

Petroleum.—The production of crude petroleum in Canada during 1928 was the greatest on record and amounted to 624,184 barrels, as compared with 476,591 barrels produced in 1927. Of this production 134,094 barrels came from Ontario, 8,043 from New Brunswick and 482,047 from Alberta. Alberta thus produced 77 p.c. of the total for Canada and accounted for the increased production in 1928. The Turner Valley field is the principal source of production in Alberta and embraces territory in which, beginning with the famous Royalite No. 4 well, a number of productive wells have recently been brought in. The wells in this field give a wet gas from which a very high grade of crude naphtha is separated. The producing horizons in Western Canada were formerly considered to be the Dakota and Kootenay shale formations of the Upper and Lower Cretaceous periods, but the Royalite No. 4 well proved that much better producing horizons existed in a lower formation, a brown porous dolomitic limestone, below the Kootenay formation. A small production of petroleum was obtained in the Wainwright field, about 120 miles east of Edmonton, where the oil is heavy and of a lower grade. Altogether 31 oil wells were in operation in Alberta at the close of the year 1928, while drilling was in progress on 61 other wells. These drilling operations were distributed over the Turner Valley, Wainwright, Ribstone and other fields. No less than 197,029 feet of drilling was done in Alberta during 1928.

The principal Ontario oil fields are situated in the southwestern peninsula between lake Huron and lake Erie. The oil districts are all situated within an area underlain by Devonian strata, and the petroleum is largely obtained from the horizons in the Onondaga at varying depths in the different localities.

Subsection 2.—Other Non-Metallic Minerals.

Asbestos.—Canada produces more asbestos than any other country. The value of the annual output of asbestos has increased from less than \$25,000 in 1880 to \$11,238,360 in 1928, so that, except for coal, asbestos is now the most important non-metallic mineral product. In 1928, the world's production amounted to about 378,000 long tons; of this tonnage Canada produced 243,779 long tons or 64.5 p.c., Rhodesia 35,679 tons or 9.5 p.c., Russia 26,000 long tons or 7.0 p.c., South Africa 24,197 tons or 6.4 p.c., Cyprus 16,287 tons or 4.3 p.c., and the United States 2,000 tons.

Quebec.—The Eastern Townships has for many years been the most productive asbestos-mining area in the world. The most important deposits are those at Black lake, in Coleraine township; at Thetford and Robertsonville, in Thetford township; at East Broughton, in Broughton township, and at Danville, in Shipton township. The veins of asbestos traverse the serpentine in all directions, and as a rule the fibre lies at right angles to the walls of the veins. The veins vary in width from $\frac{1}{4}$ inch to $\frac{1}{2}$ inch, and occasionally fibre has been obtained several inches in length. The fibre is of good quality and well adapted for spinning. In the East Broughton deposits, the serpentine occurs enclosed in a highly quartzose slate, probably of Precambrian age. In the Danville area, asbestos up to $\frac{1}{2}$ inch in length occurs abundantly, and the whole of the serpentine is impregnated with fine, short fibre, giving a first-class milling material.

Open-cut methods of mining are adopted almost invariably throughout the Canadian asbestos fields. Nearly all the mining companies have installed machinery for the crushing, fibrizing, screening and grading of the mine product. In addition, 10 plants in Canada manufacture asbestos products, including the following com-