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 continent. Then again the mean path of lows is directly over the northern part of the gulf of St. Lawrence, hence conditions associated with cyclonic areas are of frequent occurrence. These conditions are accentuated by the fact that many storms, especially in winter, develop near the Atlantic coast between the Gulf Stream and the cold land, and, moving northeastward, cause gales and bring precipitation in the Maritime provinces and Newfoundland.

2.—The Climate of Canada since Confederation.

Under the above heading Sir Frederick Stupart, Director of the Meteorological Service of Canada, contributed a short article, which for reasons of space is not reprinted here, to the 1921 edition of the Year Book (pp. 169-173); to it the interested reader is referred.

3.—The Meteorological Service of Canada.[1]

In order to secure information regarding the climate of Canada in the 17th and 18th centuries, the "Relations of the Jesuits" have been carefully examined and the references to climatic phenomena collated under such headings as "winter", "summer", "drought", etc. From these notes it has been possible, in spite of the total lack of instrumental records, to arrive at certain conclusions regarding the general character of the Canadian climate in these early days. Broadly speaking, that climate was then very much the same as it is now.

Some of the earliest instrumental meteorological records of the Canadian climate appear to have been made by Mr. Thomas Hutchins, an officer of the Hudson's Bay Company at York Factory and Severn House, in 1773, and it is believed that there are several other records by officers of the company in the archives of the Royal Society in London.

Investigation of old provincial records has further shown that, during the early part of the 19th century, several individuals in Ontario, Quebec and the Maritime provinces kept meteorological records which it would be quite possible to bring together and publish; however, owing to their fragmentary character, it is unlikely that they would prove of any great value. Perhaps the most indefatigable among observers prior to 1840 was the Rev. Mr. Dade, who has bequeathed us a record extending over many years.

[1]Contributed by Sir Frederick Stupart, Director of the Meteorological Service of Canada.