

part of about 700 feet. The northern part of Cape Breton island is a table-land 1,200 feet high, culminating in Ingonish mountain, with an elevation of 1,392 feet, the highest point in Nova Scotia.

The Cordilleran region, the mountainous area bordering the Pacific, extends northward from the United States through Canada into Alaska, and embraces nearly all of British Columbia and Yukon and the western edge of Alberta and the Northwest territories. The eastern part of the Cordillera is occupied by the Rocky mountains. They consist of overlapping chains with peaks rising to heights of 10,000 to 12,000 feet. They extend northwest and die away towards the Liard river. North of this river the mountains with a similar trend lie 100 miles farther east and are known as the Mackenzie mountains. The western part of the Cordillera is occupied by the Coast range and the mountains of Vancouver and Queen Charlotte islands. The Coast range rises to heights of 7,000 to 9,000 feet. Between the Rocky mountains and the Coast range lies a vast plateau system having elevations of 3,000 to 4,000 feet, and cut by deep river valleys. The plateau region merges into rugged mountain ranges as it approaches the Rocky mountains; it also breaks into mountains in northern British Columbia, but becomes subdued to a plateau again in the Yukon. A striking feature of the Cordillera is the deep trench that lies immediately to the west of the Rocky mountains, extends north-westerly from the international boundary into Yukon and is occupied by the headwaters of the Kootenay, Columbia and Fraser rivers and tributaries of the Peace and Liard rivers.

2.—Geology.

Canadian Shield.—The Canadian Shield is underlain by rocks of Precambrian age. These consist of series of sedimentary and volcanic formations and igneous intrusives of great variety. They were subjected to mountain-building processes, folded, crushed and metamorphosed. Although the mountains were reduced nearly to their present level before the earliest Palæozoic sediments were deposited, the Precambrian area has, during a great part of recorded geological time, maintained itself as a continent, a land mass offering a stout barrier to the buffeting of the waves and a stubborn resistance to the eroding action of the elements. The period of time represented by the Precambrian sedimentary deposits is probably much greater than that which has since elapsed.

Geologists do not agree on the main subdivisions of the Precambrian formations. They are, however, unanimous on one great unconformity which represents a long period of erosion and which divides the stratified rocks into two groups, an earlier group consisting of a great mass of volcanics with associated sedimentary rocks and a later group consisting more fully of sediments. The earlier group is greatly folded and altered; the later group has in general been less disturbed and altered. In the earlier group the most important series of rocks is that known as the Keewatin. The Keewatin consists essentially of lava flows accompanied in many places by tuffs and basic intrusives, and includes iron formation, which frequently is made up of thin layers of chert-like quartz, alternating with quartzose layers holding magnetite or hematite or both. Sedimentary rocks consisting of conglomeratic, sandy and slaty strata are frequently associated with the volcanics and are, in places, of considerable thickness and extent. They may underlie the volcanics, like the Couchiching of the Rainy Lake area, they may be interbedded with the volcanics, like the Doré formation of Michipicoten, or they may overlie the volcanics like the Timiskaming formation of northeastern Ontario and western