



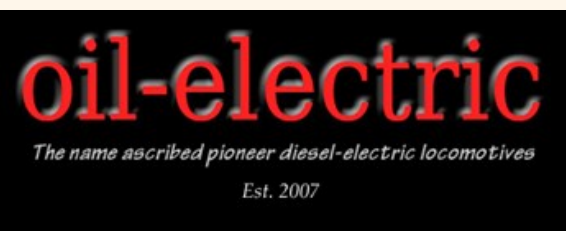
DID
YOU
KNOW?

Bartholomew Brosnan Kelliher - Ballyplimoth, Cordal, Castleisland. Chief Engineer of the Grand Trunk Pacific Railway. *He has been called the greatest Railroad Engineer of his time.*

History Comes Alive !

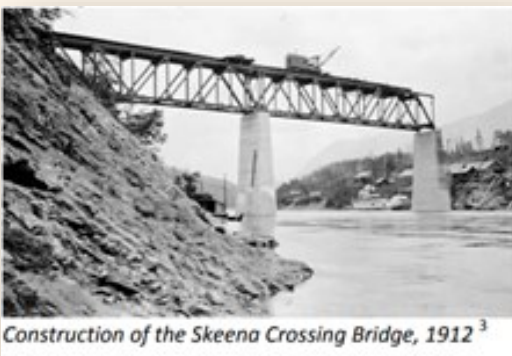


Manitoba Historical Society
Keeping history alive for over 140 years



Extract: The Grand Trunk Pacific Railway 100th Anniversary

Prepared by Ken Newman, Regional District of Kitimat-Stikine, March 2014



Construction of the Skeena Crossing Bridge, 1912

Within the Mountain section the Skeena Valley portion of the railway was a distance of 180 miles from Prince Rupert to Hazelton. This portion of the railway was the most difficult and the most costly part of the Mountain section. The total cost to build the rail line from Winnipeg was \$109.8 million and of that the Mountain section cost \$78.2 million. The Skeena River from Hazelton to the Pacific Ocean falls 1,000 feet making it one of the most rapidly descending rivers on the west coast of North America. Such obstacles along the way included the steep mountain walls of the lower Skeena, Kitselas Canyon and the crossing of the Skeena west of Hazelton. The man in charge of this section of the construction was GTP engineer C.C. Van Arsdoll, nicknamed "four tenths Van" for his insistence that the grade not exceed four tenths of 1% in a mile, even during this difficult section. This high standard contributed to the challenges and costs of building a railway in this difficult environment.



