

miles from Moncton, while the western division is 1,755 miles in length.

The eastern terminus of the railway will be at Moncton, New Brunswick, from which point the seaport of Halifax will be reached over the Intercolonial Railway, a branch line being projected to St. John. The distance from Moncton to the first named port is 185 miles, and to the latter 89 miles. The western terminus will be at Prince Rupert, British Columbia, on the Pacific Coast, near the southern boundary of Alaska.

Commencing at Moncton, the line will take the most direct practicable route within the Province of Quebec, to the city of Quebec. At Chaudiere Junction, five miles above Quebec, the new line will cross the St. Lawrence River, thence taking a direct route, passing in the vicinity of Lake Abitibi, and to the north of Lake Nepigon, to Winnipeg, Manitoba.

Owing to the physical character of the country the Western Division is subdivided into the Prairie Section and the Mountain Section; the former extending from Winnipeg via Edmonton to Wolf Creek, Alberta, a distance of about 916 miles, and the latter, as its name indicates, being the section over the mountains from Wolf Creek, Alberta, to Prince Rupert, British Columbia, about 840 miles.

The country through which the Prairie Section of the railway will pass, contains land now known to be well adapted for the growing of wheat, which in extent is four times the wheat growing area of the United States, and is the great agricultural belt of the North-west. This land, which is now being rapidly taken up by settlers, produces rich crops the first year of cultivation and will furnish a large traffic for the railway as rapidly as it can be extended, therefore amply warranting the company in assuming the payments of the interest charge on the cost of construction, from the beginning. The Mountain Section, however, passing through the mineral deposits, will require a little longer time for development, and as stated, the government has therefore assumed the payment of the interest charges under its guarantee of three-quarters of the cost of construction, for the first seven years after completion (waiving their right of recourse on the company in the event of default, for an additional three years), and allowing for the period of construction, which is fixed at seven years, not until 1919 will the company be required to assume this liability beyond the interest charges on the one-quarter of the cost of construction under the guarantee of the Grand Trunk Railway Company of Canada.

Returning to the question of gradients, mentioned above, the Grand Trunk Pacific will benefit from these exceptional conditions by the great economy and low cost of operation which can be obtained from the commencement, when this item is of such importance in the case of a newly constructed railway at a time when the traffic and the revenue therefrom must of necessity be light, although with the gradual evolution of the enterprise and from explorations which are being made in all directions, it would appear that the period of light traffic will be of short duration.

The Mountain Section of this railroad lies between the 52nd and the 57th parallels of latitude. It is probable that no other area in North America can equal this portion of British Columbia in her natural resources. Where there is no agriculture and pasture, there is mining or lumbering to be developed, and where there are none of these, although they often occur in one district, there is at least trapping and hunting. Lying as it does, far to the north, the climate conditions have in the past been supposed to be extremely severe during the winter season, but the fallacy of this impression is rapidly becoming known on account of the reverse conditions actually existing, due in part large to the

proximity of this territory to the Pacific Ocean and the influence of the Japan current. Before the House of Commons Agriculture Committee recently Mr. Elihu Stewart, Dominion Superintendent of Forestry, in testifying as to the resources and conditions concerning the northern country, having particular reference, however, to the district adjacent to Great Slave Lake, which lies many hundred miles still more northerly of where the Grand Trunk Pacific will be constructed, said that the growth of vegetation in the Mackenzie Basin was surprising, the sun in the summer being visible for about twenty hours out of twenty-four. On July 15th, at Fort Providence, near Great Slave Lake, on the Mackenzie River, about 550 miles north of Edmonton, Mr. Stewart said he saw wheat in the milk, potatoes in flower,

COMPARISON OF SUMMIT ELEVATIONS, MAXIMUM GRADIENTS AND TOTAL ELEVATION ASCENDED FOR VARIOUS TRANSCONTINENTAL RAILWAYS.

Name of Railway	Highest Summits	Max. Gradient in feet per mile		Total Ascent in feet overcome	
		East-bound	West-bound	East-bound	West-bound
Grand Trunk Pacific: Western Div. Winnipeg to Pr. Rupert.. Eastern Div. Winnipeg to Moncton....	1 Summit 3,712	21	26	6,990	6,890
Canadian Pacific....	2 Summits 5,299 4,308	116	116	23,106	23,051
Great Northern	3 Summits 5,569 5,532 2,849	116	116	17,830	17,137
Union Pacific System: Omaha to San Francisco...	5 Summits 8,247 6,953 3,537 3,936 4,204	106	116	18,171	17,171
Western Pacific....	6 Summits 7,510 7,453 6,987 7,132 2,575 3,819	175	185	34,003	34,506

peas fit to use, tomatoes, turnips, rhubarb, beets, cabbage, onions and other garden vegetables. The strawberries had been ripe there for some time, and the people had currents and gooseberries. To illustrate the heat, he said at Fort Chipewayan it had been 100 degrees in the shade for several days and nights. Indians coming from the Alaska boundary to meet the steamer Wrigley had lost two dogs from the heat in the Arctic Circle. He thought systematic exploration would show a surprising amount of good country, extending down from Slave Lake to Peace River. Along the Mackenzie River, spruce grew clear to the shores of the Arctic Ocean. There were aspen, white poplar, balm of gilead and birch growing as far north as Fort Macpherson. Mr. Stewart said that on Slave River he had passed a bank of burning coal about twenty miles in length near Fort