

Across the Continent on the Canadian Northern

The Recent Trip of a Special Train on the New Transcontinental and the Meaning of the C. N. R. to Canadian Transportation, by the Wall Street Journal.

Probably at no time has the Canadian Northern Railway been more in the Dominion's eye than the week of October 11th, when the company was engaged at once in an audacious experiment in operation and a bold challenge to the critics of the road and its promoters.

A member of the Dominion senate on board the train of fifteen Pullmans which arrived in Vancouver the night of October 18, remarked while the train was crossing Northern Ontario: "Statements have been made in Parliament which, if uttered elsewhere, would have put those who made them in jail." He referred to the jibe recently current that the Canadian Northern had been built (especially the portions of the main line pushed forward since the war began) to obtain the subsidies, that some mileage consisted of rails strung across the prairies without ties or ballast and that no real passenger train would be risked upon the 737 miles of new line from Peace River Junction, just west of Edmonton, to the Pacific.

It was with a public temper of this sort in mind that Mackenzie determined to take his parliamentary special over the Continental Divide with one engine. Better time could have been made with two—the train left Ottawa at 11 p. m., October 12—but nothing could have demonstrated so convincingly that the road has the grades and the solidity of roadbed and structures claimed for it as has the hauling of a train of over 1,100 tons through to the coast with one engine. Officials of the company believe that no other road on either side the international line has ever done it. As for the condition of the road, a disinterested but competent observer who was with the party remarked: "This road is in better condition than was the Canadian Pacific at the same stage in its career."

Barring a few spots which need ironing down, inevitable in a new road, the Canadian Northern is ready for heavy traffic. The line from the mountain summit at Yellowhead Pass, which it crosses at an elevation of only 3,706 feet above sea level, down to Vancouver, is of exceptionally good construction, with steel and concrete bridges and ballast usually of stone, elsewhere of heavy gravel. East of Edmonton there are perhaps a dozen long trestles which will ultimately have to be replaced with solid filling, concrete and steel. The road's own entrance to Vancouver from New Westminster, 13 miles, remains to be completed. Right of way and the terminal site in Vancouver have been acquired, but the scarcity of capital prevents further construction at this time. Meanwhile the Canadian Northern uses Great Northern trackage into this city.

Canadian Northern makes no pretension to the scenic grandeur of the Canadian Pacific's mountain crossing at Banff, a hundred miles southeast, although the line down the deep canons of the Thompson and Fraser rivers is more than satisfying. But the Canadian Northern in choosing the Yellowhead route, where the mountain system runs off and becomes simplified, accepted the route first selected for the Canadian Pacific by Hugh Fraser. Sir William Van Horne overruled the eminent engineer's choice, not because he condemned it from an engineering standpoint, but for reasons of general policy. Western Canada was clamoring for railroads. They were impatient to invite the roads south of the border to come north and the province of Manitoba actually did charter a northward extension to an American road in the teeth of the Canadian Pacific's grant from the Dominion government of a monopoly of railroad construction in western Canada for a long term of years.

This clause in its charter the Canadian Pacific later saw fit to surrender.

So the Canadian Pacific chose the southern route with its much worse grades, but it thus kept the American lines substantially out of Canada. Its guiding spirits thought this imperative to keep eastern and western Canada, which geography and immigration seemed tending to force apart, together as a political entity. Today Canadians say that Van Horne contemplated building another Canadian Pacific line through the Yellowhead when the exigencies of railroad strategy allowed.

However that may be, the Canadian Northern today holds the route with a line of 0.5 per cent maximum grade westbound on the line between Edmonton and the Pacific coast, and a maximum of 0.7 per cent eastbound, the higher figure occurring only on the 110 miles between Blue river and Lucerne. Grades, elevation and distance of the principal mountain roads of North America compare approximately as below. The figures are from the Canadian Northern engineering department:

Road—	Maximum Grade	Maximum Elevation Feet	Dist. Miles
Canadian Northern	0.7%	3,706	1,610
Canadian Pacific	2.2%	5,321	1,484
Grand Trunk Pacific.....	1.0%	3,719	1,745
Great Northern	2.0%	5,202	1,815
Northern Pacific	1.6%	5,500	1,917
Union Pacific	1.8%	8,200	1,800
St. Paul	2.5%	6,322	1,770
Atchison	2.6%	7,421	1,927

Distances for the three Canadian roads are from Winnipeg to the coast, for the two Hill roads and the St. Paul from St. Paul, for the Union Pacific from Omaha and for the Atchison from Kansas City.

On the Canadian Northern a modern engine of 50,000 pounds tractive effort could haul 48 cars of 50 tons gross loaded weight from Winnipeg over the summit and 90 thence to the coast. Eastbound, the same engine could haul 50 cars up to the summit division and over the 110 miles of that division 36 cars. East of there the full load would be resumed.

Over the new route from Port Arthur east through northern Ontario it is asserted that the Canadian Northern can handle from two to three times the trainload of the Canadian Pacific over its corresponding line immediately north of the Great Lakes.

Now as to the passenger service. It is admitted that the Parliamentary special made slow time. Apart from the task of trying out a new roadbed with an extraordinarily heavy train, this trip found the operating organization along the just-opened portions of the new line in need of the "tuning up" that comes only with actual service. The engineering department's figures are that the ordinary transcontinental train of eight cars could travel between Edmonton and Vancouver at the minimum speed of 40 miles an hour and would be limited to that only on the sections affected by the ruling advance grade of 0.5%. East bound, on 28 miles of the line the limit would be 30 miles an hour, and elsewhere any speed up to 50 miles an hour. These figures are based on an engine of 35,000 pounds effort and could be bettered with a more powerful one.

Mr. R. Magill, chief of the Board of Grain Commissioners, was in Vancouver last week looking over the situation with regard to handling wheat at this port.