At the watershed, on the other hand, we find groups of less regularly disposed mountains, sometimes consisting of nearly horizontal strata and of cathedral shape, rising in their highest summits perhaps above 13,000 feet. The rivers and lakes of this portion of the mountains have not the regularity of direction found in the eastern ranges.

The rocks of the region, so far as can be determined from fossils collected in 1892 and '93, are of Devonian age, and consist of limestones, shales, and slates, underlaid by thick beds of quartzitic sandstones and conglomerates. The time of elevation is post-Cretacious, since Laramic rocks occur in some of the valleys, as near Brazeau lake, and Cretaceous rocks may be observed tilted into foothills near the Brazeau gap.

Distances were determined by pedometer or dead reckoning, checked by frequent latitude observations; heights by means of three aneroids and a boiling-point apparatus, the height of the Athabasca at the mouth of the Miette, which was determined years ago in railway surveys, serving as a check. The readings were compared with sea-level barometer readings for the region, kindly supplied by Mr. Stupart, of the Meteorological Service of Canada. It is believed that the heights determined are not more than 100 or 200 feet astray.

The accompanying carefully executed map is the work of Mr. Stewart.