rocks and maintain a forest growth. In some areas, as in part of northern Ontario and Quebec, adjacent to the Canadian National Railway, stratified fine sediments were deposited in lakes formed in front of the retreating glacier.

The Precambrian formations are prolific of mineral deposits of great number, variety and extent. They occur generally at or near the contact of the intrusives and the intruded rocks. Among them are the gold deposits of Porcupine and Kirkland lake, associated with intrusions of porphyry, the silver deposits of Cobalt, South Lorrain and Gowganda, associated with diabase sills, the enormous nickel-copper deposits of Sudbury, associated with norite of a thick laccolithic intrusion, the auriferous copper sulphides of western Quebec, the copper-zinc sulphides of Flinflon, and the iron ores and iron pyrites of many localities of Ontario; in the Grenville-Hastings area are found deposits of galena, mica, graphite, feldspar, magnesite, fluorite, kaolin, molybdenite, talc and apatite.

St. Lawrence Lowland.—The St. Lawrence Lowland is divided into two parts by an arm of the Laurentian plateau that extends southward into New York state and crosses the St. Lawrence between Kingston and Brockville. It is underlain by nearly horizontal Palæozoic sediments dipping gently away from the Canadian Shield and deposited on the sloping surface of Precambrian rocks which, prior to the deposition of the Palæozoic strata, had been reduced to a physiographic condition similar to that existing on the Canadian Shield today.

The sediments are almost wholly of marine origin, consist mainly of limestone, magnesian limestone and shale, and range in age from late Cambrian to late Devonian.

In the Ottawa-Montreal division the latest strata are Ordovician; these, together with the Potsdam sandstone (Cambrian), have a thickness of about 6,000 feet. In the Great Lakes region of southern Ontario the Ordovician formations are succeeded upward by those of Silurian age and these in turn by strata of Devonian age. The Ordovician formations form a zone extending from Kingston to the Niagara escarpment and stretching northwest to Georgian bay and into Manitoulin island. The Silurian formations are exposed in the Niagara escarpment and westward in a belt 25 to 50 miles wide stretching northwest from Niagara peninsula into Manitoulin island. West of this nearly the whole of the area between lake Erie and lake Huron is underlain by Devonian limestones and shales. Each in turn is exposed over an area farther to the southwest than the older and underlying formation, so that in travelling westward from Kingston to Sarnia one passes over the bevelled edges of successively younger strata. Borings made in the township of Dawn show a thickness of nearly 3,900 feet of sedimentary rocks.

It is evident that the seas in which some of these sedimentary rocks were formed extended northward over the Precambrian rocks through Hudson bay into the Arctic ocean. The presence of outliers on lake St. John, lake Nipissing, and lake Timiskaming in the south, and on lake Nicholson west of Hudson bay, of broad areas of Ordovician, Silurian and Devonian formations south of Hudson bay, and of Cambrian, Ordovician, Silurian and Devonian formations on the islands of the northern part of Hudson bay and of the Arctic seas, is clearly indicative of wide submergence. On the Arctic islands formations of Carboniferous (with coal seams) and Triassic age are widespread, and there are patches of Tertiary sediments with lignite. There is also evidence of the occurrence of rocks of Mesozoic age in Moose River basin.