

## THE GALES FROM THE GREAT LAKES

TABLE I.—Gives the total number of lows charted in the various months of each year, and also the portion of the continent where first observed. Interesting facts indicated by this table are that in April, May and June the West Lows exceed in number the North-west Lows; that November, December, January, February and March have the largest number of South-west Lows; that October and November have the most Atlantic Lows, and that during May, June and July the maximum Sporadic movements occur.

TABLE II.—Gives the percentage of lows causing storms in the different months, and shews that November is, on the average, the stormiest month of the year on the Great Lakes, and that January is the stormiest month in the Maritime Provinces. However, December and February also give a high percentage of storms.

The diminution of lows and percentage of storms caused by lows in March is opposed to the old ideas of the very stormy character of the month in the north temperate zone. September, the other equinoctial month, is also remarkably free from storms in comparison with the months immediately succeeding it.

TABLE III.—Gives the percentage of gales caused by lows from the different directions for each month in the year, together with the number of sporadic gales occurring. The percentage of gales caused by North-west Lows is, in nearly every month, higher on the Great Lakes than in the Gulf of St. Lawrence and Maritime Provinces, showing that, as a rule, the North-west areas decrease much in energy in their eastward advance.

The percentage of gales attributable to the West Lows is larger in many months than to the Northwest Lows, especially in the Gulf of St. Lawrence and the Maritime Provinces, suggesting that they are as a rule more energetic than the latter and less likely to lose in intensity during their eastward progress. The Southwest Lows usually give a high percentage of gales, so likewise do the Atlantic lows, but the latter only in the Gulf of St. Lawrence and in the Maritime Provinces. Gales caused by sporadic areas are relatively few in all months. The increased number noticed in the lower St. Lawrence Valley and the Gulf is mainly owing to a considerable increase in the barometric gradients over those districts on the approach of an area of high pressure travelling across Québec and Labrador. In fact, this so often occurs under the conditions named, that in almost any month of the year when a high is seen to be crossing the continent with its centre passing well to the northward over Canada and comparatively low pressure exists at the time in the Gulf of St. Lawrence, a gale may there be reasonably expected to occur and often of considerable violence. This movement has probably not been well understood for as recently as last summer and autumn warnings were not issued when these conditions were manifest.

TABLE IV.—Gives the number of lows in each year and the part of the Continent where first observed. Among the more interesting features of these results are the