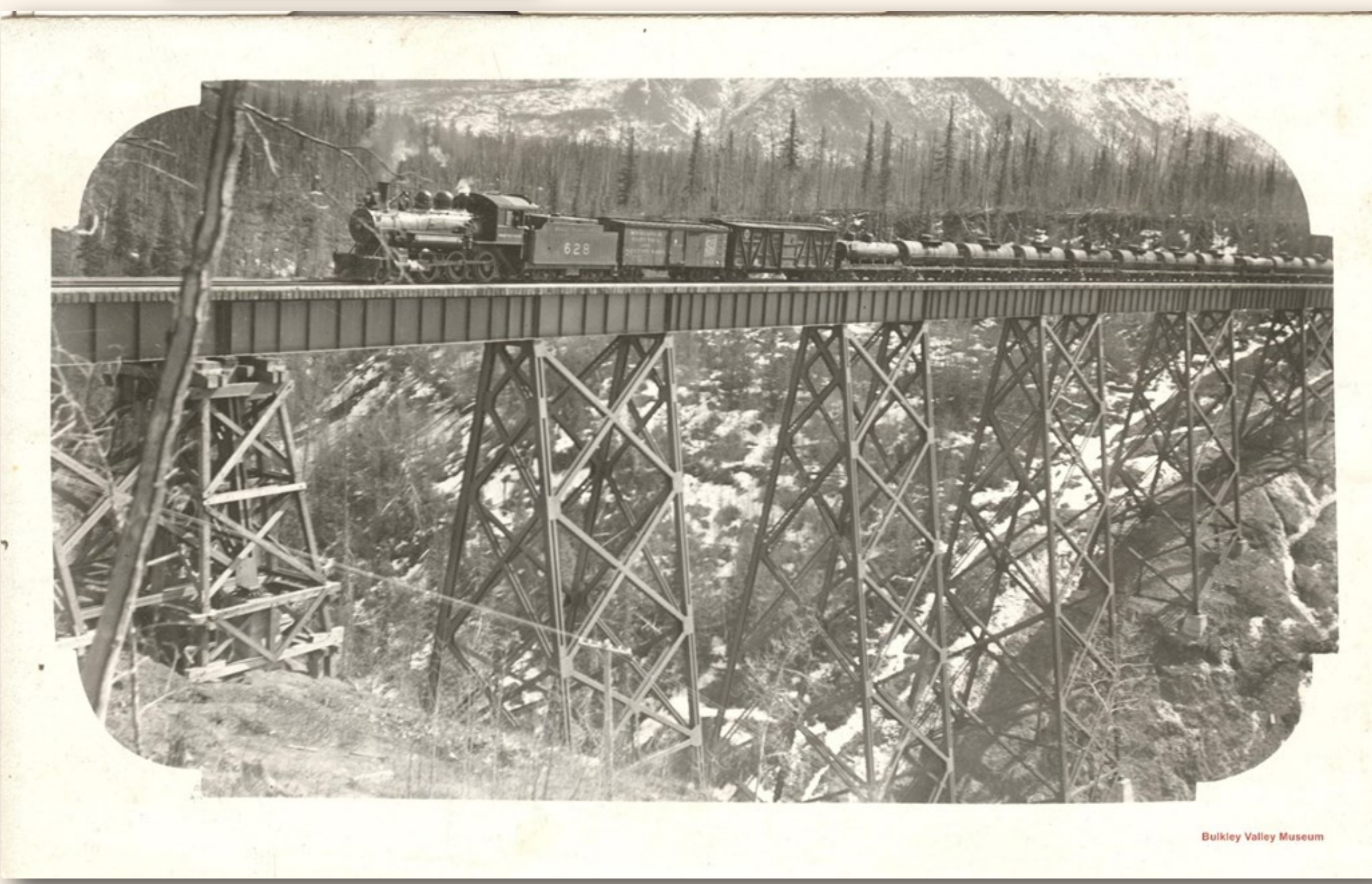
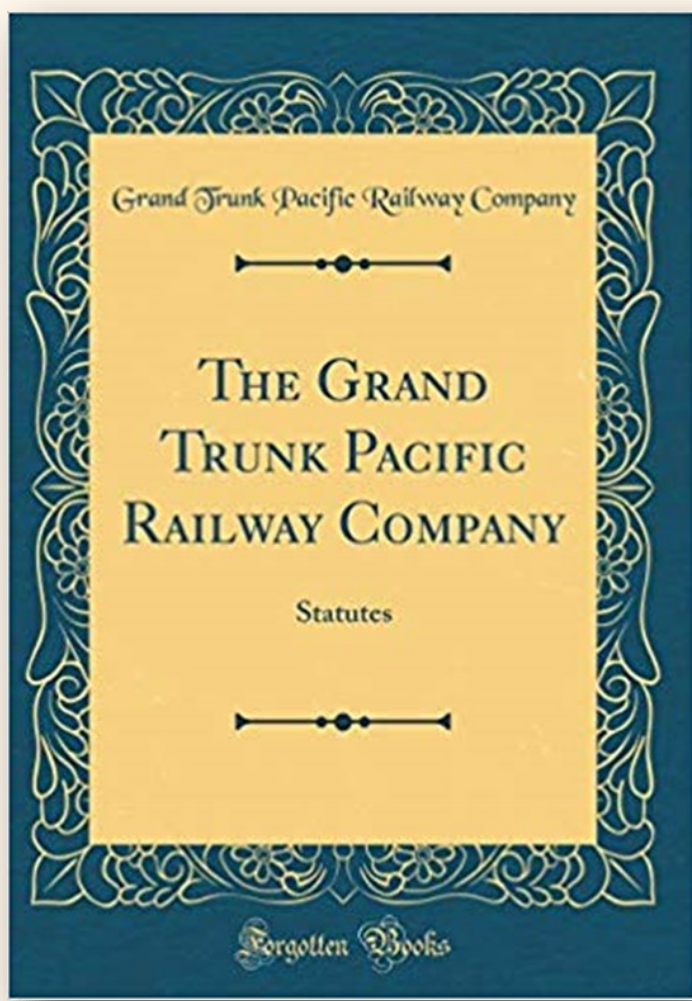
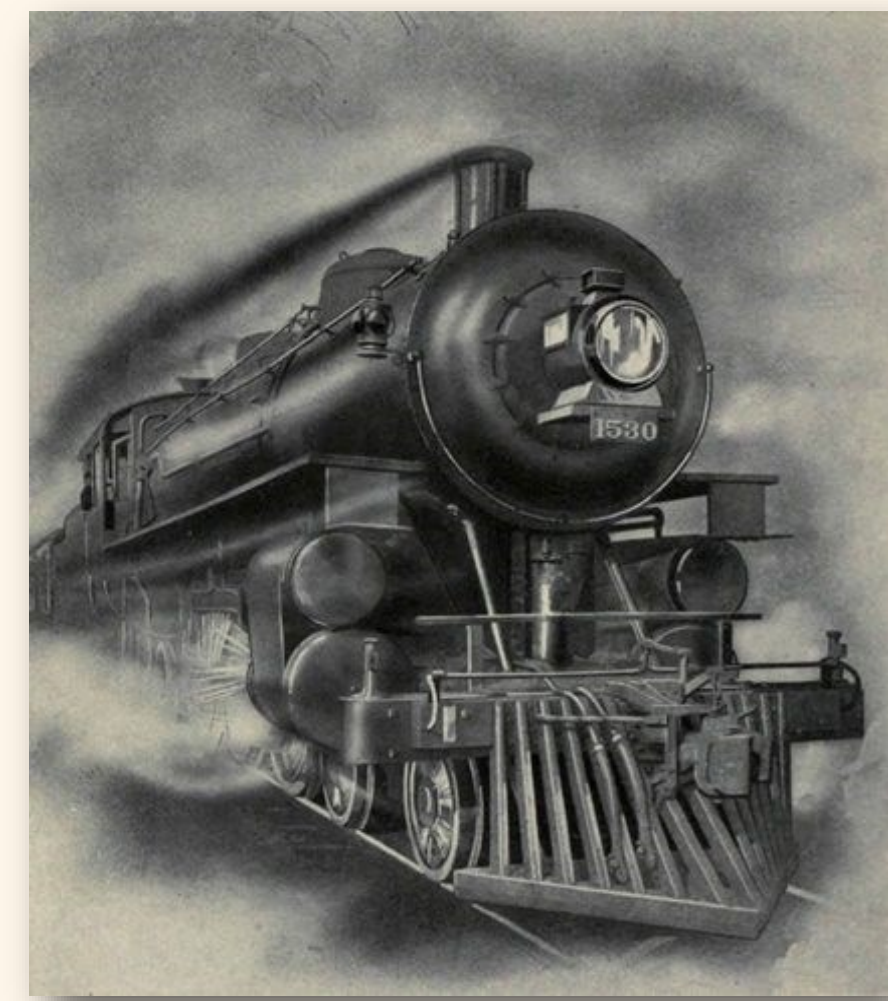
The first GTP Passenger Train arriving in Prince Rupert, April 9, 1912 pulled by engine No. 112

