

Lakes. Above this point the river enters an old alluvium-filled basin, and exposures cease. East of the valley, which here runs almost directly north-and-south, the mountains are built of the schists of the Shuswap series, while west of the valley an area of eruptive rocks occurs. The latter consist of diorites around the periphery, but soon pass to the west into biotite- and hornblende-granites. The dip of the schists is to the north-east, or away from the eruptive area.

The rock section exposed along the Finlay, after the latter leaves the valley bounding the Rocky Mountains on the west, consists of the western half of a great anticline, which includes the schists of the Shuswap series (Archean), conglomerates and limestones of Cambrian age (Bow River and Castle Mountain groups), and an upper schistose series consisting of altered volcanic rocks, the age of which was not determined. Finlay section.

The dip of these rocks is usually to the north-east, but in places, and more especially in the limestone series, overturns have been produced by pressure from the west, and the dip is reversed.

The eastern limb of the anticline has entirely disappeared, a result probably affected by faulting along the line of the Finlay Valley. Faulted anticline The junction between the volcanic schists at the summit of the Palaeozoic section, and the Shuswap series east of the Finlay Valley, over which they are apparently faulted, is concealed by the Laramie conglomerates.

*Section in Peace River Pass.\**

A short trip was made through the Peace River Pass of the Rocky Mountains, for the purpose of obtaining a general view of the structure of the range in this latitude. The time occupied, one day in descending, and two days in ascending the river, was too limited for anything but a hurried reconnaissance. Peace River Pass section.

Peace River breaks through the Rocky Mountains, here about eighteen miles wide, in a direction a few degrees south of east. In its passage of the range it has a width of from three to five hundred yards. Its course, with the exception of two small rapids, one before entering and the other after leaving the range, is uninterrupted. The current seldom exceeds five miles an hour and for most of the distance is much less. The valley averages about a mile in width, and the bordering mountains range in height from 2000 to 4500 feet above the river, or 4000 to 6500 feet above sea-level. Character of river.

\* See also Report of Progress, Geol. Surv., Can., 1875-76, pp. 41, 80.