

two kilometers, we reach the Rogers Pass (height 1,310 meters), a deep saddle in the mountain, while the peaks rise steeply on both sides to a height of 2,700 and 2,800 meters. An outlet between the precipitous walls seems scarcely possible: then all at once the train rounds a corner and far below it appears the Illecillewaet River, to which it must now descend in great loops, passing frequently over high frail-looking trestles. As we do so quite a surprising mountain panorama is unfolded. Glaciers here recline against mountains only 2,700 meters high, and in the neighbourhood of the highest peak of the group, Mt. Sir Donald (3,250 meters), they cover considerable space. A turn of the road brings us quite close to the magnificent Illecillewaet glacier whose tongue only ten years ago reached immediately up to the lower shrubs, from which it has now retreated a distance of almost 170 meters. Not far from this glittering tongue, which is remarkably free from debris, rise the mighty giant trees of British Columbia. Evidently the snow line is here very low. Its height must be reckoned at 2,200 or 2,300 meters, that is lower than upon the summit of the Rockies, where it must be put at 2,700 to 2,800 meters, and far deeper than on the eastern edge of the chain, where peaks of 3,000 meters in height fall below it. The snow line sinks considerably from the interior of Canada to the Pacific. At the same time it is much lower on the west side of every chain than on the east side.

As at Banff in the National Park and at Field below the Hector Pass, so, too, at this supremely picturesque point, the C.P.R. has built an excellent hotel near the station Glacier, only a few kilometers from the end of the Illecillewaet glacier. This place is frequently made the headquarters for mountain tours in the Selkirks as well as being an excellent point to break the long continental journey. Our excursion also stopped here, but bad weather prevented us from making any use of September 4th. We were obliged to content ourselves with a visit to the tongue of the Illecillewaet glacier, of which I gave an extended account in the *Journal of the Alpen Verein* for 1898.

As at the Hector Pass, so, too, at the Rogers Pass the ascent from the east is easier than the descent to the west. The westward flowing river is in both cases the stronger: it works away with energy at the deepening of its upper channel and as at the Kicking Horse River, so, too, at the Illecillewaet the railway has difficulty in reaching the level of the valley. This is done by a fall of fifteen per cent. in a stretch fourteen kilometers in length. Then road and river descend together until the latter must enter a deep defile to reach the Columbia. It was here dammed up very high with driftwood. The track follows it with difficulty. At Revelstoke both have got down to the level of the great water-artery: it has circumvented the Selkirks in a great curve to the north and descended to a height of 450 meters in doing so. This is a level which we had passed away back on the prairies near Winnipeg, 1,200 kilometers from the eastern foot of the Rocky Mountains, and higher than this we scarcely get as we continue our journey westward. Even the chain west of Revelstoke, with its glaciers and peaks 2,700 meters high, which separates the waters of the Columbia from those of the Fraser river, is crossed in the Eagle Pass at a height of only 610 meters. Here we pass quite gigantic moraines with quite enormous erratic boulders.

*The valleys within the Canadian Cordilleras lie considerably deeper than the prairie and steppe-land on their eastern borders.* At the same time they are partly submerged, that is, they are occupied throughout their entire breadth by long and deep lakes, which not only follow the long valleys, especially in the region of the Columbia River, but also often assume very complicated shapes; the Shuswap Lake, which the Thompson River drains into the Fraser, reminds one, for instance, of Lake Lugano. Great deposits of sediment, as well as old deltas and shore lines, of which we counted not less than six at Revelstoke, reveal the fact that these lakes were once far more extensive. These deep valleys, rich in lakes, are really confined to the Canadian Cordilleras; farther south in the United States the space between the Rockies and the Sierra Nevada has not been broken up into valleys but appears as a uniform unbroken highland. This difference may probably be attributed to climatic causes. The Canadian Cordilleras are richly watered and supply mighty rivers. The regions to the south are dry and have no channels that reach the sea. But in consequence they have no way of being cut through, while such a power is working in the Canadian Cordilleras to a great extent and, as it