

## GEOLOGY AND ECONOMIC MINERALS.

**Islands.**—The northern and western coasts of Canada are skirted by clusters of islands. Those on the north are mostly within the Arctic circle. On the west Vancouver and Queen Charlotte Islands are the largest and most important. On the East, besides the separate island colony of Newfoundland, there are the Cape Breton Island, forming part of the province of Nova Scotia, Prince Edward Island, forming one of the nine provinces of Canada, the Magdalen Islands and the island of Anticosti. To the south of Newfoundland are the two small islands of St. Pierre and Miquelon belonging to France. In lake Huron is the island of Manitoulin and the so-called Thirty Thousand Islands of Georgian Bay. In the St. Lawrence river, just below lake Ontario, are the picturesque Thousand Islands.

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**Geological Investigations.**—The geological investigation of Canada may be said to have commenced in 1843 with the organization of the Geological Survey of Canada under Sir William Logan. The classical work of Logan and his little coterie of assistants, Murray, Hunt, Billings, and others, was summarized in the *Geology of Canada*, published in 1863, which deals with the southern portions of Ontario and Quebec. Since this was written the work of the Geological Survey has gradually widened until at present it embraces the northern half of the continent of North America. Much of this work has been exploratory. The great field to be covered with a small force has prevented concentration of effort, and in no single district can it be claimed that the geological problems are completely solved. The natural difficulties of travel in the northland have rendered the progress of even reconnaissance work tedious, and a large part of Canada is still practically unexplored. Nevertheless sufficient has been done to make known its main geological features, to indicate roughly the territories that will be found to be mineral bearing, to presage the character of its mineral resources in the different geological provinces and to demonstrate that Canada is destined to become one of the great mining countries of the world.

A brief summary of the characteristics of the main natural divisions of the country will at least suggest the possibilities of great expansion in the mineral development of the country.

**Appalachian Region.**—The southeastern portion of Quebec, together with the Maritime provinces, forms the northeastern extension of the Appalachian Mountain system. The Appalachian region is characterized by rock formations, ranging from pre-Cambrian to Carboniferous, that are typically disturbed and thrown into a succession of folds. In Canada the Appalachian extension is found to possess many of the minerals which have placed some of the eastern states in the foremost rank of mineral and industrial districts of the world. Important deposits of coal, iron, and gold are mined in Nova Scotia. Of lesser importance, but still considerable, are the gypsum, stone and building material industries; manganese, antimony, tripolite and barite are also mined, and some attention has been paid to copper. The