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ROGER'S PASS TUNNEL OF THE C.P.R.

THE FIVE-MILE, DOUBLE-TRACK TUNNEL UNDER CONSTRUCTION THROUGH THE SELKIRK MOUNTAINS, LOWERING THE GRADE 540 FEET AT THE SUMMIT AND REDUCING THE DISTANCE BY $4\frac{1}{2}$ MILES—NOVEL METHOD OF CONSTRUCTION EXPLAINED.

THE Canadian Pacific Railway is now constructing one of the most important engineering works ever attempted on this continent—the boring of a 5-mile, double-track tunnel through Mount Macdonald, one of the peaks in the Selkirk Range. The

the Hoosac tunnel on the New York Central line, the longest at present, by three-quarters of a mile. It has associated with its construction, the building also of over 18 miles of new main line. The views shown in Fig. 1 illustrate the nature of the region it penetrates, while the

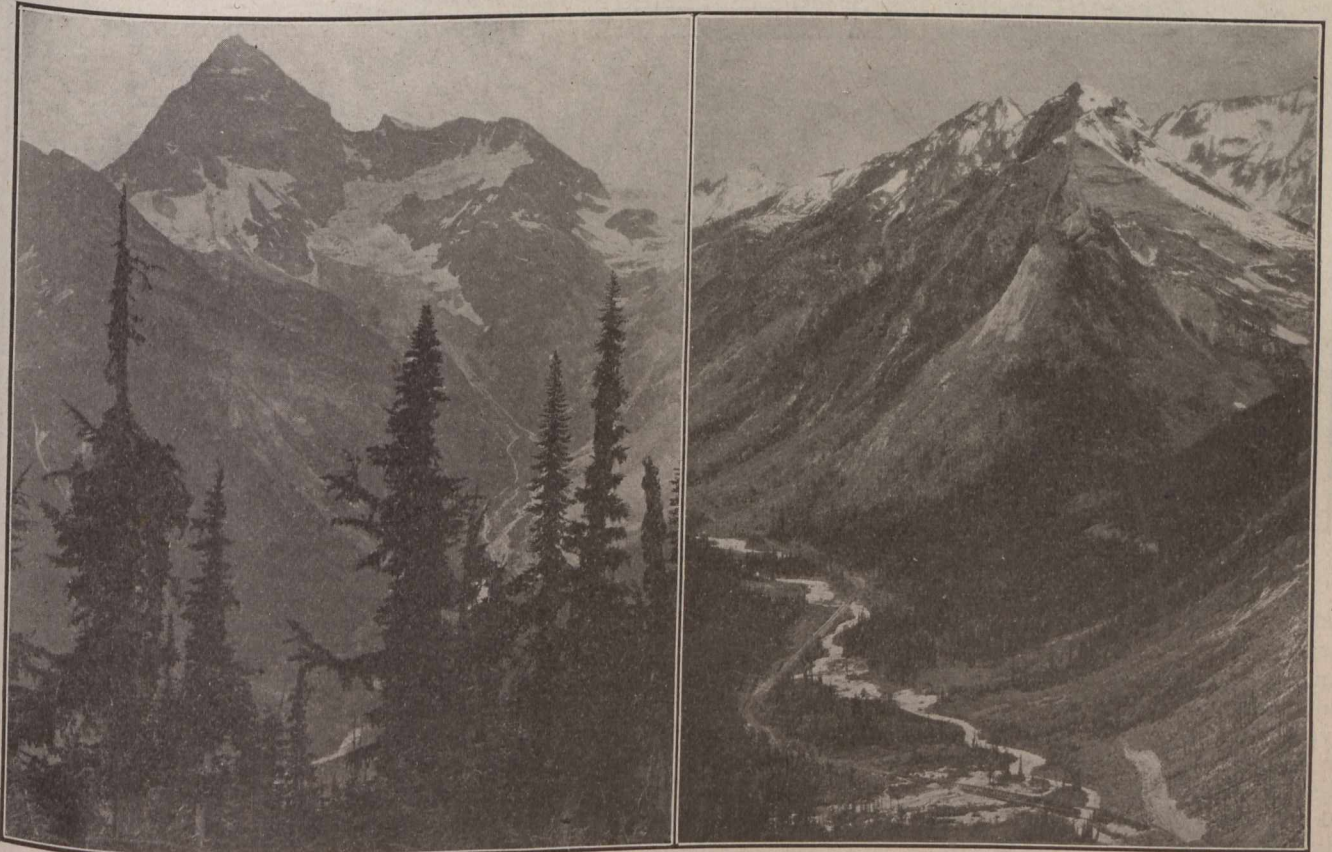


Fig. 1.—Approaches to the Roger's Pass, showing (on the left) Mt. Macdonald and (on the right) the Illecillewaet Valley, British Columbia.

purpose of it is to obviate the present necessity of using two long spiral loops on the western slope, and many miles of snow sheds, the improvement being designed to effect a considerable grade reduction and the abandonment of what is considered from the operating standpoint one of the most costly sections of railway on the entire system.

The tunnel, when completed, will be the longest in America, measuring exactly 26,400 feet, and surpassing

map and profile (Figs. 2 and 3) show its relative position and that of the old and new main lines of the Canadian Pacific Railway through the Selkirks.

Since the C.P.R. first opened its transcontinental line through the mountains of British Columbia it has expended millions of dollars in protecting and renewing its tracks, on extra locomotives for the heavy grades, and in coping with snowfalls and other physical handicaps which keep a large force of men and a large amount