Hazelton (commonly known as Skeena Crossing) was a 930 foot span completed in March of 1912 and only 10 miles further a second bridge almost 900 feet long was constructed over Sealy Gulch. It is estimated that to build the first 100 miles of grade east of Prince Rupert cost \$80,000 a mile before any track was laid. Construction on the Skeena portion of the line was carried out by the principal contractor Foley Brothers, Welch and Stewart (F.W. & S) who in many cases sublet to other contractors. Construction camps to house workers were situated along the route approximately every two to five miles. Throughout construction, due to poor living conditions and low wages, workers were hard to retain and it was said that for every man arriving at camp to work one was leaving. Workers would often refer to F.W. & S Company as Fool'em, Work'em and Starve'em.



GTP Superintendent's Train on the Skeena near the Exchamook River, 1914

With the arrival of the tracks at Skeena Crossing in March of 1912 the GTP was offering passenger service from Prince Rupert to Hazelton with a ferry service across the Skeena. Even before this in 1911 passenger service was available for the first 100 miles to Kitselas, which at the time was called Vanarsdol and would later become the site of a station. The threat of bankruptcy, world war and recession may have all conspired together to prevent the formal ceremony with a golden spike. The GTP was completed but likely not in the fashion it was dreamed of in 1903 by Charles Hays. It finished more with a whimper than a bang. The location of the last spike is a little clearer, the site was near the east end of the upper Nechako River crossing about one mile east of the Fort Fraser station. The first train across the track was pulled by engine No. 112 and arrived in Prince Rupert on April 9 1914 at 1:15 in the afternoon.



Bally Valley Broom



Chief Engineer Kelliher driving a spike in the last rail, the last spike being one to complete the lining up of the Main Line steel. General Superintendent Brewer assisting.

Everyone wanted to drive the 'Last Spike'!

The last spike was to be driven in a fancy ceremony in August 1914, with Edward Chamberlin expected to be doing the honours, but this was cancelled, so the "**Last One**" became **Kelliher's honour**. Last Spike GTP Railroad, Fort Fraser Last spike was driven by **B. B. Kelliher**, the Chief Engineer of the Grand Trunk Pacific Railway, all the way from Ballyplimoth, Cordal, Castleisland Co. Kerry.

Photograph above from Library and Archives Canada showing **Chief Engineer Kelliher** driving the last spike. This photo was part of Alfred W. Smithers personal album. General Superintendent Brewer assisting was the guy in the foreground, back to the camera. On right side, one foot on rail, gentleman with his hat off, handkerchief in his coat pocket was Morley Donaldson

Area - KERRY (RC), Parish/Church/Congregation - CASTLEISLAND

Region of MARGARET KELLIHER of BALLYPLIMOTH on 15 January 1903

Wife: MARGARET KELLIHER

Address: BALLYPLIMOTH

Religion: ROMAN CATHOLIC

Further details in the record

Date of Birth: 15 January 1862 (BASED ON OTHER DATE INFORMATION)

Spouse 1: JOHN O'DONNAN

Spouse 2: HELEN BROWNE

Sibling

Area - KERRY (RC), Parish/Church/Congregation - CASTLEISLAND

Region of THOMAS KELLIHER of BALLYPLIMOTH on 4 April 1902

Wife: THOMAS KELLIHER

Address: BALLYPLIMOTH

Religion: ROMAN CATHOLIC

Further details in the record

Date of Birth: 15 January 1862 (BASED ON OTHER DATE INFORMATION)

Spouse 1: JANE LAYTON

Spouse 2: JANE LAYTON

Sibling

A POPULAR HISTORY OF EAST KERRY

By
T. M. DONOVAN



FIRST EDITION PUBLISHED 1931

THE TALBOT PRESS LIMITED
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I have already written of the men of learning: now I propose to write of the men of action that Ciarraige Luachra is proud to claim as sons.

Bartholomew Kelliher, perhaps the greatest railway engineer of North America, was born at Cordal, near Castleisland about seventy-two years ago. At first he attended the Kilmurry National School, under the management of the late Mr. Peter Kearney, and afterwards he attended the Castleisland National school, under Mr. D. Desmond.

