

Manan and Campobello (part of the province of New Brunswick) in the bay of Fundy. Prince Edward island is 2,184 square miles in area, Cape Breton 3,120 and Anticosti of about the same extent. Fishing activities in these eastern islands are important, while agriculture on Prince Edward island and mining on Cape Breton are among the chief occupations of the inhabitants.

Manitoulin island in lake Huron and the Thousand Islands group in the St. Lawrence river, at its outlet from lake Ontario, are the more important islands of the inland waters.

## PART II.—GEOLOGY.

### Section 1.—Geology of Canada.<sup>1</sup>

The outstanding feature of Canadian geology is the vast area underlain by formations of Precambrian age. These occupy nearly the whole of Canada east of a line joining lake Winnipeg and Great Bear lake with the exception of the Maritime Provinces, the extreme southern parts of Ontario and Quebec, and a part of Ontario adjacent to the southern coast of Hudson bay. The Precambrian rocks are the oldest rocks exposed on the earth's surface, and the vast area which they underlie is one that has probably existed as a land mass throughout longer periods than any other part of Canada.

These ancient formations extend, with gentle sloping surface, in almost all directions beneath a mantling series of nearly flat-lying sedimentary rocks of Palæozoic, Mesozoic and Cenozoic age. These little disturbed sediments occupy southern Quebec, southern Ontario, the Prairie Provinces and the Northwest Territories. Some of them were at one time of much wider extent and covered part or all of the Precambrian area.

Towards the Atlantic and Pacific coasts the Palæozoic and later sediments, together with the older rocks on which they rest and assemblages of volcanic rock, are intensely folded and faulted, forming the Appalachian system of mountains on the east and the great Cordillera, comprising nearly all of British Columbia and Yukon, on the west.

#### Subsection 1.—Topography.

The present topography of Canada is the temporary outward expression of a half continent which is subject to unceasing change. It is the result of the operation of geological processes at the surface of the earth or at depth throughout hundreds of millions of years. It derives from the injection of igneous rock masses in liquid form beneath the surface, the ejection of lavas and volcanic fragmental material, the deposition of sediments, the folding and faulting of rock formations, and the disintegration of solid rocks and transportation of the products of disintegration by surface agencies. The slow rising and sinking of broad continental land masses and the upheaval and subsequent gradual levelling of mountain ranges are involved.

The great area in Eastern Canada underlain by rocks of Precambrian age is known as the Canadian (or Precambrian) Shield or the Laurentian Plateau. It may be regarded as a subdued plateau or perhaps, more strictly speaking, a peneplanated surface that has been rejuvenated by Pleistocene glaciation and uplift.

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