FLORA OF CANADA.

Mines Branch of the Department of Mines to determine the applicability of the bituminous sands of northern Alberta to road construction will be awaited with much interest.

The mineral industry of Canada partially recovered during 1915 from the set back resulting from the outbreak of the war. This was particularly noticeable in connection with the metallic minerals. Gold mining was carried on briskly, and the demand for metals employed in the manufacture of munitions of war gave an impetus to the mining of such ores as copper, nickel and zinc. The production of non-metallic minerals, especially those used in structural work, has been adversely affected by the war.

Embargoes and difficulties of transportation have led to an investigation of the possibilities of some of Canada's smaller mineral deposits. The mining of the chromite of Quebec has been stimulated, and there has been increased activity in the mining and development of the supermagnesian dolomites of Grenville township, Quebec. Shipments were made also from the hydromagnesite deposit of Atlin district, British Columbia, and an investigation of this deposit was made by the Geological Survey. The manufacture of metallic magnesium in Canada has been started by the Shawinigan Electro-Metals Company. Interest has also been aroused in the manganese, antimony, barite, and other deposits of the country.

The demand for molybdenum on the part of steel manufacturers has led to an investigation of Canada's molybdenite deposits and to the opening of a few mines. In this connection the Mines Branch of the Department of Mines has made an examination of many deposits and has carried on concentration tests in the ore dressing laboratory.

FLORA OF CANADA.

By J. M. MACOUN, C.M.G., F.L.S., Assistant Botanist and Naturalist, Department of Mines, Ottawa, and M. O. Malte, Ph.D., Dominion Agrostologist, Department of Agriculture, Ottawa.

In order to understand the general characteristics of the Canadian flora as we see it to-day, and to make clear and explain certain features in the distribution of a number of species and genera, which at first may seem perplexing or even inexplicable, we must go back to the time when most of the Dominion was a vast glacial waste, destitute of plant life.

It is well known that the whole of Canada east of the Rocky Mountains was at a geologically recent period covered with glacial ice, which slowly advanced from the north and reached as far south as lat. 36°-37° in Eastern North America and lat. 46° on the Pacific coast. Evidences of general glaciation are also seen in the Rocky Mountains in the form of erratic boulders, carried there by the ice from the far north.

As the front of the continental glacier advanced southward, the plants in its vicinity, which naturally were of an arctic type, were driven slowly towards the south. At the same time the existing vegetation