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Methods Adopted in the Construction of Rogers Pass Tunnel.

By J. G. Sullivan, M.Can.Soc.C.E., Chief Engineer, Western Lines, Canadian Pacific Ry.

The Rogers Pass tunnel is in the Selkirk Mountains of British Columbia. It is double tracked, five miles long, and as shown on figs. 1 and 2, lowers the summit of the former line by 552 ft. It also shortens the line by 4.3 miles, eliminates some 2,300 or 2,400 degrees of curvature and avoids the expense and danger of maintaining and operating 4.5 miles of snow sheds.

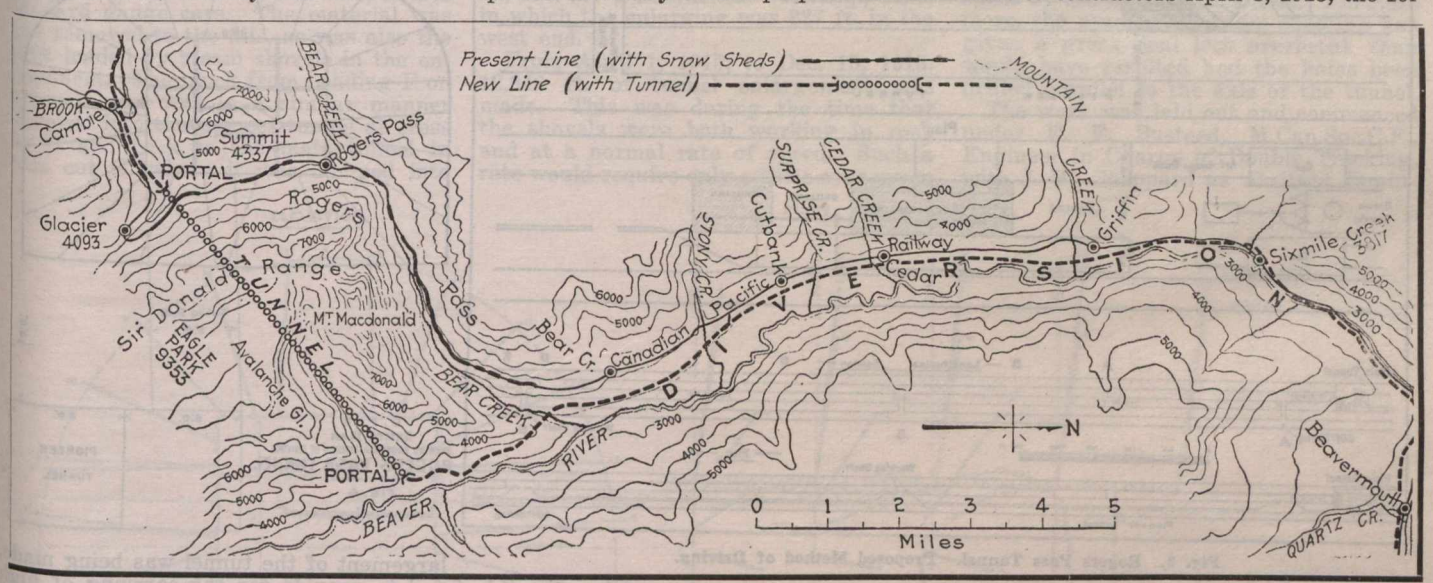

Fig. 1. Rogers Pass Tunnel. Map of Old and New Lines.

struct the tunnel, made a further suggestion that it might be necessary to double track the present line over the mountain and gauntlet the heavy bridges in order to handle the traffic during the period of construction. It can be readily understood, therefore, that the length of time required to complete the work became a matter of anxiety to the company. The author was aware that tunnels in Europe had been driven at a rate two or three times as fast as any long tunnel had been driven on this continent, and he had, in a superficial way, an idea of the methods employed. In a circular letter sent to contractors April 8, 1913, the following statement appeared:—"The necessity for this tunnel is so great and the expenditure so large that it would be worth considerable money to this company to have the tunnel completed as soon as possible. Therefore, everything else being equal, the party who will guarantee completion in the shortest time will be the one who will receive the work. I would be glad if you would give us prices on the European method of tunnelling,

