Production declined in the province from 3,156,546 tons in 1957 to 2,519,901 tons in 1958. Since the discovery of the Leduc oil field in 1947 and the subsequent expansion of the natural gas industry, coal output has dropped by almost 71 p.c. About 67 p.c. of the 1958 Alberta output was subbituminous. The production of bituminous coal decreased by 34.2 p.c. to 834,256 tons, whereas that of subbituminous decreased by only 10.8 p.c. The average value of bituminous coal f.o.b. mines was \$6.326 per ton and subbituminous \$4.467, both slightly lower than in 1957.

The output of briquettes, which are made from the semi-anthracite and low volatile bituminous coals of the Cascade area and the medium volatile bituminous coals of the Crowsnest area, continued downward, dropping from 269,147 tons in 1957 to 128,502 tons in 1958. Of the total manufactured, about 38.5 p.c. was made in the Cascade area.

Of the total production of all the coals mined in Alberta, about 9 p.c., consisting to a large extent (79 p.c.) of subbituminous coal, was shipped to Manitoba, 23.2 p.c. to Saskatchewan and 21.2 p.c. to British Columbia for both industrial steam-raising and household use. Only about 2.1 p.c. was shipped to Central Canada to be used mainly for commercial purposes.

British Columbia.—Bituminous coking coal, ranging from high to low volatile, is mined on Vancouver Island and in the East Kootenay (Crowsnest), Telkwa and Nicole (Merritt) areas. Small quantities of subbituminous coal are produced in the Princeton field. Mining on Vancouver Island was confined almost entirely to one mine in the Comox area. Production in British Columbia in 1958 amounted to 849,091 tons compared with 1,113,699 tons in 1957. The 1958 total included 4,344 tons and the 1957 total 7,731 tons mined in the Yukon Territory. Of the total, about 80 p.c. was produced in the Crowsnest area. The average value of British Columbia bituminous coal was \$6.160 per ton for the Crowsnest area and \$8.846 per ton for Vancouver Island. Of the total production about 17.5 p.c. was shipped to Manitoba and 7.6 p.c. to Ontario.

Medium temperature oven (by-product) coke for industrial consumption in Western Canada and northwestern United States is manufactured in the Crowsnest area, somewhat under 200,000 tons being produced in 1957. The single briquetting plant in the province, which is located in the Crowsnest area, produced 34,396 tons (about 85 p.c. railway fuel) in 1958 as against over 84,000 tons in 1957. Approximately 8 p.c. of the provincial output of coal, which was coking coal from the Crowsnest area, was exported to southwestern United States for blending in the manufacture of 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 many 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

<sup>•</sup> Revised, under the direction of the Deputy Minister, in the Editorial and Information Division, Department of Mines and Technical Surveys, Ottawa.