

# Railway Department

PROVINCE OF BRITISH COLUMBIA

## ANNUAL REPORT

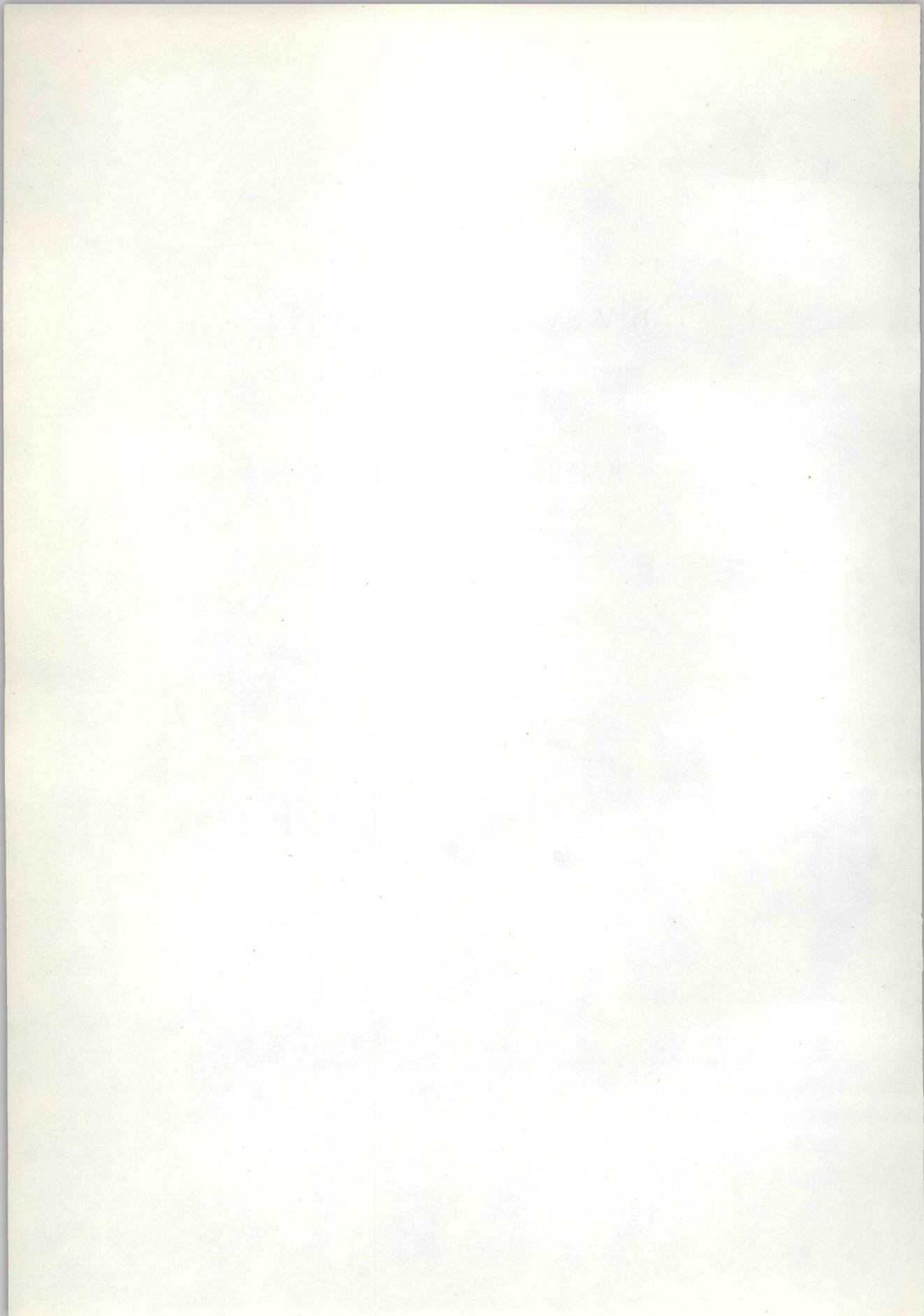
Year Ended December 31st

1955



VICTORIA, B.C.

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1956



*To His Honour* FRANK MACKENZIE ROSS, C.M.G., M.C.,  
*Lieutenant-Governor of the Province of British Columbia.*

MAY IT PLEASE YOUR HONOUR:

I have the honour to present herewith the Annual Report of the operations and activities of the Railway Department for the year ended December 31st, 1955.

W. R. T. CHETWYND,  
*Minister of Railways.*

*Victoria, B.C., January 31st, 1956.*

VICTORIA, B.C., December 31st, 1955.

*The Honourable W. R. T. Chetwynd,  
Minister of Railways, Victoria, B.C.*

SIR,—I beg to submit herewith the Thirty-eighth Annual Report of the Railway Department, covering the year 1955, together with Appendices.

Your obedient servant,

J. S. BROADBENT,  
*Deputy Minister.*

# Report of the Railway Department

## FOREWORD

British Columbia has continued to expand industrially over the past few years, and particularly during 1955. An increase in population and secondary industries has naturally followed the industrial expansion throughout the Province, and consequently the transport systems have been operating to full capacity.

Natural gas as a potential source of light, fuel, and energy has, in the past year, introduced a new era in British Columbia, the reason being that tremendous natural-gas and oil reserves have been discovered and developed in North-eastern British Columbia and the adjacent territory in Alberta. Gas transmission-lines are under construction to pipe the natural gas through British Columbia and into the United States, and various gas utilities companies have made application under the "Pipe-lines Act" to supply various cities and communities throughout British Columbia with natural gas. It is therefore safe to predict that, within the next few years, industry and manufacturing in the lower portion of British Columbia will grow tremendously due to this low-cost source of heat and power.

It is also of consequence to note that during 1955 the Alcan project at Kitimat has been enlarged, so that subsidiary industries are springing up around this source of cheap water power. Transportation facilities in the Kitimat area are also being improved and enlarged, and many miles of privately owned industrial road is being constructed.

Construction on the southern extension of the Pacific Great Eastern Railway, which will be completed during 1956, has given impetus to development in the Squamish area. This is due not only to the railway extension connecting with Vancouver, but also to the parallel highway which is being constructed by the Government. Here again is a case where improved transportation facilities are building up a valuable area which remained stagnant for many years, and it is safe to predict that families will live in suburban Squamish and motor to work in Vancouver. Conversely, people working in Squamish will live in Vancouver, so that in a few years Squamish will be almost a suburb of Vancouver, and the Squamish Valley will develop as well as the Garibaldi Park area.

The long-talked-of northern extension of the Pacific Great Eastern Railway from Quesnel to the Peace River is at last an actuality. It is no longer in the talking stage. During 1955, 145 miles of grade was under construction north of Prince George, the line was surveyed through to Dawson Creek and Fort St. John, and contracts are to be let during 1956 for completion of the railway. This has shown a marked impetus in progress in the Peace River area, as towns are developing rapidly in anticipation of the new rail connection. Most people of British Columbia do not realize that Dawson Creek is the largest grain-shipping centre in Canada, and with the new rail connection to Vancouver the outlet of this grain to the coast will mark a new era in the development of the Province.

