

Numerous bodies of granite and related igneous rocks intrude the strata. Most of these were associated with the Acadian orogeny and were intruded in Lower, Middle and Upper Devonian times. Many bodies of ultrabasic rocks occur intermittently in north-easterly-trending belts in the Eastern Townships and in Newfoundland. Most of these intrude Cambrian and Ordovician strata and are probably related to the Taconic orogeny.

The Appalachian Region now produces about 7 p.c. of the Canadian production of minerals, including fuels. This is mainly asbestos associated with basic rocks in the Eastern Townships, iron from Ordovician sedimentary beds at Bell Island, Newfoundland, and coal from Pennsylvanian strata in Nova Scotia. The Eastern Townships contain the world's leading asbestos occurrences. Elsewhere copper, zinc, lead, gold and silver are produced, mainly from central Gaspé and central Newfoundland. Most of the deposits are related to the Acadian orogeny, as were numerous gold-bearing veins formerly mined in Nova Scotia. Gypsum, barite and salt are produced from Mississippian strata in Nova Scotia, and some gypsum is also produced in New Brunswick. From veins in granite and related rock in Newfoundland comes most of Canada's production of fluorite.

The Innuitian Region.—This mountainous belt is known mainly from reconnaissance surveys. It is underlain by moderately-to-intensely folded sedimentary, volcanic and metamorphic rocks of various ages, the oldest being probably Proterozoic and the youngest being Tertiary. Folding occurred at different times and in different directions, some before the Silurian period, some in Silurian or Devonian time, some late in the Palæozoic era, and some in Tertiary time. Five fold-belts have been recognized—Cornwallis, Parry Islands, Central Ellesmere, Northern Ellesmere, and Eureka Sound. Granitic intrusions have been found in the Northern Ellesmere belt. Lead and zinc have been reported from Little Cornwallis Island and magnetite from Axel Heiberg Island. Gypsum occurs in beds of various Palæozoic ages. Coal has been found at several places, in strata of different ages, the thickest known seams being in beds apparently of Tertiary age on Ellesmere and Axel Heiberg Islands. The less deformed parts of the region offer possibilities for oil and gas and are now being investigated by companies.

The foregoing are only brief sketches of the subjects covered. Further information is supplied by *Geology and Economic Minerals of Canada* (\$2, including Map 1045A) and *Prospecting in Canada*; the latter also contains chapters on the principles of geology and on minerals and rocks. The *Geological Map of Canada* (1045A, 50 cents) and *Canada, Principal Mining Areas* (900A) are also recommended. Map 900A is revised annually; one copy is sent free to residents of Canada and additional copies are 25 cents each. These publications can be ordered from the Director, Geological Survey of Canada,* together with lists of reports and maps of the Geological Survey of Canada on specific topics and areas, for each province. Other publications are available from provincial mines departments.

PART II.—GEOGRAPHY†

Canada occupies the northern half of the North American Continent with the exception of Alaska and Greenland, extending in longitude from Cape Spear, Newfoundland, at 52° 37' W, to Mount St. Elias, Yukon Territory, at 141° W, a distance of 88° 23'. In latitude it stretches from Middle Island in Lake Erie, at 41° 41' N, to the North Pole. The northernmost point of land is Cape Columbia on Ellesmere Island, at 83° 07' N. Canada is thus a western and a northern country, a fact of increasing strategic significance.

In shape, Canada resembles a distorted parallelogram with its four corners making important salients. In the north the salient formed by the Arctic Archipelago, which penetrates deep into the Arctic basin, guards the northern approaches to the Continent from Europe and Asia and makes Canada neighbour to the Union of Soviet Socialist

* A special article covering the history and current activities of the Geological Survey of Canada appears in the 1960 Canada Year Book, pp. 13-19, and is available from the Director in reprint form. A brief outline of the functions of the Survey is given in the Mines and Minerals Chapter of this volume (see Index).

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