CLIMATE AND METEOROLOGY

the extreme eastern portion, and the least about 17 inches, in the more southern and western districts. As, however, most of the precipitation, especially the summer rainfall, comes from local storms, there is sometimes a considerable difference in the amounts recorded at places not far distant from each other. Between 9 and 10 inches of rain, or approximately 50 p.c. of the total annual precipitation, occurs between May and August and is nearly equal to the amount that occurs during the same period in Ontario and in the midland counties of England. At Winnipeg the greatest annual precipitation recorded was 29.24 inches in 1878, and the least 14.38 inches in 1886, in which year only 4.23 inches fell during the May to August period. Most of the summer rainfall occurs in thunderstorms, which at times are quite heavy, accompanied by violent squalls and, less frequently, by hail. It is but very seldom that these storms attain the energy of the tornado, which is not uncommon on the more heated prairies to the south.

The snowfall of Manitoba ranges from 52 inches in the eastern districts to 44 inches in the western districts, and while the ground is usually well covered from December to March, it is seldom that the depth is great. In most winters there are several heavy northwest gales succeeding the passage of cyclonic areas, and in these storms, as the temperature drops quickly, accompanied by a blinding drift of the dry snow, we have the well-known blizzard of the prairies.

Ontario.—The province of Ontario alone is a vast territory, stretching over 15 degrees of latitude from a point in the same parallel as Rome, Italy, to a point in the same parallel as the north of Scotland, with a breadth including twenty degrees of longitude. The almost entire north and east shores of the Great Lakes belong to Ontario, and its lands form about half the west shore line of Hudson bay. In portions of Ontario, the climate is tempered by lake influence; other portions are affected by the northern inland sea, and other portions again are exposed to the severe cold waves from the far northwest, which in winter sweep with unchecked severity over the country north of Lakes Superior and Huron. Then again, altitude is responsible for some climatic variation, the country rising away from the various lake levels to heights which reach 1,800 feet just south of the Georgian bay, and over 1,500 feet near the Upper Ottawa.

The climate of the peninsula of Ontario is much warmer than that of the northern parts of the province. It is true that the first part of March is usually rather cold, but bright sunshiny days and swelling buds, together with the rapid disappearance of the snow, which now lies only in sheltered places, give omen of spring, which soon comes on apace. Light snowfalls occasionally occur in April, but this month with a mean temperature of about 43, three inches of rain and 190 hours of bright sunshine, is truly spring, and before the close of the month wild flowers are in bloom and the trees are leafing out.

With a high percentage of bright sunshine and ample rain, vegetation makes rapid progress during May. Frosts are quite infrequent, and by about the 24th most of the trees are in full leaf.