The Railway Department has continued to keep pace with fast-changing conditions. During 1955 inspection was extended to logging-trucks and oil pipe-lines. Field work and office work of the Department's staff have been overtaxed during 1955, but there has been no increase in staff during the year. The Inspection Department in Vancouver consists of R. E. Swanson, Chief Inspector; W. E. Tyler, Inspector; J. H. Carmichael, Inspector; W. F. Thomas, Inspector; and Miss Ruby McColl, clerk-stenographer; while in the Victoria office there is a Chief Draughtsman, Arthur Shaw, and secretarial stenographer, Mrs. B. White. It is expected, however, that in future it might be necessary to increase the staff both in the Vancouver and Victoria offices of the Department as the Department will be forced to cope with the unprecedented expansion which is at the present time taking place throughout British Columbia.



Victoria and Sidney Railway, February, 1912. Engine No. 1 with the crew: Bill Walker, A. J. A. Lacoursiere, Cliff Ferguson, H. Shade, Hindu freight helper, R. Peterkin, R. Mellado, Mr. Jenkins, D. Laird.

## A HISTORY OF SAANICH PENINSULA RAILWAYS

By R. D. HARVEY, Q.C.

With Technical Data and Photographs Supplied from the Collection of George Hearn,  
Victoria Model Railway Club

## FOREWORD

In presenting the following history of abandoned railways which at one time ran between Victoria and Sidney, B.C., it is hoped that an historical document will be preserved. Mr. Harvey's pen has been dipped deep into the ink-well of nostalgia so that one again lives in those swashbuckling days of handle-bar moustaches and big diamond smoke-stacks, when the sobbing and plaintive cry of a steam-locomotive's whistle echoed across the Saanich Peninsula, when people went on picnics and enjoyed themselves to the fullest, and when people rode in wooden coaches behind an old wood-burning locomotive and marvelled at the progress of the age in which they lived.

Following is the story of an era when the mail contract paid \$250 per year to carry the mail once a week between Victoria and Sidney by stage-coach, and in 1895, by the evolution of progress and inflation, the V. & S. Railway got \$460.64 per annum for the daily contract! It is to be remembered in those days the agricultural area of Saanich was a land of big timber and logging camps which was gradually changed to what we know to-day by the advent of the "Cordwood Limited."

The reader will appreciate the tenacity of the enthusiastic rail fan Mr. George Hearn, who has walked every inch of the old abandoned right-of-way to collect photographs and data. He has compiled authentic information on the locomotives and rolling-stock, and the men who ran the trains. He has even found a few of the old spikes which held the rusty old rail to the rickety old ties. This, then, is not a story: it is a true record of an era which has passed on, but in passing has paved the highways and airports so as to make possible the transportation systems and the civilization we enjoy to-day.—*Robert E. Swanson.*

## THE VICTORIA AND SIDNEY RAILWAY

The most historic means of transportation from Victoria to North Saanich was the Victoria and Sidney Railway, which was incorporated on the 23rd day of April, 1892, and the company was authorized to construct, maintain, and operate a line of railway from the City of Victoria to the townsite of Sidney, and also "to construct and operate telegraph and telephone lines along the said line of railway; also to construct wharves, docks, elevators, dock-yards, ships and piers, warehouses, etc., as might be necessary to carry on the business of the company."

The provisional directors of the company included Julius and Henry Brethour, well-known pioneers of North Saanich, and Robert Irving, of Victoria.

Apparently the route must have been under considerable discussion. At one time it appears that it was under consideration to use what is now Shelbourne Street as the exit from Victoria and to proceed roughly via the west side of Mount Douglas, then known as Cedar Hill, thence inland to what is now approximately Saanichton, and thence to Sidney. However, this route was abandoned in favour of proceeding direct to Royal Oak, thence to Beaver and Elk Lakes (the line followed the western shores of each), thence to what is now known as Keating, Saanichton, and finally to Sidney.

Originally the Victoria terminus of the railway was at or near Hillside Avenue, and the miles of route then operated was 15.97. This became known as Station No. 1.

It would appear that the builders of the railway, who will hereinafter be mentioned, were rather anxious to make a connection with the Esquimalt & Nanaimo Railway, and it would seem that they were endeavouring to sell the railway to the Canadian Pacific Railway, which would probably account for the fact that on May 14th, 1894, before

the railway was actually in operation, a trial run was made on which President Van Horne, of the Canadian Pacific Railway, and Superintendent Abbot and Chief Engineer Paterson, of the same company, were taken over the V. & S. to Sidney and return, and the run to Sidney was made in twenty-six minutes from the Hillside terminus. Mr. White assures me that this is an accurate statement of the time, and, of course, he is in the best position to know. It must certainly have been an almost non-stop operation, and some consideration must have been given to the safety of the important passengers who were the guests of the company.

#### *Prominent Figure*

The most prominent figure connected with the construction of the V. & S. was the late T. W. Paterson, who was later Liberal member for the Islands constituency in the Legislature (which then included, as I think it should now, the North Saanich Peninsula) and Lieutenant-Governor of the Province. Before the railway was actually completed, no one could be found to operate it, and Mr. Paterson undertook the task. In the meantime there had appeared in the issue of the *Colonist* dated April 14th, 1893, an article concerning the construction of the railway, which was headed "The Road Has Changed Hands and Will Be Ready for Operation by Fall," and then there is the first mention of a connection with the mainland under the heading "Mainland and Island Connections in Prospect—A Direct Ferry to Be Established."

The article went on to state that contracts for the completion of the construction would, in all probability, be awarded, and by the following fall it was hoped that the railway would be in operation. The *Colonist* went on to state that "whatever difficulties have kept the project at a standstill have disappeared with a complete change in the ownership of the charter, which has now passed into the hands of men well able to carry the work to completion and anxious to do so as soon as possible. For personal reasons the new owners' names do not appear, but they admit the purchase and state that all will be made public in due time. One gentleman, already prominently identified with railway enterprise (who turned out to be A. B. Guthrie), has a half interest in the new concern. Speaking with a representative of the *Colonist*, he said it was the intention of the purchasers to let the contract at once, provided the tenders received were satisfactory, and to have work vigorously prosecuted.

"'Unless,' he said, 'something quite unforeseen happens, trains will be running by next fall. I cannot tell you anything about the running arrangements. These have not yet been made. If, however, they should be in connection with the E. & N. Railway, I think it would be in the best interests of the City of Victoria and of all concerned. When the road is in running order it will undoubtedly make direct ferry connection with the mainland, thus ensuring a saving both in time of travel and the cost of freighting.'"

#### *Confident*

Then Alderman McKillican, one of the committee of the Victoria City Council concerned with the matter, is quoted as stating: "I know the purchasers," he said, "and have every confidence in them as men of enterprise and ability to build the road. I think they are bound to provide direct connection with the mainland in their own interests, as the merely local traffic could not be expected to pay much; and they are, I believe, quite confident as to the outcome of their enterprise."