Young Bartholomew was apprenticed to an engineering firm first in Tralee and then in Dublin. After qualifying there, he went to the United States, where he at once jumped into the front rank of railway engineers.

After some years of hard work, pioneering, he became one of America's leading engineers. He helped to build both the Union Pacific and Northern Pacific transcontinental railways; but his greatest achievement has been the building of the Grand Trunk Pacific of Canada.

To quote a Canadian paper: "Mechanical and engineering experts will remember what a sensation was created in their circles when it became known what Kelliher was about to undertake in the construction of the Grand Trunk Pacific. To build a great railroad through the Rocky Mountains with only a four-tenths of one per cent. grade was considered not only impossible, but the idea itself was looked upon as the mad vision of an idealist. Yet, Kelliher accomplished this, and as a result the Grand Trunk Pacific has the lowest mountain grade in the world. At Kicking Horse

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HISTORY OF EAST KERRY

Pass, the Grand Trunk reaches an altitude of 3,712 feet.

"It was the ambition of the two first Presidents of the line to build a road-bed from coast to coast, over which trains would travel as smoothly as rubber-tired automobiles on a graded road." This idealistic dream, of "making a feathered bed out of hard steel," was actually laughed at by men who had already become famous as railroad builders. But B. B. Kelliher accomplished the feat. At a recent meeting of great railroad builders in London, it was conceded that for workmanship, smoothness, and grade, the Grand Trunk Pacific was the greatest road in the world; and B. B. Kelliher, being the man behind the gun, it follows that he was acclaimed as the greatest railroad engineer of our time, and his work is known all over the world—in North and South America, and in India—everywhere in fact but in his own native land.

Now, readers will understand what great honour this Castleisland man has won for Kerry and for Ireland. He is an outstanding son of the Old Kingdom, and if ever Kerry shall institute a roll of honour the name of B. B. Kelliher ought to take the leading place among men of action.

He was married, secondly, to the sister of Sir James O'Connor, and his only living relative now in Castleisland is Mrs. James Pembroke.

TM Donovan was born in Church Street, Castleisland in the early 1860s. His claim to fame and a limited version of immortality, is that he, as far as we know, is the only one who penned any history of the Castleisland/East Kerry region from personal knowledge.

Grand Trunk Pacific Railway Construction.

We have been favored by the Chief Engineer, B. B. Kelliher, with the following statement of work done during 1913. Construction on the main line was in progress, also on eight branches in Manitoba, Saskatchewan and Alberta. In the case of the main line construction was confined to British Columbia, being worked both westerly from the eastern boundary of the province, and easterly from Prince Rupert, the Pacific terminus of the railway. Approximately 275 miles of grading and 297.6 miles of tracklaying were done on the main line during the year, and on the branches a total of 80 miles of grading and 267 miles of tracklaying, respectively, was done, so that during the year 355 miles of grading and 564.6 miles of tracklaying were done on the entire system. This is exclusive of second track and sidings. Below is a brief description of each portion of the work:—

Main Line.—At the end of 1913 grade was completed to mile 1270 west of Winnipeg, track being laid to within five miles of that point. The substructures for the large steel structures of the third crossing at mile 1233, and the fourth crossing at mile 1278, of the Fraser River, were being built. Grading was fully under way and well advanced to completion all along the line westerly until the end of steel was reached at mile 323.9 east of Prince Rupert, or mile 1422 west of Winnipeg. Railway in operation from Prince Rupert, easterly to Bulkley Summit, mile 300. Grading in Prince Rupert terminals well advanced.

Harte-Brandon Branch.—Length 25 miles. 21.85 miles of grading completed, but no track laid. Erection of Assiniboine River bridge substructure was in progress at end of 1913.

Regina Boundary Branch.—Length 155 miles. Completed and in operation.

