

In Pleistocene time nearly the whole of the Cordillera with the exception of a large area in the Yukon was subjected to glaciation, and glaciation still persists in the mountainous regions. Volcanics of recent age are found in areas of limited extent.

An episode of great economic importance in the geological history of the West was the intrusion of the granitic rocks of the Coast Range batholith and of acid rocks at different points in the interior, particularly in the southern part of British Columbia in Mesozoic times. Many of the more important mineral deposits of British Columbia, such as the copper deposits of Hidden Creek, Britannia, and Allenby mountain, the gold-silver deposits of Salmon River district and the silver-lead deposits of the Slocan, had their origin in solutions given off by the magmas of these acid intrusives.

The lead-zinc deposit of the Sullivan mine lies in sedimentary rocks of Precambrian age. The Cretaceous and Tertiary formations carry seams of coal and lignite of great importance. There are economic deposits of other minerals in great variety throughout the Cordillera, and British Columbia is one of the leading mineral-producing provinces of Canada. The gold of the once famous Klondike region was found in placers of an unglaciated area and the gold of the Cariboo district occurs mainly in Tertiary placers that were unaffected or little affected by glaciation.

Section 2.—Economic Geology of Canada, 1929.*

The purpose of this paper is to call attention to the most important reports and articles treating of the economic geology of Canada and published during 1929. The particular articles here referred to, although recently published, do not necessarily contain the best and most complete information on the subjects treated; for further information it is advisable to consult the Dominion and Provincial Departments of Mines. The reference numbers appearing through the text indicate the publishers as listed at the end of this paper.

Asbestos.—In the Bulletin of the Geological Society of America, Stephen Taber described the chrysotile veins of southern Quebec. Evidence is presented to support the theory that the wall rock in immediate contact with the veins has been displaced as the veins were formed instead of being destroyed by replacement or re-crystallization.

Copper.—The Pueblo, Tamarack-Carlisle and War Eagle-Leroi copper properties,¹ Whitehorse copper belt, Yukon, were examined by W. E. Cockfield. The rock formations, in order of age, consist of limestone, porphyrite, granite, granodiorite, porphyry dykes and basalt. The principal ore bodies are of the contact metamorphic type and occur in limestone close to or adjoining the granite. Discoveries have also been made in the granite at a considerable distance from the contact. There are two types of ore bodies, those in which the copper is associated with magnetite and hæmatite and those in which the gangue consists chiefly of silicate minerals. Mineralization is patchy.

V. Dolmage studied the Gun Creek map area,¹ Lillooet District, British Columbia, and outlined the origin of the ores of Copper mountain,⁵ Similkameen district, British Columbia. Cretaceous sediments and volcanics and

* Contributed by P. J. Moran, B.Sc., Geological Survey, Ottawa, Ont.