

"but wriggling almost directly up the face in would-be zigzags bitterly trying to pedestrians. Above this it is lost among cliffs and hollows dotted with small timber, and rises more gradually until, five miles from Cokelin, an altitude of 1,780 feet (2,890 feet above the sea) is now attained. The trail now emerges on an elevated, rolling district, where the mountains, with whose summits we are nearly on a level, seem of inconsiderable height and lose much of their rugged appearance."—*Altered vegetation.*—"Down by a gradual descent of 500 feet to the brook Hotharko, a tributary of the Atnarko, and up its valley seven miles in an east-north-easterly direction to its forks, meeting with no serious obstructions but fallen timber and occasional small rock slides. The space between the forks of the Hotharko, which run in south-easterly and west-north-westerly directions, is occupied by a peculiar mountain mass of basaltic rock, 1,350 feet in height, which has received the name

'THE PRECIPICE.'

"The ascent of this mountain is excessively steep, the trail at first running up the back bone of a singular spur, further up winding among crumbling fragments of rock, and finally, reaching by a dizzy path the summit of the perpendicular wall of rock, 100' (only one hundred) feet high, which crowns the mass, and from which it derives its name."

[Here I would respectfully observe—a tunnel—it seems to me—say about a mile in length, from the eastern slope (slope shown in section sheet 7) of this "precipice" to the base of its "100 feet perpendicular," would bring the line to the head of a system of natural slides and "heavily timbered slopes," which, though steep for ordinary railway gradients, certainly present no feature insurmountable to railway construction and working, as *proved*, abundantly, under such like conditions, and worse, with higher heights, and steeper gradients, as on the Nevada of California; on the Andes of South America (with average gradients of 500 feet to the mile) for 30 miles together, on Pacific slope; on the Ghauts of India; and on the Alpine heights of Switzerland and other mountain lands, all—save British Columbia—thoroughly or partially railwayed.

At this "Precipice" alone, with its "slides," would special plant and motor be required, in the whole route from

ocean to ocean. The same can scarcely be said as to the Bute Inlet line between the N. Thompson and Fraser, as surveyed, and now given in report.

In Sir Alexander McKenzie's account of this interesting spot, in this *Adam Trail*, and *his*, to the Pacific in 1793, we have the following as given in pages 233-234 of Mr. Fleming's report. Approaching from the east, he says: "We continued our route with considerable degree of expedition, and as we proceeded, the mountains appeared to withdraw from us. The country between them soon opened to our view, which apparently added to their awful elevation. We continued to descend till we came to the brink of a precipice. The precipice, or rather a succession of precipices, is covered with large timber, which consists of the pine, the spruce, the hemlock, the birch and other trees. In about two hours we arrived at the bottom, where there is a conflux of two rivers that issue from the mountains."

Reverting to Mr. Palmer's report, we see it stated by him that the distance from Cokelin to the Precipice is "16 miles," and that the "top of the Precipice is 3,840 feet above the level of the sea." "Arriving here," he continues, "the traveller enters on the level of the great elevated plateau which intervenes between the Cascade Mountains and the Fraser. Looking eastward the plateau presents but few objects to attract attention, and the eye grows weary in wandering over a vast expanse of waving forest, unbroken save by the lakes and marshes, which are invisible from the general level." "The summit ridge is crossed at a distance of about fifty-five miles from the Precipice, and a height of 4,360 feet above the sea. The extreme elevations of the rolling plateau are very inconsiderable, seldom more than 800 feet above the general level. Distance from Slide to Alexander" (Alexandria on Fraser River) "180 miles."

Yours,
M. McLEOD.

Aylmer, Q., June, 1874.

LETTER VII.

LEATHER PASS.

TO THE EDITOR OF THE GAZETTE.

SIR,—This is a term applied—or at least was so by the Fur Trade—in a general way to the whole passage from the Northern Bend of the Fraser, eastwards to Jas-