

granodiorite and quartz diorite. The Cassiar-Omineca batholith within the central plateau and mountain area, is of similar composition. It has a length northwesterly of more than 500 miles, and a width up to about 25 miles.

The effects of the Laramide orogeny are less apparent in the Western Cordilleran Belt than farther east. During succeeding Tertiary time sedimentation took place in local fresh-water basins and accumulations of marine sediments formed in places near the present shoreline. Volcanism was active from Eocene to Recent times, reaching a climax in the Miocene or Pliocene. In general the Tertiary beds rest with angular discordance on the older rocks; early Tertiary strata lie in open folds, whereas later Tertiary beds are for the most part horizontal.

The Western Cordilleran Belt was largely covered by ice in Pleistocene time the most significant exception being the weathered Tertiary surface of part of Yukon that was not so covered. Near Vancouver, Pleistocene deposits reach a thickness of 1,100 feet and show tills of at least two different ages separated by stratified sands and clays.

The Cordilleran Region is a producer of gold, both lode and placer, copper, silver, lead and zinc and contains also deposits of mercury, tungsten and iron. Aside from a small area near Field in the Rocky Mountains, all the known metaliferous occurrences are in the Western Cordilleran Belt and most of them at least are believed to be related to the late Mesozoic and early Tertiary granitic intrusions. The Region also produces coal, the deposits of which are widespread. Petroleum and natural gas are produced from fields in the eastern division, chiefly in the foothills region of Alberta. Fluorite, gypsum, magnesite, hydromagnesite, phosphate, saline deposits, building stone, and limestone for the production of lime and cement, form other valuable mineral occurrences.

PART III.—GEOPHYSICS

Material on Gravity, Seismology and Terrestrial Magnetism will be found at pp. 18-27 of the 1948-49 edition of the Year Book.

PART IV.—FAUNA AND FLORA

See list at the front of this edition for special material, under this heading, published in previous editions of the Year Book.

PART V.—LANDS, PARKS AND WILDLIFE CONSERVATION

Canada is a comparatively new country with resources that are for the most part in the early stages of development. The fur, fishery and forest resources have, it is true, been the basis of trade for two to three hundred years, but exploitation on the present commercial scale is of relatively recent growth. Detailed information regarding individual natural resources will be found in later chapters, together with data concerning the efforts directed to conservation of those resources that admit of such methods. The following treatment of resources is concerned only with those summary phases of the subject that can be regarded as falling under the definition of physiography used in its wider interpretation.