the evening have not reached their destination until the following morning.

Since the beginning of September, warnings have generally been issued from Toronto *without waiting* for the receipt of the telegram from Washington, and the result has been that scarcely any of the telegrams have reached their destination after the commencement of the storm.

The following is a table showing the number of storm warnings issued from this office since September, 1876, and the percentage verified:—

District.	Number Issued.	Number Verified.	Percentage Verified.
Lakes.....	153	118	77·1
St. Lawrence River and Gulf.....	71	45	63·4
Ocean.....	117	103	88·0
Total for the Dominion.....	341	266	78·0

It will be noticed that the percentage of verification of warnings for the St. Lawrence is considerably below that at other places. This is, in part, due to the want of sufficient telegraphic reports from the north.

In connection with storm warnings, the following resolution was passed by the Board of Inland Marine Exchange at Toronto:—

“The Marine Exchange cannot close its meetings for 1876 without putting on record its appreciation of the services rendered by the Meteorological Department during the past season in accurately forecasting the weather.

“This year has been marked by a very few marine disasters, and while it would be too soon to say how much of this is due to the confidence sailors are beginning to place in the storm signals, it seems not unlikely this cause may have contributed to immunity from shipwreck.”

PROBABILITIES.

During the summer, and to the close of navigation, a chart of the weather with probabilities for the ensuing 24 hours was issued from this office at 10 a.m. and furnished daily, Sundays excepted, to the Marine Exchange Board, Toronto, for public inspection. Since October, these probabilities have appeared in the Toronto afternoon papers, and in December were furnished to the Telegraph Companies, and were forwarded by them for publication in the various papers in Ontario and at Montreal. It is intended shortly to extend these probabilities so as to include the Maritime Provinces. The verification of the probabilities has been as follows:—In October, with two exceptions, all were fully verified. In November the number of predictions issued was 130; of these 108 were fully, 12 partly and 10 not verified, or 92·3 per cent. verified and 88 per cent. completely so. In December the number of predictions issued was 151; of these 128 were fully, 19 partly and 4 not verified, or 97·3 per cent. verified and 84·8 per cent. completely so.

CENTRAL OFFICE.

Owing to the very considerable increase in the various branches of the work, it has been with great difficulty that the present staff has been enabled to prevent arrears from accumulating. In order that the present work should be permanently and satisfactorily carried on, and in view of continued progress, it is necessary that there should be some increase in the staff.