Talmage to Weyburn Branch.—Length 15 miles. Grading completed. No track laid.

Moose Jaw North West Branch.—Length 67.86 miles. Grading and tracklaying completed to mile 67.

Prince Albert Branch.—Length 111.5 miles. Grading completed throughout. Track laid to mile 87.2, at which point there is a large steel bridge over the South Saskatchewan River, the erection of which had not been commenced up to the end of 1913.

Cutknife Branch.—Length 50 miles. Grade completed throughout. Track laid to mile 33 and should be completed during 1914.

Biggar-Calgary Branch.—Length 105 miles. Completed and in operation.

Calgary Branch.—Length 202 miles. Completed and in operation. Terminal work at Calgary has been commenced.

Speaking of the railway construction in the Dominion, in presenting the Railway Department's report to the House of Commons recently, the acting Minister said the construction of the line from Winnipeg to Prince Rupert, is divided into two sections—the prairie section from Winnipeg to Wolf Creek, and the mountain section from Wolf Creek to Prince Rupert. The first section is 914.9 miles, and is in full operation. There is some work at terminals yet to be completed, and some bridges and culverts to be put in permanent condition. The total amount expended to date upon this section is \$40,427,322.65. The mountain section is 830 miles. From Wolf Creek to Fort George, 363 miles, the road is graded and track laid, with the necessary sidings, and 326 miles have had a good lift of ballast. Some steel bridges have not yet been erected, but the traffic now going into Fort George is being carried over temporary bridges. The concrete substructures for the third and

fourth crossings of the Fraser River have been built. Station buildings have been erected to mileage 219 from Wolf Creek. From Prince Rupert easterly the line is completed and traffic is in operation for 339 miles, of which 100 miles have been fully ballasted, and 170 miles have received a first lift. Station buildings are either erected or are under construction on this mileage. There are 15 steel bridges yet to be erected to replace temporary pile structures. The intervening 128 miles, on which the acting Minister stated 90% of the grading had been completed, and steel was being laid at the date of the reports to him, have since been connected up with the east and west sections, the last spike having been driven by the Vice President, M. Donaldson, April 8. The total expenditure on the line is shown by the following general statement:

Mountain Section.—	
Total expenditure, as certified by Government Chief Engineer . . .	\$71,449,962 90
Company Chief Engineer . . .	71,514,398 00
Total payments to company . . .	52,139,534 50
Total payment to company upon guarantee and implementing same..	52,139,534 50
Total payment to company on account of special loan	7,000,000 00
	59,139,534 50
Total cost to complete as given by Government Engineer . . .	9,089,000 00
Total cost to complete as given by company engineer	13,700,000 00
Cost per mile, Government Chief Engineer	97,035 00
Cost per mile, company Chief Engineer	102,775 00
Prairie Section.—	
Total expenditure	\$40,427,322 65
Total payment to company upon guarantee	\$31,135,482 91
Total payment to company on account special loan	10,500,000 00
	21,635,482 91
Estimated cost at completion . . .	41,335,180 00
Cost per mile	45,180 00

The last mile of track on the main line from Winnipeg to Prince Rupert, was laid in the presence of Vice President and General Manager, M. Donaldson, and other officials, April 8. The party arrived from Winnipeg by special train, and were received at mileage 1,375 west of Winnipeg, and mileage 371 east of Prince Rupert, by officials from the western end of the line, and representatives of the contractors, Foley, Welch and Stewart. There was no special ceremony at the connecting up of the two sections of the line, and the special train immediately afterwards proceeded on its way to Prince Rupert, reaching there, April 9.

The line is 1,744.9 miles long, and is built throughout on a 0.4% gradient against east-bound, and on a 0.5% gradient against west-bound traffic, with a maximum curvature of six degrees. The roadbed is 18 ft. wide and 80 lb. steel is used for the tracks. There are tangents on the prairie sections as long as 47 miles. Construction was started in Manitoba in 1905, and at Prince Rupert in 1908, and tracklaying was started Sept., 1906. Following are some of the principal features of the route:—

Elevation at Winnipeg, 767 ft. above sea level. For 160 miles west of Winnipeg line built on prairie level, reaching elevation of 1,650, with maximum grade of 0.5%—26.4 feet to the mile.