Then in the *Colonist* of July 3rd, 1893, is an interesting account of progress and construction under the heading "The Victoria and Sidney Railway Construction Being Pushed Ahead Rapidly." The *Colonist* stated: "When the promise or statement was made a few months ago that by the middle of November there would be trains running on the Victoria and Sidney Railway, there were many who shook their heads and had doubts about it; but if the present rate of construction is kept up for the next two months

and there is every indication that it will be, there is no reason why the first train should not start on time as expected.

"Work having been commenced from the Sidney end of the line, there is not very much known in the city of what has been done. A little party was out yesterday inspecting, however, and has seen the results of the work so far. The line from Sidney toward Victoria, as far as Elk Lake, is all graded, and about one hundred eighty men are on the job, so that every day the camp gets a little nearer to town. From Sidney to where the camp was yesterday there has not been much heavy work, but from there in to Victoria the difficulties to be overcome are a trifle greater, the grades being somewhat heavier. The end of the track at Sidney is just opposite the new sawmill, which has been erected by John White (uncle to J. J. White) and his associates. The line runs for a considerable distance along the sea shore, and is very advantageously located. In places there is a good deal of heavy timber, but the chief obstructions have been overcome by long curves around them. The ship which brings the rails from England is expected next month at Sidney, where she will go to the wharf and discharge, and the work of laying the iron will commence from that end."

According to the *Victoria Daily Times*, the ship in question, the "Rathdown," was, on September 11th, 1893, at Sidney with a cargo of rails for the V. & S.

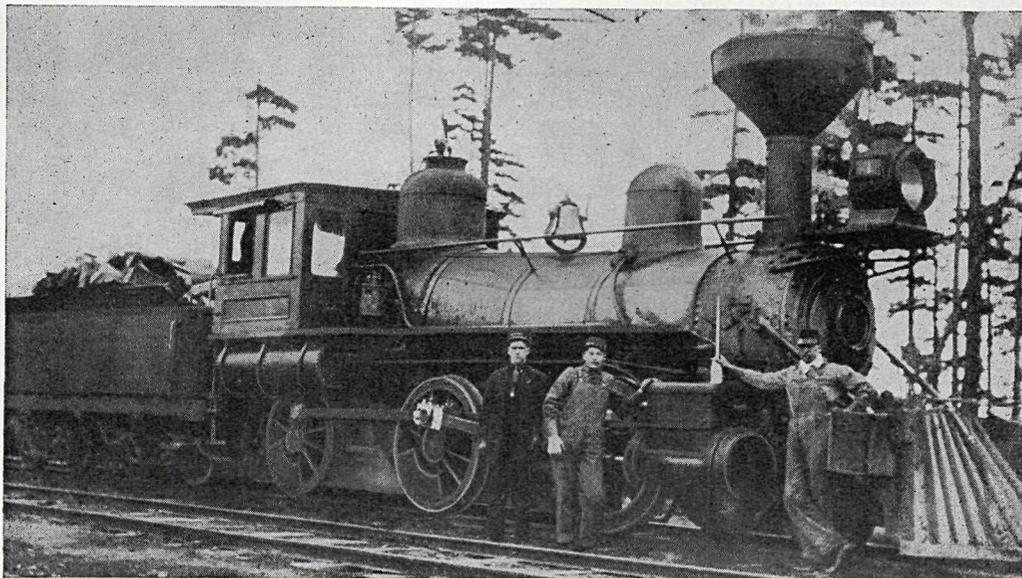
#### *Sidney Mill*

A word or two about the Sidney mill, which was Sidney's first important industry. J. J. White gives some interesting information with regard to this important undertaking, namely: "My uncle, John White, who represented a Federal riding in Ontario, a faithful follower of Sir John A. Macdonald, was defeated after serving more than two decades, and was at loose ends when a newly formed company known as the Toronto and British Columbia Lumber Company thought they could use his knowledge in dealing with governments and that knowledge could be used to advantage in securing timber units for them in British Columbia.

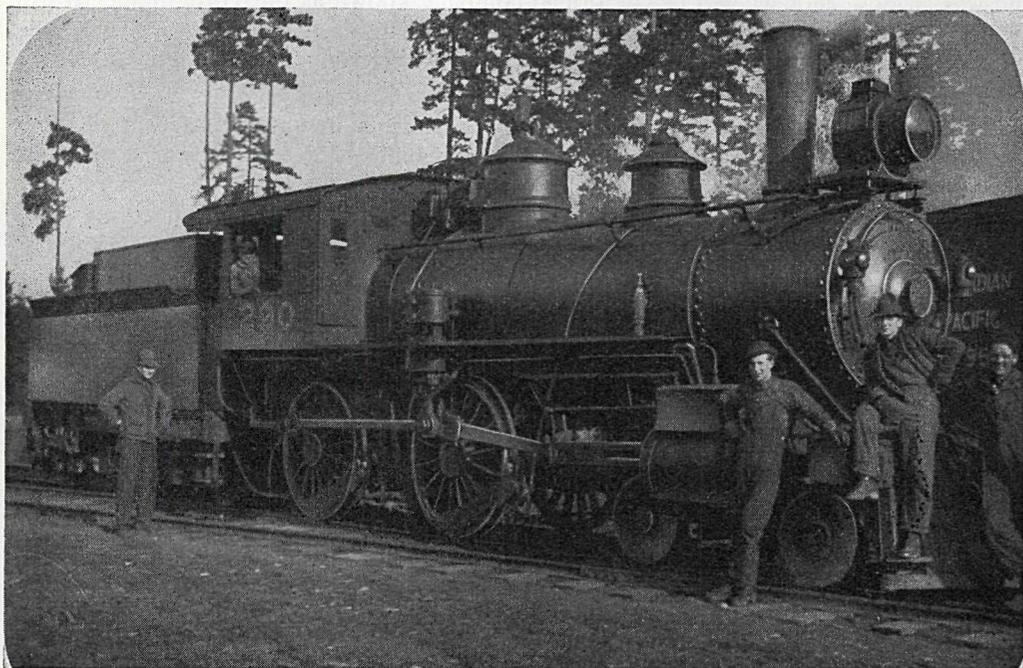
"Uncle White, consulting with one of the departments, met a Civil Servant who was a friend of the Brethour family and more particularly Julius, who was a power at that time in the political field, and who, in partnership with his brother Henry and others, were instrumental in founding the townsite of Sidney. The Civil Servant introduced my uncle to Julius and was successful in interesting him in constructing a lumber-mill in Sidney, and assured him that a railway would be constructed, which would enable the company to ship their lumber to Victoria consumers, and also said the mill would probably secure the contract for the ties, fence lumber, etc. (for the railway).

