resulting from the weathering of the shales and limestones, and contributing the potash-bearing ingredients transported from the granitic areas of the Laurentian plateau.

In its mineral deposits the area is very similar to the state of New York, its Palæozoic rocks containing frequent occurrences of petroleum, natural gas, salt, gypsum and other non-metallic minerals. In addition, clay products, cement and other building materials are produced in large quantities.

Laurentian Plateau.—North of the valley of the St. Lawrence, from Newfoundland to beyond the lake of the Woods, and enclosing Hudson bay like a huge V, is an area of pre-Cambrian rocks, estimated to cover 2,000,000 square miles, or over one-half of Canada.

The plateau is underlain by hardened sediments and igneous rocks. The latter are much more widespread than the former, however, and granitic types predominate. Considerable inequalities of surface have been augmented by glacial action, and a further effect of glaciation was the denuding of much of this region of its soil. Generally speaking, therefore, the physiographic and soil conditions are not favourable to agricultural pursuits. Over a great part of the area, however, sufficient soil has been retained to support a forest growth, although insufficient for agriculture. Within the plateau there are some valleys where areas of softer rock have afforded a greater abundance of soil that has not been removed by glaciation, and beautiful cultivated fields lend a pleasing contrast to the surrounding forest. In places the sediments deposited in the basins of glacial lakes have reduced the inequalities of the surface and produced large level areas of arable land. Interesting examples of these are furnished by the Clay Belt of northern Ontario and Quebec, traversed by the Canadian National railway, and by the flat section of country along the main line of the Canadian Pacific railway a few miles north of Sudbury.

The rocks of this pre-Cambrian formation are remarkable for the variety of useful and valuable minerals they contain. Iron, copper, nickel, cobalt, silver, gold, platinum, lead, zinc, arsenic, pyrite, mica, apatite, graphite, feldspar, quartz, corundum, talc, actinolite, the rare earths, ornamental stones and gems, building materials, etc., are all found, and are, or have been, profitably mined. Most of the other minerals, both common and rare, that are used in the arts have been found. Diamonds have not been located, but from their discovery in glacial drift from this area, it is altogether probable that they occur.

A tongue of these pre-Cambrian rocks extends into New York state and supports some large and varied mineral industries. Another extension crosses over from Canada into Michigan, Wisconsin and Minnesota. In it are located the Michigan copper mines and the great lake Superior iron ranges. Along the southern edge of the pre-Cambrian in Canada, there are the copper and gold deposits of Saskatchewan and Manitoba, the gold ranges of the lake of the Woods, the silver of Thunder bay, a succession of iron ranges occurring at intervals from Minnesota to the province of Quebec, the copper rocks of Michipicoten and Bruce Mines, the Sudbury copper-nickel deposits (probably the largest high-grade ore bodies in the world), the Montreal River and Cobalt silver areas, the world-famous Porcupine and other gold deposits, the corundum deposits of eastern Ontario, the magnetites of eastern Ontario and Quebec and their large apatite-mica deposits. In the far north, about Coronation gulf, are rocks that will warrant prospecting, since they bear native copper very similar to the great Michigan occurrences.