railways. Lower-rank bituminous non-coking coals are produced in the Lethbridge, Coalspur, Saunders and several other areas of the foothills. The coal in the Drumheller, Edmonton, Brooks, Camrose, Castor and Carbon areas is classed as subbituminous and that in the Tofield, Redcliff and several other areas is on the border of subbituminous and lignite. The Cascade area was the only field that produced semi-anthracite in 1953.

British Columbia.—Bituminous coking coal ranging from high to low volatile is mined on Vancouver Island and in the East Kootenay, Telkwa and Nicola areas. Small quantities of subbituminous coal have been produced mainly in the Princeton field. In the Kootenay (Crowsnest) area, the largest producing field, medium-temperature oven (by-product) coke is manufactured for industrial consumption.

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The determination of geographical position by astronomical observations for mapping purposes in northern areas is being superseded by Shoran trilateration in which the adaptation of radar is meeting with success.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 Topographical Mapping 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 Air Photographic Library indexes, preserves and distributes prints for all aerial photography done by or for the Federal Government. The Topographical Survey administers the Canadian Board on Geographical Names.

The Legal Surveys and Aeronautical Charts Division makes and records legal surveys of federal Crown lands in the Yukon and Northwest Territories, the National Parks and Indian lands and reserves. This Division prepares and distributes

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