"To induce its construction the Brethours gave to the mill company several acres of land and also a number of acres to the railway. This property covered the entire waterfrontage of three of the five farms of the Brethour families—the law of the Province in 1891–92 compelled holders of timber units to construct mills of a stated capacity per thousand feet of cut per day for a stated number of acres held. There was nothing in the Act compelling the holder to operate the mill. This was changed at the suggestion of my uncle that the holders pay an annual fee per acre. The fee was set, I think, at 10 cents per acre.

"However, my uncle secured the contract for timber to be used by the railway—\$10 for rough and \$12 for dressed. He leased the mill for the company and placed me in charge. My knowledge was confined to seeing log drives down a river near my former home in Ontario and at a time when they would cut anything that would move—we both got by through employing men who did understand. I was the first agent for the railway at Sidney and Samuel Brethour was the first agent in Victoria."



V. & S. Engine No. 1 at Sidney on August 12th, 1914. This engine, built in 1892 by Canadian Locomotive Company, ran on the Victoria and Sidney Railway until abandonment in 1919.



V. & S. Great Northern Engine No. 290 at Sidney. Returned to Great Northern in 1919 when line was abandoned.

*First Train*

On May 12th, 1894, the Colonist has this to say: "A number of pleasure loving citizens took advantage of the first train over the Victoria & Sidney Railroad to attend the annual ball of the North and South Saanich Agricultural Association, held last night. The train left Tolmie Avenue about 7 o'clock in the evening, making the run in good shape. The ball was a very successful affair, and ranks well with past similar ones held by this association. The weather proving all that could be desired added materially to the pleasure and comfort of the visitors. The various committees had their work well in hand and the comfort of all guests was made the matter of careful and successful solicitation."

Then on June 3rd, 1894, the following appeared in the Colonist: "At the invitation of Messrs. Paterson and Riley [later a senator], the initial excursion and informal opening of the Victoria & Sidney line took place yesterday afternoon. The locomotive and train, decorated with bunting and flowers, started from Third Avenue (Station No. 1) at 1.30 p.m., making the entire run inside of 30 minutes. The park reserve at Sidney was thrown open to the guests and a sumptuous repast was spread. Dancing on the spacious platform, boating and other amusements, were also indulged in, the party returning at 9 p.m., and on arrival at the Victoria terminus three hearty cheers were given (in response to the call of Mr. Yates) for Mr. and Mrs. Paterson and Mr. and Mrs. Riley, and the delighted excursionists were, thanks to the tramcar officials, met at the Saanich road by cars in waiting for the party (such an action was typical of these good old days). A general opinion prevailed that Sidney and its neighborhood will be the coming picnic ground for Victoria, the pine [we used to call fir 'pine' in those days] reserved by the railway company for park and pleasure grounds [an indication of foresight by the railway company] affording a most delightful and shady retreat, being in all respects perfection for picnic parties."

*Important Centre*

On April 5th, 1896, the Colonist has this to say: "A very valuable addition was made to the transportation facilities of Victoria in August, 1894, when the Victoria & Sidney Railway was first put in operation. This road runs between Victoria and Sidney, a distance of 16½ miles, the intermediate stations being Royal Oak and Saanichton. Sidney is splendidly located on the coast of the island in the centre of a fine timber section, and is destined to be an important lumber centre, there being a large sawmill already established there. From Sidney steamers are run among the neighbouring islands and to the coast. In April, 1895, the Victoria & Sidney Railway company took possession of the road. This company is incorporated under British Columbia laws, with a large, paid-up capital [for those days no doubt], and the officers are: president, P. C. Dunlevy; vice-president, Julius Brethour; general manager, T. W. Paterson. Both passengers and freight are carried on the road, and two trains run daily each way, leaving Victoria at 7 a.m. and 4 p.m. daily, except on Saturdays and Sundays, when they leave at 7 a.m. and 2 p.m. The rolling stock of the company is of thoroughly modern construction and design, and every comfort and convenience is provided for passengers. The building of the railway is doing a great deal to open up the facilities through which it passes by supplying the most direct shipping facilities to and from Victoria, and making the interests of the residents of this district one with those of our city. Sidney's picturesque location and the beauty of the scenery lying around about it make it a delightful spot for outings, and already the people of Victoria have added it to the many attractive spots surrounding our city, and the trains, during the summer months, carry large parties of pleasure-seekers. The officers of the company are all men of prominence in Victoria, and their names are the strongest guarantee of the able and reliable management of the Victoria & Sidney Railway. Mr. Dunlevy [an American, I believe] resides in Victoria. He is a capitalist, and has extensive mining and other interests. Julius Brethour lives in Sidney, and also is widely known. Mr. Paterson, the manager, is also

an influential citizen of Victoria. He was formerly public works contractor here for some years. His business ability is doing much to further the prosperity of the road."

The Great Northern Railway acquired control of the V. & S. in 1902 through the acquisition of its outstanding capital stock. To provide funds for the construction of this railway, 5 per cent mortgage bonds dated September 1st, 1892, maturing September 1st, 1917, in the amount of \$300,000 were issued. The payment of interest was guaranteed by the Province of British Columbia and the City of Victoria. The company, which had become a subsidiary of the Great Northern Railway, was unable to pay the interest as it became due, and the guarantors were obliged to meet the obligation. Eventually the interest paid by the Province and the city covered amounts accruing due from March 1st, 1893, to March 1st, 1913, inclusive.

However, in the meantime the railway was running and was the chief means of transportation between Victoria and the North Saanich Peninsula, and even though it was subsidized as above mentioned by the Provincial and municipal governments referred to, it was a worth-while investment in the future development of what is now the rich and prosperous Saanich Peninsula. The railway continued to run under a receivership from 1913 until it was finally wound up in 1922.

*Andrew F. Forbes*

The most colourful personality in connection with the operation of the Victoria and Sidney Railway was its first conductor, Andrew Fraser Forbes, who came to Canada at the age of 18 from Scotland. Andrew Forbes was born in 1864 and died on Christmas Day, 1916. He worked on construction of the Canadian Pacific through the Rockies in 1886 and was one of their first conductors, running between Kamloops and Revelstoke.

In 1890 he left the Canadian Pacific to work on the construction of the Shuswap and Okanagan Railway (later to be acquired by the Canadian Pacific Railway) with the late Messrs. Paterson and Riley. At Mr. Paterson's request he joined the V. & S. and was conductor on that line when it opened in 1894. He retired from the railway in 1913, when he was succeeded as senior conductor by Herman Shade, now of Sidney. He was market superintendent at Victoria until his death. The first engineer was Dave Hosker.

As has been stated, the first southern terminus of the railway was in the vicinity of Hillside Avenue, but it was later brought into the centre of the city and had its terminal behind the present market and fire-hall. This was known as Station No. 2, and at this point it came very near to making a connection with the Esquimalt and Nanaimo Railway, but to the best of my knowledge this was not achieved, and for a time the V. & S. and E. & N. ran in opposition in this respect that both railways solicited patronage for passengers and freight from Victoria to Nanaimo, as has been previously mentioned. Later the terminus was moved up to Blanshard Street, near what is now Arena Way, and this has been referred to as Station No. 3.

