

the west and extending eastward to the edge of the great Canadian Shield which commences on the Arctic Coast about three hundred miles east of the mouth of Mackenzie River and runs south and east through Great Bear, Great Slave, Athabaska and Winnipeg Lakes. Throughout most of the region the underlying Palæozoic, Mesozoic and Tertiary rocks are nearly flat-lying. In the northwestern part of the area, however, the Franklin Range, which lies between Great Bear Lake and Mackenzie River, is composed of folded strata. In western Alberta, also, the rocks are folded and faulted.

The southern portion of the plains region slopes gently to the east down to Lake Winnipeg and includes the Nelson River drainage emptying into Hudson Bay; representing the bulk of the presently settled part of Western Canada, it includes the treeless prairies and comprises the lands which, in the main, produce Canada's great wheat crops. This area is characteristically different from other parts of Canada in that any exposure of surface rock is rare. Generally, it is overlain by great depths of clay soil, through which the streams have cut themselves down into deep coulées and the rivers into deep wide valleys. Lakes of any considerable extent are infrequent and usually quite shallow. The terrain is generally smooth or gently undulating and, from an elevation of 3,400 feet at Calgary, falls away gradually to an elevation of 800 feet around Lake Winnipeg, 700 miles to the east.

Just north of Edmonton where the Plains have narrowed to a width of about 400 miles, a height of land turns the water. The northern portion of the plains region is drained by a river system flowing eastward from the high mountains and then turning north to discharge into the Arctic Ocean through the great Mackenzie River. The Mackenzie is over 2,500 miles long and its valley with its low elevation is the outstanding feature of the Northwest Territories. In this watershed the terrain becomes less smooth with prominent elevations in the Caribou, Horn, and Franklin Mountains and the clay soils of the prairies give way to more of sand and gravel. Great Slave and Great Bear Lakes, each half as large again as Lake Ontario and less elevated above the sea than Lake Erie, are notable features.

The Cordilleran Region.—The outstanding and predominant orographical feature in Canada is the great Cordilleran Mountain System which, extending up from the south, parallels the coast of the Pacific Ocean and, continuing on, comprises the bulk of the United States territory of Alaska. Throughout Canada this mountain system has a width of about 400 miles and, covering about 530,000 square miles in area, includes nearly all of British Columbia and Yukon. This area is definitely the most rugged and elevated in the Dominion, many of the summits reaching heights of 10,000 feet with occasional peaks over 13,000 feet above sea-level. The principal named peaks exceeding 11,000 feet in elevation are given in Table 6. The main mountain ranges forming the system are the Coast Mountains and the St. Elias Mountains on the Pacific side, the Selkirks and the Rockies on the east side of the system to the south, and farther north on the east side the Stikine and the Mackenzie Mountains. This great mountainous tract is a formidable barrier between the ocean and the interior of Western Canada; by precipitating a great part of the moisture out of the winds coming from the Pacific, it has a marked effect on the climate of the western country. On the west side, the Cordilleras are drained by mountain streams pitching swiftly down to the Pacific. The Yukon Territory is drained to the north by that remarkable river of the same name which runs through