

SIXTH ANNUAL REPORT
OF THE
METEOROLOGICAL OFFICE OF THE DOMINION OF CANADA,
FOR THE YEAR ENDING DECEMBER 31ST, 1876.

BY

CHARLES CARPMAEL, M.A., F.R.A.S.,

Late fellow of St. Johns College, Cambridge.

To the Honourable
The Minister of Marine and Fisheries.

SIR,—In the absence of Professor Kingston, through illness, I have the honour to submit the Sixth Annual Report of the Meteorological Office.

In former reports the Superintendent has very fully described the general objects of a meteorological system, as also, the means which should be employed for their accomplishment. In the present report I shall endeavour to shew to what extent, and with what success, these objects have been attained during the past year, and to point out such additional work as should be done in the immediate future. The objects of the system (as stated in the last report) are twofold.

I. The collection of Meteorological Statistics (including the statistics of storms), and their arrangement in forms suited for the discussion of sundry physical questions. The combination of materials collected in a series of years and the deduction therefrom of the climatic character of the several districts; and the furtherance in other respects, of a knowledge of the facts and principles of climatology, and of Canadian climatology in particular.

II. The practical utilization of the facts and principles thus acquired, especially to the prognostication of the weather.

COLLECTION OF METEOROLOGICAL STATISTICS.

The observations have been going on as in previous years, with a few alterations and various additions, the most important of which are the following:—

British Columbia.—Through the exertions of Mr. John Murray, of Spences Bridge, a number of volunteer observers have undertaken to keep a record of rain-fall, and for this purpose accurate glass measures have been forwarded from this office. Twenty stations have already been established with the prospect of still further increasing that number. At Esquimaux the observer, Mr. Bevis, has been instructed to take an observation at 4:29 a.m. local time, to accord with the simultaneous observations throughout the northern hemisphere.

North-West Territories.—Through the co-operation of the Chief Commissioner of the North-West Mounted Police, observations have been taken at the various stations of the Force, and the records forwarded to this office. Returns of observations from Fort Rae, near the Great Slave Lake; Fort Simpson, on the Mackenzie River; and York Factory, Hudson's Bay, have also reached us through the Bishop of Rupert's Land. Observations are being taken at other places, but the records have not yet been received.