*Gas-car*

While technical details may not be of interest to all your readers, Mr. Hearn has supplied me with information regarding the locomotives which were used in the operation of the V. & S., and I think some mention should be made of them. The first was No. 1—2-6-0, received new from the Canadian Locomotive Works in Kingston, Ont., in 1892. This locomotive continued in service until it was finally disposed of to the United Engineers in Vancouver in or about the year 1919. No. 2—4-4-0 was received second hand from the Canadian Pacific, who had used it in construction in the Kootenays. This locomotive, too, was built by the Canadian Locomotive Works, but was not satisfactory and was scrapped in the early 1900's. No. 3—4-4-0, which I remember along with No. 1, was purchased from the Victoria Lumber and Manufacturing Company about 1900.

Then at a later date the V. & S. received a Great Northern Locomotive, No. 4—4-4-0. This was received by the V. & S. merely on loan and, proving unsatisfactory, was presumably returned. It was replaced by another Great Northern locomotive, No. 290—4-4-0, and finally from the same source No. 2301, a gas-car originally operated between Buffalo, Rochester, and Pittsburgh. This gas-car proved quite satisfactory, and its use was, I think, brought about by the completion of the B.C. Electric, which was now in operation between Victoria and Deep Cove.

I have had supplied me a time schedule of the gas-electric motor car services provided at this time. It is dated November 16th, 1913, and is advertised as providing a service from Victoria to Rogers Crossing, Royal Oak, Beaver Lake, Elk Lake, Keating, Saanichton, Mount Baker Park, the Experimental Farm, and Sidney. The service proved both popular and satisfactory. It provided for a daily service, except Sunday, between Victoria and Sidney, the first train leaving Victoria at 8 a.m. and arriving at Sidney at 9 a.m., and then leaving Sidney at 9.15 a.m. and arriving at Victoria at 10.15 a.m. The second train left Victoria at 10.45 a.m. and arrived at Sidney at 11.45 a.m., and returning left Sidney at 1 p.m. and arrived at Victoria at 2 p.m. The third trip, which was daily, left Victoria at 5 p.m. and arrived at Sidney at 6 p.m., and left Sidney at 6.15 p.m. and arrived at Victoria at 7.15 p.m.

The Sunday train left Victoria at 10 a.m. and arrived at Sidney at 11 a.m., returning to Victoria at 1 p.m. There could be no complaint about this service, and the Sunday service included, of course, the daily third trip above mentioned.

#### *First Payroll*

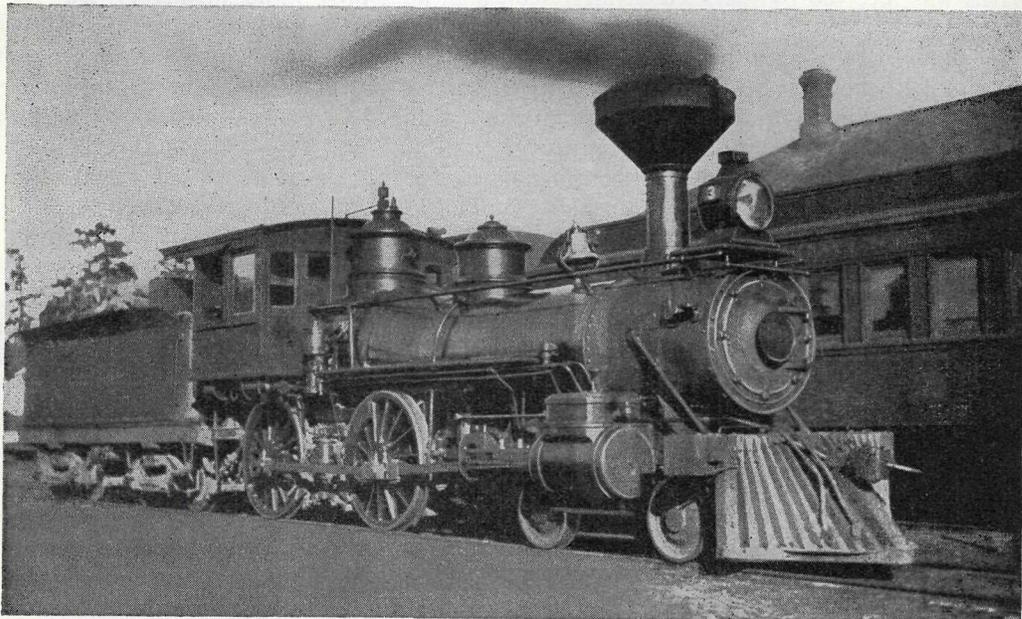
Through the courtesy of the Great Northern Railway Public Relations Branch, the following is a payroll of the conductors, trainmen, engineers, firemen, and others employed by the company, which I have been able to trace from May, 1903, to June, 1918. Perhaps some of your old-time readers may be able to give earlier and later lists of personnel. The first payroll was as follows (incidentally I have not been advised what salaries were paid), namely: A. F. Forbes, conductor; George Parsons, brakeman; Herman H. Shade, brakeman; F. J. Andrews, brakeman; A. J. Jones, brakeman; Thomas Brownley, brakeman; F. Carpenter, brakeman; D. M. Hasker, engineer; John Walton, fireman and wiper; George Walton, engineer and fireman; E. G. Hasker, fireman and wiper; and C. Irvine, wiper. Then the 1918 list gave the names of: Herman H. Shade, conductor; W. C. Bates, brakeman and fireman; C. Ching, coach-cleaner; John Walton, engineer; George Walton, engineer and handy-man; J. Frank, fireman; and William Walker, engineer.

The personalities named were well known to the travelling public and were universally popular, and the operation of the railway can be said to have been such that would be difficult to find nowadays anywhere. The atmosphere of the trains back and forth is reminiscent of the train to "Mariposa," described by Stephen Leacock in his "Sunshine Sketches of a Little Town." As an example of what I mean, British Columbia Police ex-Assistant Commissioner Bob Owens, in an article printed lately in the Colonist, recalls that as a boy he was rewarded for assisting in the handling of cordwood by riding in the cab and blowing the whistle and no doubt, I expect, ringing the bell.

