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equivalency of certain unfossiliferous beds overlying the Nanaimo (conl bearing) formation at Comox and elsewhere in Vancouver island, as possibly in part equivalent to the Tejon group of California. In the southern interior of British Columbia volcanic rocks, sandstones, and shales, with fossil insects and plants, constituting the Similkameen formation, have been referred to the Miocene Tertiary. In the Queen Charlotte islands, rocks of Tertiary age occur on Graham island. They form the greater part of the island, extending from Skidegate to Pillar bay, and at the head of Masset inlet Tertiary volcanics prevail. On the north side of Skidegate inlet the Tertiary rocks consist of hard, thin-bedded, arenaceous clays, oftimes gray and micaccous associated with gravels and conglomerates, argillaceous lignite, holding trunks and branches of trees. At Ya-Kan point, and on the bank of the Hi-Ellon River at Toe Hill, calcarcous sandstones and brown weathering granular dolerite occur, whilst at Skon-Un Point fossiliferous sandstones of Miocene or possibly Pliocene age (Skonun formation), have yielded an interesting fauna described by Mr. Whiteaves. On Ain river, Manin river and other localities, banded trachyte, lignites, volcanic agglomerates and obsidian have been detected and recorded. At Carmanagh Point, the Astoria Miocene occurs.

In the Arctic islands, Oswald Heer has described and recorded the existence of Miocene Tertiary plants and deposits on Prince Patrick island and Banks Land, from collections and observations made by McClintock, McClure, and Armstrong. Ballast beach, on Banks Land, has afforded large quantities of fossil wood, and plants.

On the Lewes and Yukon rivers, Dr. Dawson has recorded the occurrence of hard compact flinty and grayish-white argillite, holding plant remains, which may probably be referable to the Upper Laramie or Eocene Tertiary. The *Horsefly* Gravels and *Klondike* drift are also described by him as Pliocene.

THE QUATERNARY SYSTEM.

The Quaternary deposits of Eastern British North America may be divided into three periods, viz.: 1, the *Glacial*, or boulder clays; 2, the *Champlain*, or marine clays deposited during period of submergence; 3, the Recent or terrace period of elevation.

The Acadian Region.—In summing the results of observation thus far made in south-eastern Canada, Mr. Chalmers says: "1. The glaciation of south-eastern Quebec, and northern New Brunswick was effected largely by local glaciers which moved northward and southward from the highest land or watershed adjacent to Notre Dame mountains, this watershed forming a gathering ground for the snow and neve which sent

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