

on western Canadian bituminous coal. However, because of technical and engineering problems associated with the steepness of coal seams and the friability of the coals, such mining methods have not yet been established.

Strip mining, practised in all provinces except Nova Scotia where suitable conditions for such mining are practically non-existent, also aids in reducing costs. Almost 35 p.c. of Canada's 1957 output was produced by this method. The whole of Saskatchewan's lignite output was strip mined, almost 81 p.c. of New Brunswick's, about 44 p.c. of Alberta's and 15 p.c. of British Columbia's. On an average the output per man-day in strip mining increased from 13.3 tons in 1956 to 14.5 tons in 1957, compared with an increase from 2.8 tons to 2.9 tons for underground mining. The over-all output per man-day increased by over 2 p.c.

In an effort to produce better quality coals of greater versatility the industry continues to direct attention to the use of modern methods of cleaning, drying, dust- and freeze-proofing and briquetting. Additional facilities for cleaning and drying various sizes of coal, including fines, have recently been installed at various collieries in both Eastern and Western Canada.

Assistance given to the coal industry by the federal Department of Mines and Technical Surveys is covered at pp. 513-514 under Federal Government Aid.

Details on coal in the respective coal-producing provinces follow.

Nova Scotia and New Brunswick.—Nova Scotia produces high-volatile and medium-volatile bituminous coking coals in the Sydney, Cumberland and Pictou areas and some non-coking bituminous coal in the Inverness area. Production in 1957 was somewhat lower than in 1956, amounting to 5,685,770 tons valued at \$9,300 per ton. Many of the operations have been mechanized in order to reduce production costs. The Dominion Coal Co. Ltd. plan to establish a very large central cleaning plant for their output in the Sydney area, and the Four Star Collieries Ltd., in the Broughton area, are also planning the establishment of a cleaning plant to beneficiate their coal. When these are completed, over 80 p.c. of Nova Scotia's coal production will be beneficiated by modern methods of cleaning.

New Brunswick coal output comes mainly from a single thin seam of high-volatile bituminous coal in the Minto area. Output decreased from 988,266 tons in 1956 to 976,597 tons in 1957 valued at \$8,386 per ton. In 1955 the first mechanical coal-cleaning plant for cleaning 2 x 0-in. slack was established in this area. As a result of its success from a technical and coal-marketing viewpoint, a second plant to clean 6 x ¼-in. coal was placed in operation in 1957. These two plants allow for the cleaning of over 34 p.c. of the total output of New Brunswick. Both plants are equipped with modern mechanical and thermal drying machines.

Much of the output of the two provinces is used locally for industrial and domestic purposes. The remainder, amounting in 1957 to about 43 p.c. of the output, was shipped to Central Canada for commercial, industrial and railway use. The quantity used for thermal power production increased substantially during the year.

Saskatchewan.—This province produces only lignite coal from the Bienfait and Roche Percée fields in the Souris area. Production decreased slightly in 1957, amounting to 2,248,812 tons as against 2,341,641 tons in 1956. The coal was valued at \$1,956 per ton at the mine. Approximately 51 p.c. of the production was shipped to Manitoba and about 14 p.c. to Ontario for industrial, commercial and household use. With the extensive developments in progress for the production of thermal power in Saskatchewan and Manitoba, it is expected that lignite production will increase sharply.

The output of briquettes, which are made from carbonized lignite and used entirely for household and commercial purposes, increased slightly to 40,935 tons in 1957.

Alberta.—Almost all types of coal are produced in Alberta including a growing tonnage of semi-anthracite from the Cascade area. Medium-volatile bituminous coking coal is produced only in the Crowsnest area and output was seriously curtailed during 1957.