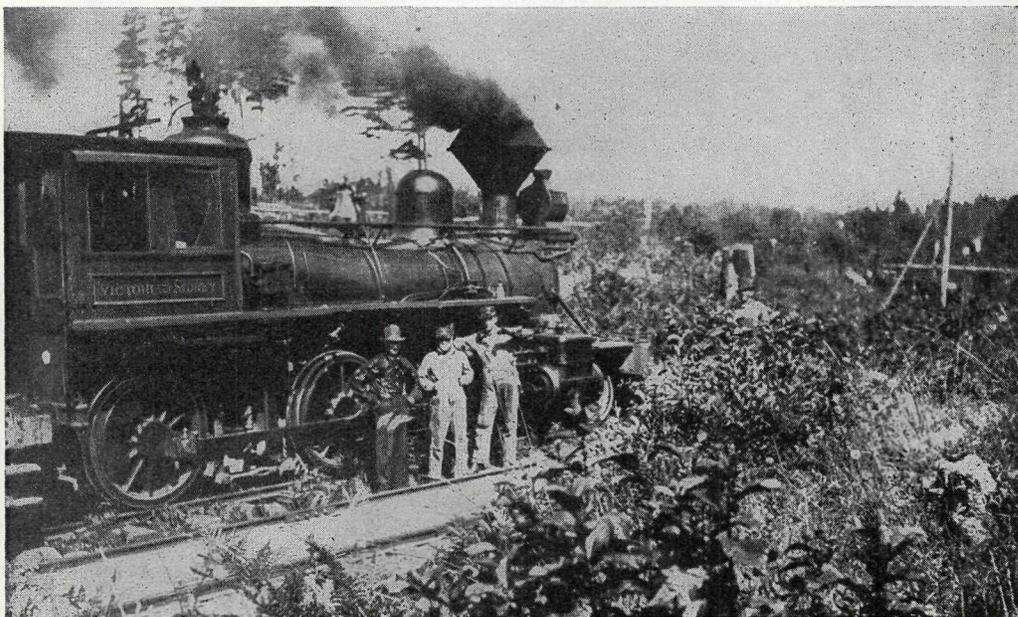
#### *Reminiscences*

Some years ago, Gus Sivertz, in his column in one of the Victoria newspapers, wrote reminiscently of "The Cordwood Limited of the V. & S." As these reminiscences are of interest, I quote from them in part as follows:—

" . . . I cannot forget the old V. & S. Railway built, I believe, by Jim Hill as part of his Great Northern system. It ran, you will remember, from a station on Figgard Street, next to the old firehall, to Sidney, whence passengers were carried by ferry to Fort Guichon, on the Fraser just below Ladner. There a branch of the G.N. took them to



V. & S. Engine No. 3 at Sidney, date unknown. This engine lay derelict at Sidney for years after the line was abandoned in 1919.



V. & S. Engine No. 1 awaiting meet with gas-car at the Elk Lake passing-track.

Colebrook station near Cloverdale on the main line [of the G.N.] . . . This doughty old wood-burner we naturally called the 'Cordwood Limited' because it would stop near Elk Lake and pile on loads of cordwood while passengers waited with what patience they could muster.

"There must be few Victorians, indeed, who do not have pleasant memories of picnics at Bazan Bay and Sidney at which every carriage of the old Cordwood Limited would be simply bulging with passengers and food hampers.

"And they must certainly remember what a time the train would have in starting up again after a stop at Royal Oak. There was a slight grade here and often I have waited 10 minutes while the train backed and rushed—backed and rushed—coughing and slipping on the polished rails.

"Men who knew her habits would refresh themselves at the nearby Royal Oak Hotel, knowing they could always run through the fields and swing aboard before the Cordwood Limited gathered too much speed."

#### *An Institution*

And then Mr. Sivertz has this to say about Andy Forbes:—

"*Amiable Andy*.—Andy Forbes was the conductor of the V. & S. when I knew it and by that time he had become an institution in Saanich, carrying out shopping commissions for farmers' wives, stopping his train between stations to accommodate a breathless passenger who left the farmhouse too late to reach the station.

"And scores of hunters must remember Andy's amiability in pulling the signal cord at any point on the right-of-way which suited some friend's purpose.

"Once, on a return trip from Sidney, when we were going great guns just past Elk Lake on a slight downgrade the old Cordwood Limited threw her piston rod far into the woods and careened wildly along the track until the engineer could stop her.

"A group of us—all youngsters—had a grand time picking blackberries for an hour or more while the train crew searched the woods for their lost piston rod and finally fitted it in place."

#### *Those Good Days*

That certainly was the atmosphere of the good old days of our youth! Many amusing things will be recalled. On one evening return trip to Victoria two inebriates boarded the train at Saanichton, but as this was long before vista domes came into fashion, they preferred to ride on the roof of the end carriage. The whole train crew was unable to get them to come down and eventually proceeded to town with them remaining happily on the roof. I do not recall whether Andy succeeded in collecting the fare, but they had disappeared shortly after we had reached Hillside.

Before leaving the V. & S., some further remarks may be of interest. I find, according to notes prepared by Miss Elizabeth Forbes, that the plan to build the road was in part a measure of relief to the people of Victoria and vicinity. The community was suffering from an outbreak of smallpox and was under quarantine for a considerable time. To relieve the poverty somewhat and at the same time open up the territory known as the Saanich Peninsula, the idea of the railway was brought forth.

#### *Wood-burners*

Miss Forbes also notes that, except for a short period during the World War, the fuel burned on the locomotives was wood, purchased from the settlers. This served to help them over many a rough spot and, together with the road, had a material influence in building up a very prosperous community. The railroad had a joint tariff with the Great Northern Railway and handled through freight, while the Island shipments were mostly wood (and, I think, dairy products) into Victoria and way freight to points along the line. (With the direct connection with the Mainland by way of transfer ferry, there

was inaugurated in that connection, so I am told, an equality of terminal rates between Victoria and Vancouver.)

Conceived as it was, the old Victoria and Sidney Railway naturally became more or less a factor in the Provincial politics, and many a weighty discussion raged about the "defenceless orphan whose existence was a struggle with poverty."

As Miss Forbes points out, there are many old-timers now residing in Victoria who received employment on the road and look nostalgically back on the days when the V. & S. was in full operation as do those who travelled by train.

#### B.C. ELECTRIC

The next main development in transportation serving the area was the construction and operation of the B.C. Electric's Saanich Interurban, with reference to which I am indebted to R. B. Mathews, executive assistant to the vice-president at Victoria, for the information that has been given me, and there is really very little to add to what I have obtained from him in that respect.

From 1910 to 1912 there was a great boom development throughout the Province, and particularly in and about Greater Victoria and the Saanich Peninsula. The roads had not yet been developed to any great extent, and people still thought in terms of railways, failing to realize how soon it would be when the roads which were in the process of being developed would provide the stiffest kind of competition to railways, particularly as far as short hauls were concerned, both with reference to passengers and freight.

In May, 1910, the directors of the British Columbia Electric Railway Company, Limited, approved the construction of an interurban electric railway to run from Victoria through the Saanich Peninsula to Deep Cove at an estimated cost of \$500,000. This estimate was nearly twice the cost of the V. & S., and the actual cost was probably even more.

In June, 1910, two survey parties were placed in the field to establish the route of the railway—one party at Royal Oak and another near Mount Douglas. Three lines were run—one along the east coast, one through the centre, and a third along the west coast—in order to select the best possible route. It will be noted that one of the original exits considered by the V. & S. from the city via Shelbourne Street was considered as the continuation via the east coast later adopted by the Canadian Northern Pacific.

