anti-cyclones, accompanied by intense cold, develop in the Mackenzie River valley and Yukon, and sweep southeastward towards the Great Lakes and eastern Canada. One of the problems then to be solved has relation to the factors governing cyclonic development in the higher latitudes over the ocean, and one wonders whether a varying solar radiation may not cause changes in the barometric distribution in the tropics, which will affect the strength of the trade winds and which will in turn lead to variations in the great ocean currents, and then, according as the warm waters are abnormally far north or far south, the Pacific centre of action will also vary. The solution of such a problem may ultimately lead to the possibility of forecasting the character of coming winters.

Canadian territory stretches northward beyond the arctic circle, from lands in the western provinces where cereal crops are an assured success to the barren lands where only mosses and lichen grow. A question of moment then, is how far north the lands of agricultural possibilities extend. Certainly, between the two limits, there is a wide zone, in the southern portion of which crops will in most years mature, and in the northern portion of which they will only very occasionally ripen. Throughout all this vast doubtful area, the factor of long summer sunlight plays an important role, and lengthens the period of growth, but another factor, acting adversely, is the liability of early and late summer frosts, and the husbandman who sees his crops rapidly maturing is not unlikely to see them destroyed in August before ready for harvest. Graphs showing summer temperature curves at various stations show how in August the downward trend of the curve is very rapid at the more northern stations.

The southern portions of Ontario enjoy a particularly favourable climate, partly owing to their being farther south than other portions of the Dominion. The most southerly point in Ontario is in the same latitude as Rome and Toronto is in the same latitude as Florence. The Great Lakes also exert an important influence in tempering the cold of winter and moderating the heat of summer, and undoubtedly have some influence in equalizing the precipitation, periods of drought there being less frequent than in corresponding latitudes to the west.

The enormous territory included in northern Ontario and Quebec, north of a line passing through Quebec city, enjoys a fairly warm summer, and it is only as autumn advances that a marked difference of temperature is registered between these districts and those farther south. It is not latitude alone which leads to the shorter growing season and more severe winters in these northern parts, but rather the fact that the mean path of cyclonic depression lies in the valley of the St. Lawrence to the south.

In the southern portions of Ontario and Quebec the winds connected with cyclonic circulation commonly veer from east through south to west, while in the north they back through northeast to northwest and it is only occasionally that the warmer air of the south is wafted northward. This, of course, leads to a steadier and more intense cold in winter, and, as this whole northern region has a fairly heavy precipitation, the snow lies deep in winter and does not disappear until quite late in the spring. It is practically certain that deforestation will not appreciably affect this northern climate, the causes which lead to existing conditions being the result of a world wide atmospheric circulation.

The weather types peculiar to the Maritime provinces are likewise largely controlled by factors apart from latitude (which is lower than that of Great Britain). Nova Scotia and New Brunswick lie near the eastern coast line of America, and hence are affected at intervals by the cold waves coming from the interior of the