

Rocks of Carboniferous age underlie the lowland belt forming much of the southeastern half of New Brunswick, the part of Nova Scotia north of the Cobequid mountains, part of the lowland south of these mountains, southwestern and north-eastern Cape Breton island and all of Prince Edward island. With the Lower Carboniferous or Mississippian rocks occur the extensive gypsum deposits and the salt beds of Nova Scotia and New Brunswick and also the bituminous shales of these provinces. The Upper Carboniferous or Pennsylvanian strata contain the coal measures which occur at Sydney, and at other places in Nova Scotia and at Minto in New Brunswick. The Carboniferous beds have in places been folded and faulted but there are wide areas in which the strata have been but little disturbed since they were deposited.

Red sandstones deposited during the Triassic period are exposed in a number of small areas along the Bay of Fundy coast. In places as at North Mountain, Nova Scotia, the beds are accompanied by lava flows. During the Pleistocene the region was glaciated. At certain stages there were apparently local gathering grounds for glaciers in central New Brunswick and in central Gaspé.

The chief mineral deposits of the Appalachian and Acadian Regions include coal, asbestos, and gypsum. The coal and gypsum, as has already been mentioned, occur in the Carboniferous measures. Asbestos occurs in serpentinized peridotite in southeastern Quebec. Chromite also occurs with the peridotite. Gold occurs in quartz veins in the Gold-bearing series of Nova Scotia. Many of the deposits are located on domes or pitching anticlines. Zinc-lead deposits occur in central Gaspé in veins cutting lower Devonian beds. At Stirling in the southern part of Cape Breton island, zinc, lead, and copper sulphides occur in a series of volcanic rocks. Copper and iron pyrite deposits occur in southern Quebec. Salt occurs in Nova Scotia and New Brunswick.

The Arctic Archipelago and Hudson Bay Lowland.—The Arctic archipelago includes the islands lying north of the Canadian Shield. They have a land area of over half a million square miles. Save for northward extension of the area of the rocks of the Canadian Shield, the islands for the most part are a series of plateaux formed of gently dipping strata.

The main Precambrian belt extends through Baffin island to Ellesmere island. Its rocks consist chiefly of granite and granite-gneiss intrusive into various types of gneisses and schists. Palæozoic strata, including Cambrian, Ordovician, Silurian, Devonian, and Carboniferous beds, cover most of the remaining area. Triassic rocks occur on the Sverdrup islands and a number of areas are underlain by Tertiary beds some of which are coal-bearing. Coal is also associated with some of the Upper Carboniferous strata at a number of places.

The Hudson Bay Lowland bordering the west side of Hudson bay has a length in a northwest direction of 800 miles, a width of from 100 to 200 miles and an area of 120,000 square miles. It rises from sea-level with a scarcely perceptible gradient to a height of about 400 feet. It is underlain by flat-lying rocks most of which are of Palæozoic age ranging from Ordovician to Devonian. An area of Mesozoic beds carrying lignite occurs in the Moose River region.

The seas in which the Palæozoic rocks which are now exposed in the Arctic Archipelago, the Hudson Bay Lowland, and the St. Lawrence Region were deposited extended at times widely over the Canadian Shield. Palæozoic outliers are known on lake St. John, lake Nipissing, and lake Timiskaming in the south, and on lake Nicholson west of Hudson bay. These outliers are mere remnants which have survived the erosion of Mesozoic and Tertiary time.