Banks of Qu'Appelle River followed for 35 miles.

Height of prairie land at mile 300 from Winnipeg, with elevation 2,325 (Touchwood Hills.)

Line follows prairie level at average ele-

vation of 2,000 from mile 330 to Wolf Creek, mile 915, end of prairie section.

Mountain section commences at mile 915 (Wolf Creek.)

Athabasca River Valley followed for 100 miles, thereafter the Miette River Valley, a tributary of the former, for 17 miles westerly.

Continental divide reached at elevation 3,723. This is Yellowhead Pass, the highest summit on the entire transcontinental system.

Line proceeds from the Pass to the headwaters of the Fraser River, skirting the north shores of Yellowhead and Moose Lakes.

Fraser River Valley is followed and crossed four times between Tete Jaune and Prince George, elevation dropping as course is proceeded westerly from 2,400 to 1,880.

Nechaco River flows into Fraser River at Prince George.

Nechaco River Valley followed for 116 miles between Prince George and Endako, elevation rising from 1,880 to 2,245.

From Endako westerly the line follows Endako River Valley and skirts the north shores of Burns and Decker Lakes, reaching the headwaters of the Bulkley River at Bulkley Summit, elevation 2,366. Bulkley River Valley followed in a northwesterly direction to Hazelton, elevation 985.

At Hazelton the Bulkley River flows into the Skeena River.

From Hazelton to Prince Rupert line follows the banks of the Skeena River, there being a gradual descent in elevation to sea level.

There are 65 large steel bridges on the line having a total length of 5.3 miles. They are all designed to the highest Dominion specifications for heavy traffic. The largest bridges on the prairie section are: South Saskatchewan, at Saskatoon, 1,500 ft. long and 71 ft. high. Battle River, mile 676 from Winnipeg, 5,440 ft. long, including approaches, and 190 ft. high. Clover Bar, over North Saskatchewan River, mile 786.5, 1,653 ft. long and 138 feet high. The largest bridges on the mountain section are: McLeod River, mile 915.6 from Winnipeg, 1,065 ft. long and 118 ft. high. Rau Shuswap, mile 1,124, from Winnipeg, 1,030 ft. long and 190 ft. high. Fourth Crossing, Fraser River, mile 1,278 from Winnipeg, 2,650 ft. long and 36 ft. high. The highest bridge is that over the Pembina River, 860 miles west of Winnipeg, rail level being 208 ft. above high water. The Fraser River is crossed four times, at mileage 1,073, 1,189, 1,233 and 1,273 from Winnipeg. The mainland and Karem Island, on which Prince Rupert is situated, are connected by the Zanardi Rapids bridge, 655 ft. long, and 33 ft. above high water.

The company has also built and placed in operation 940.10 miles of branch lines, and is completing 119 miles of additional branch lines this season. These are located as follows:—

	Total Mileage	Completed
Manitoba—		
Harte-Brandon	25	
Saskatchewan—		
Melville-Canora	65.20	55.20
Melville-Regina	98.40	98.40
Regina-boundary	155.00	155.00
Regina, Moose Jaw and N.W.	108.	90.20
Prince Albert branch	111.80	67.00
Battleford branch	48.50	48.50
Cutknife branch	50.00	2.60
Biggar-Calgary	104.00	104.00
Talmage-Weyburn	15.00	
Alberta—		
Tebeid-Calgary	201.50	201.50
Alberta Coal branch	56.40	56.40
Mountain Park Coal branch	30.24	30.24

At the Canadian Railway Club's monthly meeting at Montreal, Apr. 14, J. E. Duval, General Superintendent of Car Service, G. T.R., read a paper on the misuse of cars and the causes of car shortage.