In November, 1910, the route was finally decided; namely, via Burnside Road from Douglas to a point near Rowlands' farm, thence across country with stations at Tillicum, Strawberry Vale, and Wilkinson Road to the West Saanich Road, thence to Tod Inlet via Heal's Rifle Range, Sluggett, Saanichton, and finally to Deep Cove.

In September, 1911, the contract for the first 18 miles was let to Messrs. Moore and Pethick. By July, 1912, the whole right-of-way was cleared, grading completed, and the work of track-laying begun.

#### *Official Opening*

On June 18th, 1913, the B.C. Electric's Saanich Interurban line was officially opened by an appropriate ceremony. One hundred guests of the company made the trip from Victoria to Deep Cove. The train left the Douglas Street depot, behind the former display office of the B.C. Electric, at 11.25 a.m., with no stops being made en route. Deep Cove was reached at 12.30 p.m. Considering this to be in 1913 and not 1894, when the V. & S. made its first run, one would have expected the trip to have taken less time.

On alighting at Deep Cove the party gathered around the then Premier, Sir Richard McBride, who performed the ceremony of driving the last spike. A. T. Goward, local manager of the company, placed the silver spike in position, and Sir Richard drove it home with a brand-new sledge-hammer. The inscription on the silver spike read: "Last spike in the Saanich extension of the B.C. Electric driven in by the Hon. Sir Richard

McBride, K.C.M.G., Prime Minister of British Columbia, June 18, 1913." (I wonder what happened to the last spike.) Among the many guests were Lieutenant-Governor Paterson (whose thoughts on this occasion must have been interesting), members of the Legislature, civic and municipal officials.

### *In the Red*

The operation was never a success financially, and by 1923 the railway was badly in the red. It became increasingly apparent that there was simply not the population along the route of the line to make it profitable, having regard to competition that was continuing to increase.

By July, 1923, closure of the Saanich Interurban seemed to be inevitable. A meeting between the company and representatives of the Chamber of Commerce, the City Council, and the Saanich Council was held, at which various proposals were put forward to preserve the line. After a lengthy meeting a solution was not evident. The major problem appeared to be the competition from the bus services which had been established along the peninsula. Reeve Watson, of Saanich, explained it would be difficult, if not impossible, to stop buses running in Saanich, and one wonders now, being wise after the event, why the B.C. Electric did not then and there interest itself in the operation of buses. It was many years later, I think, that they gave any consideration to buses, and then more or less limited the operation of the same to cities and municipalities.

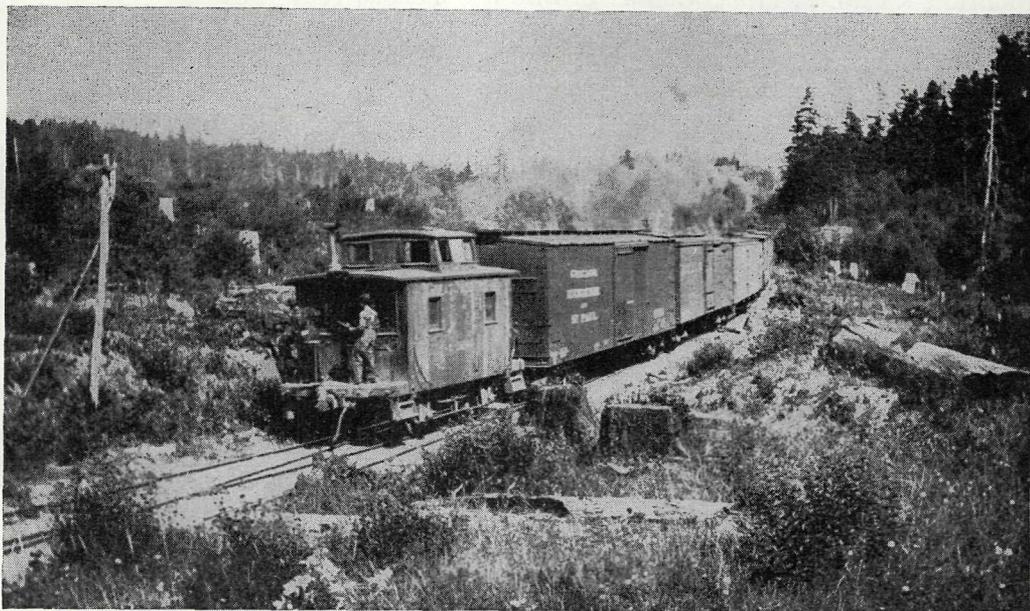
In September, 1924, the decision was reached to discontinue the operation of the railway at the end of October. The announcement caused great concern throughout Victoria and Saanich. The company pointed out that it had done everything possible to keep the line operating by introducing one-man cars, weekly passes, etc. The regular type of interurban cars had in the meantime been replaced with two city trams, Nos. 22 and 23, which had previously operated on the Willows route in Victoria, and which many will well recall. These cars were exceedingly well built and, unlike others in operation by the B.C. Electric in its city transit service, had been built in Ottawa by the Ottawa Car and Foundry Company. I imagine that the B.C. Electric had some difficulty with the Board of Railway Commissioners on the question of one-man cars, as their operation was under the authority of that body. I imagine as well they might have had some difficulty with the Brotherhood of Railway Employees, who would naturally be against such an operation in what was in fact an interurban service. It is my recollection that they did.

### *Tracks Lifted*

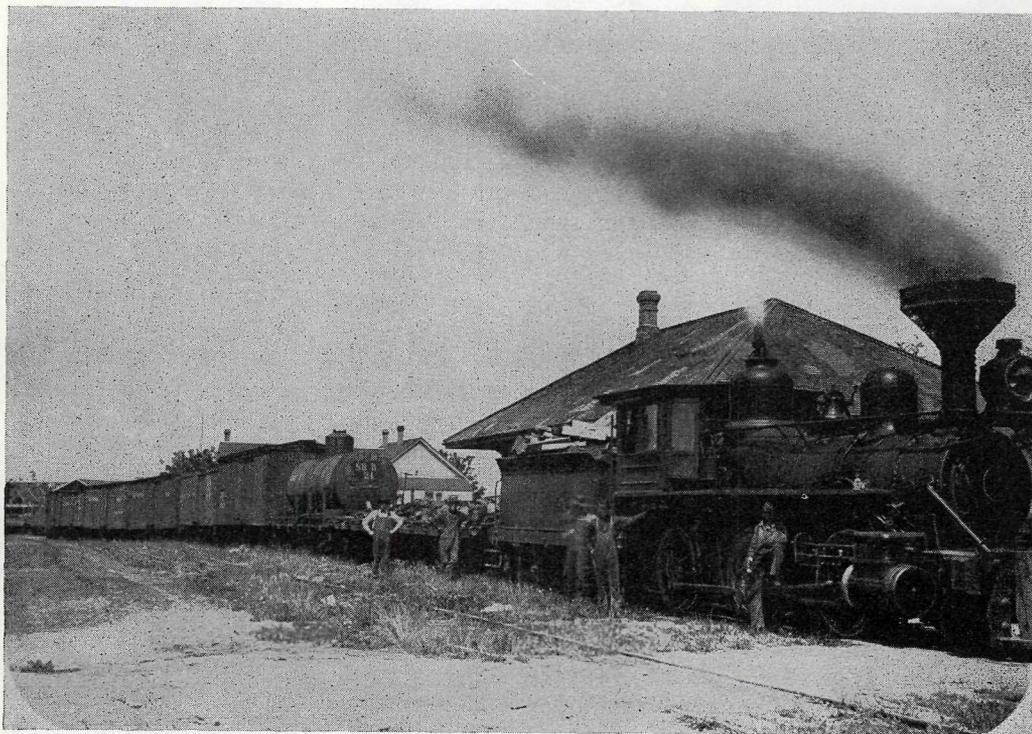
However, even these services came to an end, and in the spring of 1925 the tracks were lifted and the overhead trolley dismantled.

