## NOVEMBER.

Temperature.—With the exception of the Maritime Provinces and Southern British Columbia, November was considerably warmer than normal throughout the Dominion. In the Prairie Provinces and Northwestern Ontario there were large areas with mean temperatures 8° to 10° above normal and in Southern Ontario and Northwestern Quebec 4° to 6° above.

Precipitation.—In Manitoba and the adjoining region of Ontario there was a considerable excess over normal precipitation. In the Maritime Provinces the normal amount was recorded. Elsewhere there was a fairly general deficiency.

Winds and Bright Sunshine.—Gales occurred on 3 to 8 days on the British Columbian coast, on 3 days in the Lakes region, and on 3 days on the St. Lawrence, and were of general occurrence on the 14th, 19th and 26th in the Maritime Provinces, while local gales were recorded on several days. Bright sunshine was very irregularly distributed, areas of excess and areas of deficiency occurring in all provinces.

## DECEMBER.

**Temperature.**—From Western New Brunswick to the Rocky Mountains temperatures were higher than normal. In the Prairie Provinces the excess was  $3^{\circ}$  to  $9^{\circ}$ 

Precipitation.—In most districts of Western Canada there was more than the normal precipitation, but in Lower Quebec and the Maritime Provinces most districts reported a deficiency.

Winds and Bright Sunshine.—Gales occurred on the British Columbian Coast on 2 to 6 days, on the Great Lakes on the 2nd and 10th, in Quebec and New Brunswick on the 1st and 25th, and on three or four days in Nova Scotia. Gales of more local occurrence were recorded on several other days on the Atlantic Coast. The amount of bright sunshine was deficient by 10 per cent locally in Alberta, Eastern Saskatchewan, Manitoba, and Prince Edward Island, and in excess by the same amount in Southern Vancouver Island and in the Lower Fraser Valley.

## TEMPERATURE AND PRECIPITATION.

Temperature.—At the Stations of the Dominion Meteorological Service the highest and lowest temperature in each 24 hours, termed respectively the maximum and the minimum, are recorded by self-registering thermometers. For any month the sum of the daily maxima, divided by the number of days of the month, is the mean maximum temperature of that month. The mean minimum temperature is obtained in a similar manner. The half sum of the mean maximum and the mean minimum is called the mean temperature. The averages of these results for any particular month over a period of years are the average means for that period and are used as normal means or temperatures of reference. The highest and lowest temperatures, recorded during the whole period of years are termed the extreme maximum and extreme minimum respectively. These latter figures are of course to be regarded as extraordinary, the more unlikely to recur the longer the period from which they have been derived. Temperatures below zero have the minus sign (—) prefixed. The mean winter temperature is based on the records of January, February, March, November and December, and the mean summer temperature is based on those of June, July and August.

Precipitation.—Under the collective term "precipitation" is included all moisture which has been precipitated from the atmosphere upon the earth: rain, snow, hail, sleet, etc. The amount of moisture is conveniently measured by determining the depth to which it has accumulated upon an impervious surface, and is always expressed in inches of depth. The total depth of snow is tabulated separately, but is added to the depth of rain after division by ten. An extended series of experiments in melting and measuring snow having been collated, the rule was deduced that a given fall of snow will, in melting, diminish on the average to one-tenth of its original depth. This rule is used in practice. All solid forms of precipitation other than snow are included in the tables of rain.