

## GENERAL SURVEY OF THE CLIMATE OF CANADA.

The change in climate between the west and east sides of the Coast range is decidedly abrupt. The Pacific winds are deprived of much of their moisture in ascending the western slopes of the mountains, and the air flows eastward or is drawn down to lower levels, becoming drier and warmer; hence the interior plateaus between the Coast and Selkirk ranges possess a relatively dry climate; the summers are warmer and the winters colder than on the lower mainland. The cold of winter is, however, scarcely ever severe, and the hottest days of summer are rendered pleasant by the fact that the air is dry and the nights are cool. In all the lower levels of British Columbia, March is distinctly a spring month. In the more southern divisions the mean temperature of April corresponds very nearly with that of the same month in England, while the summer may very well be compared with that of southern Ontario, except that the air is much drier and the rainfall is scant. Over the larger portion of Yale district apples, pears, plums, cherries, as well as cereals, are most successful crops, and in Okanagan grapes and peaches thrive, and tobacco is yearly proving more successful. The meteorological tables for Kamloops and Kelowna show approximately the mean temperature and rainfall values of the region.

**The Sub-Arctic.**—To the northward of the provincial boundaries, in latitude 60, there are immense territories where the climate is of a sub-arctic type, with modifications in certain localities. The most striking of these occurs in the valley of the Mackenzie river, where the summers are comparatively warm, wheat has matured within the Arctic circle, and certainly vegetables may be grown quite generally. It is not improbable that these mild conditions obtain over all the territory between the River and the Rocky mountains. The winters are, however, extremely cold, and while snow is disappearing rapidly and wild fowl are flying in April, it is May before there is much sign of growth, and after severe frosts in September winter sets in in October. The summer rainfall is scant over all the northern country, and the winter snowfall is by no means heavy.

**Alberta.**—It is doubtful whether there is any other territory on the surface of the globe with a winter climate as variable as in this province. The normal winter is cold, and in some years extreme cold is continuous from November to March, but in other years the Chinook is most persistent, and warm days with bright sunshine are the characteristic features of the winter; e.g., the mean temperature of November, 1896, at Calgary was 39, the mean of November, 1896, was 2, the mean of January, 1906, was -6, while the mean of January of the following year was 26. Corresponding variations occur in all parts of the province.

An average daily maximum of 53° at Calgary and at Edmonton and 58° at Medicine Hat, indicates very clearly that April is truly a spring month, and verifies the statement that spring seeding is well under way or perhaps completed in April. The rapid upward trend of the temperature curve continues during May and June, and from the middle of May until the end of July occurs the heaviest rainfall of the year—a rainfall which is nearly equal to that of Ontario and Quebec during the same period and which as a rule is ample to insure successful crops. Bright,