

The valley, where occupied by these glaciers, is bordered on either side by benches of clay and gravel. A bench of this character extends from the lower cañon right up to the second cañon, a distance of four and a half miles. It appears to be almost, if not absolutely level. At the lower cañon the top of the bench is 200 feet above the bed of the stream, and gradually approaching nearer to the level of the water as it ascends the valley, it disappears entirely at the second cañon. If this bench is actually level, it makes the grade of this part of the stream about fifty feet to the mile, inclusive of the two cañons.

At the second cañon there is an abrupt rise in the floor of the valley, caused by the aforementioned dike of diabase. This rise is slightly increased by a heavy deposit on the dike of glacial detritus irregularly distributed, which is apparently another terminal moraine similar to that at the lower cañon. A faint outline of another bench, similar to the well-defined one below, can be traced on the sides of the valley above the second cañon.

Above the second cañon, as below, expansions of the stream are occupied by sheets of ice; but the valley soon contracts to a width of a quarter of a mile, in which the water is necessarily more confined, allowing no room for the accumulation of ice. Here, rising abruptly from the water's edge, are steep talus slopes, on some of which banks of snow lie quite close to the stream.

Two miles below the forks of the creek, to which point the canoes were dragged, the character of the valley suddenly changes. The stream is here confined to one channel, the grade is not so steep, while the valley, widening to half a mile, is occupied by several small, marshy ponds. This portion is entirely devoid of any timber. Along the edge of the stream and ponds is a light growth of alders and willows, which is shortly replaced on the sides of the valley by bare rocky slopes of limestone talus. Only at the forks again does any spruce occur.

At the forks of Braine creek the valley divides, forming two passes, each of which brings one in a few miles into Peel River waters. One pass runs off to the northwest, and the other to the east. Camp was pitched here for a few days while the two passes were thoroughly explored, and the easier one selected for the portage. Though the eastern pass is 200 feet lower than the northwestern, the latter was the one chosen, because it brought us into a much larger and more navigable stream than the other. The eastern pass is the more direct route to the Wind river, and is the one that travellers would be more likely to take in the winter time.

The summit of the eastern pass is 150 feet above the level of the forks of Braine creek. The valley is very wide and open. A scrubby