

"*Carpolite*.—A single imperfect specimen resembling *Legumenosites arachnoides* of Lesquereux.

"*Animal Fossils*.—Minute bivalve shells of two kinds, one possibly an *Estheria*, another perhaps a *Cyprid*.

"All the above fossils, so far as determinable, appear to indicate the Upper Laramie period. Of the collections in my possession, the plants seem most nearly to resemble those of the Lignitic series on the Mackenzie River, which are referable to the Upper Laramie. There is nothing among the plants to indicate any other horizon."

Pleistocene

Evidences of glaciation abound throughout the district. In the Peace River Pass, well-marked glacial groovings occur on the south side of the river two miles east of Mount Selwyn. The movement of the ice here was eastward. Glacial groovings of a pronounced character, running in an easterly direction, were observed on the hillsides north of the Omenica River twelve miles above Germansen Landing, and they are also reported to occur on the summit of a mountain south of Manson Creek at an elevation of 5000 feet above the sea. No groovings were found along the Finlay, but the exposures on the mountain slopes north-east of Fort Grahame present in many instances the smooth rounded characters of rocks polished by moving ice. The movement here was in a south-easterly direction.

The glacial deposits consist of boulder-clay, accompanied by gravels, sands and silts.

In Peace River Pass, gravels, sands, and silts of glacial age are of constant occurrence, and boulder-clay holding striated stones occurs in a couple of places. On the Omenica River, a high bank of stratified sands, silts and gravels occurs below the Black Cañon, and boulder-clay accompanied with sand and gravel was found above the mouth of the Oslinca. Below Germansen Landing, light-colouring silts weathering into steep bluffs are exposed for several miles along the valley. From Germansen Landing to Hogem the immediate shores of the river are low and are mostly built of alluvium.

Boulder-clay is developed to a greater extent on some of the tributaries of the Omenica than on the river itself. High banks of this material occur on Germansen Creek and on Manson Creek, and in both cases are underlain by fluvio-glacial gravels, which are often auriferous. Boulder-clay banks of considerable thickness were also found on Vital Creek and on Tom's Creek.