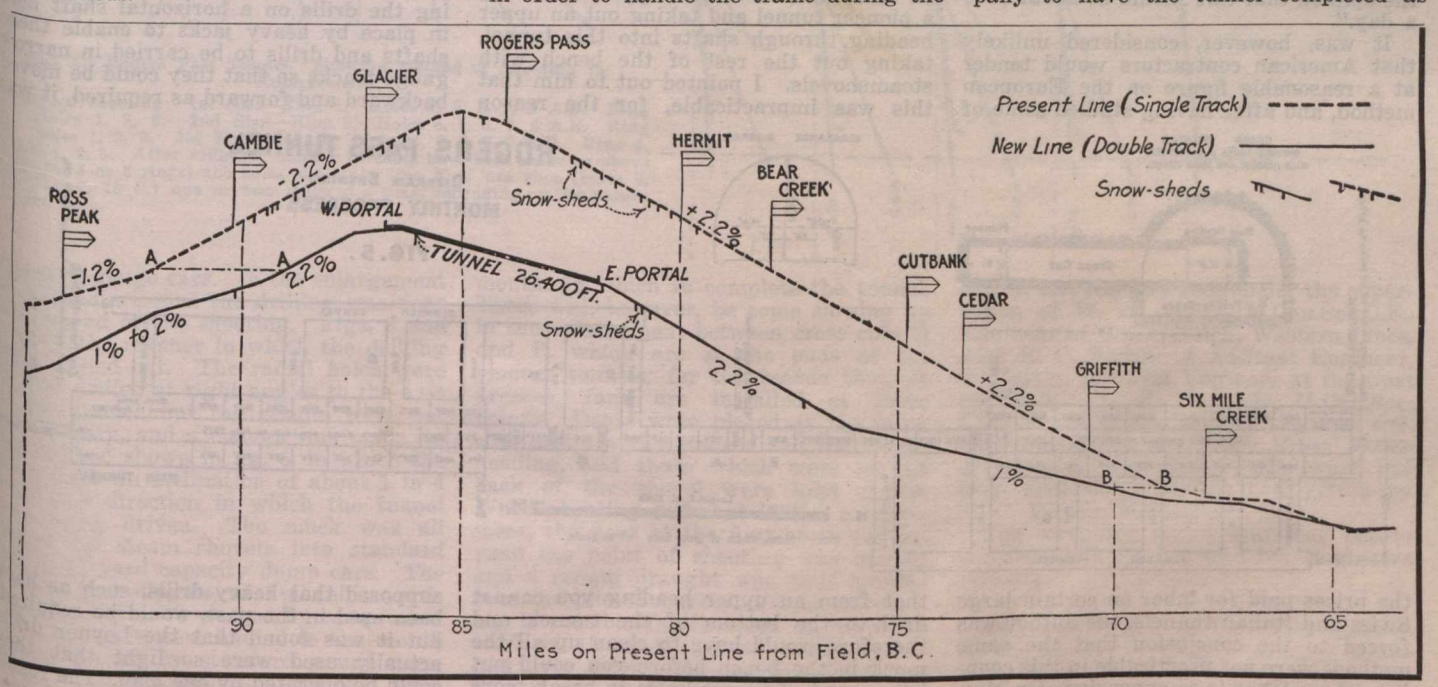

Fig. 2. Rogers Pass Tunnel. Profile of Old and New Lines.

In order that the plan adopted in the construction of this tunnel may be properly understood and appreciated, it is perhaps advisable to go somewhat into the history of the case. During the period from 1910 to 1913, C.P.R. traffic increased