

Production declined from 4,859,049 tons in 1954 to 4,361,274 tons in 1956. Since the discovery of the Leduc oil field in 1947, coal output in Alberta has declined by 46 p.c. from a production of 8,070,430 tons. About 52 p.c. of the 1956 output was subbituminous coal. The average value of bituminous coal was \$6.069 per ton and of subbituminous coal \$4.745. As already mentioned, the one remaining mine in the Mountain Park area suspended operations in 1956 as did a former large producer of railway coal in the Coal-spur area.

The output of briquettes, which are made from the semi-anthracite coals of the Cascade area and the medium-volatile bituminous coals of the Crowsnest area, amounted to 525,202 tons in 1956 compared with 637,000 tons in 1954. About 17 p.c. was prepared from semi-anthracite coal.

British Columbia.—Bituminous coking coal, ranging from high to low volatile, is mined on Vancouver Island and in the East Kootenay (Crowsnest), Telkwa and Nicola areas. Small quantities of subbituminous coal are produced in the Princeton field. Production in 1956 amounted to 1,469,791 tons as compared with the 1954 total of 1,299,510 tons. The average value of bituminous coal was \$5.973 per ton and subbituminous coal \$5.894 per ton.

Medium-temperature oven (by-product) coke for industrial consumption is manufactured chiefly in the Crowsnest area. The only briquetting plant in the Province produced over 188,000 tons of railway briquettes in 1956 as against 150,000 tons in 1954. A substantial quantity of coking coal from the Crowsnest area was exported to the United States for blending with Utah coals to upgrade the metallurgical coke.

Section 2.—Government Aid to the Mineral Industry*

Subsection 1.—Federal Government Aid

The Department of Mines and Technical Surveys.—The Federal Department of Mines and Technical Surveys came into being on Jan. 20, 1950, in the reorganization of the former Department of Mines and Resources. The Department has five branches—Surveys and Mapping Branch, Geological Survey of Canada, Mines Branch, Dominion Observatories, and Geographical Branch. The Department's functions include the administration of the Emergency Gold Mining Assistance Act and of the Explosives Act.

Surveys and Mapping Branch.—The Branch provides the base maps required for use in the development of Canada's natural resources, produces and distributes all Canadian aids to navigation, is responsible for legal surveys of federal lands and provides a national system of levelling and precision surveys for use as geodetic control by federal, provincial and private agencies.

The Geodetic Survey provides the original surveys that form the framework or basic control for mapping throughout Canada and for engineering and surveying projects related to natural resources development. Survey stations are established at fairly regular intervals across Canada and are marked by permanent monuments whose latitudes, longitudes and elevations above mean sea level are determined with a high degree of accuracy. The determination of geographical position by astronomical observations for mapping purposes in northern areas is being superseded by shoran trilateration in which the adaptation of radar is meeting with success.

The Topographical Survey provides topographical maps that show all significant natural and artificial features fundamental to the study and economic development of mineral and other natural resources. The Field Survey Section is responsible for the field surveys that provide ground control for mapping from aerial photographs, and the Air Survey Section plots and produces maps from these aerial photographs. The National

* Revised, under the direction of the Deputy Minister, in the Editorial and Information Division, Department of Mines and Technical Surveys, Ottawa.