

rocks of Palæozoic age. It is a Region that has experienced intense folding and thrust faulting, but the final major orogeny took place not at the close of the Palæozoic, as it did farther south in the United States, but in Middle Devonian time.

The boundary between the Appalachian Region and the Interior Plains Region to the northwest is a major dislocation known as Logan's Line, a thrust fault first recognized by Sir William Logan, founder of the Geological Survey of Canada. It runs from Lake Champlain to Quebec city and thence down the St. Lawrence River between Gaspé Peninsula and Anticosti Island. To the northwest of this break, the strata of the St. Lawrence Lowlands lie flat for the most part, and what faults occur are mostly of the normal type. To the southeast the strata of the Appalachian Region are highly inclined, locally overturned, and the pre-Carboniferous faults are of the thrust variety.

Physiographically, the Appalachian Region is made up of uplands and lowlands. The former represent mountain structures that were peneplaned probably in the Cretaceous period and later uplifted; the latter are broad areas carved out of these uplands in places where the rocks are softer and hence more easily eroded. The highest elevation, 4,200 feet, is that of Mount Jacques Cartier on Tabletop Mountain in the Shickshock Range of central Gaspé.

The Cordilleran Region comprises the mountainous belt of British Columbia, Yukon and adjacent territory. It is made up of a series of ranges and plateaux separated by great linear valleys or trenches trending mainly northwesterly. Within this Region the Rocky Mountains, Foothills, and Mackenzie Mountains in the east are separated from the Coast Mountains of the Pacific border by a wide zone of the Interior Plateaux and Mountains. The rocks of the Region range in age from Late Precambrian to Recent. Proterozoic and later eras are represented over wide areas and locally volcanic eruptions have continued into Glacial and Recent times. The western part was affected by mountain-building movements and batholithic intrusion at intervals throughout Mesozoic time, possibly reaching a maximum during late Jurassic and early Cretaceous epochs. At the close of the Cretaceous period and extending into early Tertiary time, another great revolution, the Laramide, resulted in the folded structures of the Rocky and Mackenzie Mountains. Local deformation, consisting of vertical movements, faulting and minor folding, also took place in later Tertiary time. To the south in the United States this disturbance, referred to as the Cascadian, is known to have continued into Pleistocene and even Recent time. During the Pleistocene most of the Cordilleran Region of Canada was glaciated.

The Arctic Islands of Canada, together with Boothia and Melville Peninsulas, form a geographic unit whose land area exceeds half a million square miles. Geologically, many of the individual areas may be regarded as outliers either of the Canadian Shield or of the Interior Plains, those of the former commonly attaining much greater elevations than those of the latter. On Baffin Island, for example, a range of Precambrian rocks has a height of at least 5,000 feet above sea-level, with occasional peaks rising much higher. The rocks of the Plains outliers are either flat-lying or only slightly disturbed and consist of Palæozoic and younger beds. Triassic and Jurassic strata are known in some of the northern islands, and small basins of Tertiary sediments are found in numerous localities.

All the areas of Palæozoic and Mesozoic rocks in the Arctic Archipelago, however, cannot be regarded as outliers of the Interior Plains. On Ellesmere Island to the northwest of Greenland are folded strata forming mountains with elevations