

frost-bitten. The Indian horses pass the winter out of doors without fodder or stabling; the best proof that the winters are not very severe.

DIFFERENT PASSES.

It remains to say a few words on the different passes which have been explored through the Rocky Mountains on British Territory; leaving out the Athabasca Pass by Peace River, in Lat. 56°: 28, as being too far north for present purposes:

NAMES OF THE PASSES.	Ridge or Divide.		
	Lat.	Long.	Alt.
	Deg.	Deg.	Feet.
1 Yellow Head Pass, from the Athabasca to the Upper Fraser	52:54	118:33	3760
2 Howse Pass, from Deer River by Blaeberry River to the Upper Columbia	51:57	117:07	6347
3 Kicking Horse Pass, by Bow River and Kicking Horse River, to the Upper Columbia, Sullivan	51:16	116:32	5420
4 Vermillion Pass, from the South Saskatchewan by Fort Bow [4,100 feet] to the Kootanie, Hector	51:06	116:15	4947
5 Kananaski Pass, from Fort Bow by Pamsay River to the Kootanie [with a short Tunnel 4,600] Palliser	50:45	1:1531	5985
6 Crow's Nest Pass, by Crow River to the Kootanie	49:38	1:1448	
7 British Kootanie Pass, by Railway River to the Kootanie, Blakiston	49:27	114:57	5960
8 Red Stone Creek or Boundary Pass, from Waterton River to the Kootanie, [partly on American ground] Blakiston	49:06	114:14	6030

With the exception of the Yellow Head Pass in the above table, which is comparatively straight and short, and the three last which are tolerably so, but too near the Boundary line to be available, the four others describe the most circuitous routes, among a labyrinth of glaciers, and mountains covered with perpetual snow. Besides which, the approach to them over the plain by the South Saskatchewan, is for nearly one hundred miles through an arid, sandy, treeless district, forming the northern limit of the great American Desert; instead of the rich Fertile Belt drained by the North Branch, which is also the more considerable one of the two. And it is in the very latitude of this Belt, that the great barrier of the Rocky Mountains is cleft asunder, so that the road runs along this fertile zone in a direct line up to the lowest and easiest Pass, as to a natural gateway leading to the Pacific. But we have already seen, that all the southern Passes [and Captain Palliser wished it to be distinctly understood that he considered these as far from being the best that could be discovered] are intercepted further west by the Selkirk range, which presents an impenetrable barrier, and renders them so far next to useless. When, therefore, we consider their relative altitude, their necessarily precipitous nature, and the great depths of snow [27 feet or more], under which they lie buried during eight months of the year, there can be no hesitation [and such indeed is now the general opinion] in regarding the Yellow Head Pass through the Rocky Mountains, with its easy gradients and low elevation, as the only feasible one for a railroad. But the same has been shown with respect to the Upper Fraser and the Bute Inlet valley, through the Cascade range. It is, therefore, clearly demonstrated, that these passes, which connect naturally with each other, offer the best and indeed the only really practicable line for a railway to the Pacific through British Columbia.

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