Company officials concerned with the construction and operation of the Saanich Interurban Railway were A. T. Goward, general manager; G. M. Tripp, general superintendent; F. D. Picken, superintendent of interurban lines; H. Gibson, traffic superintendent; and S. J. Halls, manager, light and power department.

It was about this time that the electric-power sub-station was installed near Brentwood. The Interurban did not compete to a very great extent with the operation of the V. & S. It ran well to the western side of the peninsula, but it did bring people closer to Swartz Bay, which was contemplated at one time as being the terminus, instead of Deep Cove. As it turned out, however, Mallowmot was the station closest to Swartz Bay, and people living in the nearer islands began to use this means of transportation, so that there was some degree of competition between the two railways. I imagine that Swartz Bay was considered with a view to having a connecting-link by ferry from that point to the Mainland. I well recall my father telling me that the late Captain Troup, the manager of the B.C. Coast Service, was always in favour of such a link.



V. & S. freight departing for Sidney after meet with gas-car at Elk Lake.  
C.N. Caboose No. 0244, known as the "Bobber," is clearing the switch.



V. & S. Engine No. 1, all puffed out of steam, water, and cordwood after arriving at  
Sidney Station on August 12th, 1914, with a freight drag from Victoria.

The decision, I believe, was finally influenced by the real-estate development in and around Deep Cove, and Deep Cove owes its important development as a residential area largely to the fact that the B.C. Electric decided to place its terminus there, and the Chalet, I believe, was originally a B.C. Electric concession. Later when the "Island Princess" took over the Gulf Islands route, her winter terminus was Deep Cove and the B.C. Electric-C.P.R. connection was therefore finally to some extent carried out.

### *Flying Saucers*

One recollection this writer can add may perhaps be considered amusing. Following my enlistment in 1916 in the 50th Gordon Highlanders I was stationed for a time on guard duty at Signal Hill at Esquimalt, and one night on sentry duty I noticed flashes in the north-eastern sky which were duly entered in the Guard Report, and for several nights thereafter General Leckie, the district officer commanding, and his staff came and watched this mysterious phenomenon which occurred regularly at the same time each night. To understand the interest in such a matter, one must recall that at that time everyone was talking about German spies and mysterious signals, but it turned out only to be the last train from Deep Cove which arrived at the Victoria depot about 10 p.m. As is well known, the trolley from an electric train or car throws off sparks or flashes.

### *End of the Line*

The Victoria Daily Times, in its issue of October 31st, 1924, records the termination of the B.C. Electric service and sums up the situation very accurately as follows:—

#### SAANICH LINE TO CEASE TONIGHT

AFTER ELEVEN AND A HALF YEARS  
INTERURBAN ELECTRIC LINE  
TERMINATES

The passing of an institution will be marked by the departure at 11.30 o'clock of the last train on the Saanich interurban division of the B.C. Electric Railway. When it returns from that last journey to Saanichton at 1.15 tomorrow morning the line will be closed down. . . .

#### CANADIAN NORTHERN PACIFIC RAILWAY

Having been unable to obtain information regarding the Canadian Northern Pacific line from any Canadian National Railways source, it has been necessary for me to fall back on the services of the Provincial Library for any detailed information. Added to this, I received an interesting contribution from F. M. Boston, R.R. 1, Sidney, who wrote me last June he was in his eightieth year.

### *In 1915 the C.N.R.*

The Canadian Northern Pacific Railway, North Saanich Extension, was commenced in 1915. Mr. Boston writes:—

"About the first week in January, 1915, I came from Vancouver with a C.P.R. tug and barge and our equipment—engine, outfit cars, and flat cars. The captain was not very well acquainted with the waters in this particular locality. It was night and he anchored in Deep Cove for the night and went to Patricia Bay the next morning. The C.N.R. had a dock 2,200 feet in length, extending out into the bay as the water was shallow, and at the end of this dock was a very large deck which held all the material to build to Victoria. They had a mile and a half of steel laid to the top of the hill under Foreman James McDonald. In a day or two we got organized and started to lay track. There was about an inch of snow when we started, but very soon the big snow came and we had to quit.

" We had a good gang of men, and they stayed until they had eaten up all their wages in board so had to leave. It was about two weeks before we could get started with a fine bunch of men—some white men, some Indians, and some Chinese. Naturally we were not laying much track but gradually things went better. Tom McLeod was superintendent and I was conductor. We finally got to Victoria to Alpha Street, and then went back to Cordova Bay where we had a gravel pit. We ballasted to Victoria and then began laying track up-Island; that is, Metchosin, Rocky Point, Sooke, Milnes Landing, and Sooke Lake. . . . When they got the ferry-slip completed at Patricia Bay, I had to drop everything and go down and unload and load her. We had a gas-car from Victoria to Patricia Bay for a couple of years. They used to handle quite a lot of people working at James Island.

" It was quite an annoying job sometimes as we would be short of material. We got rails from Squamish and ties came in by scow to Patricia Bay from Chemainus. Our coal came in that way, too. (It may be noted that the rolling-stock included coal-burning locomotives as well as gas-cars.) There was good hunting then, pheasants everywhere and lots of ducks. . . ."

So much for some first-hand information from one who was actually engaged in the construction and operation of the road. It is interesting to hear from one who can speak from first-hand knowledge and recollection.

#### *Transcontinental*

The following is from the Victoria Times dated April 30th, 1917:—

" Victoria was united to another transcontinental system of Canada this morning in an official way by the opening of the Patricia Bay line of the Canadian Northern Pacific Railway. It gives to the Saanich Peninsula a third line into Victoria, and covers the eastern section of the district only partly served hitherto.

"A temporary terminal has been established at Alpha Street pending the construction of the Burnside arch and the crossing of the railway into the reserve by way of Selkirk Water Bridge. The location is just on the city boundary and can be reached either from Burnside or Cloverdale cars. The line as opened is 15½ miles long, of which about 12 miles is in the Saanich municipality and the remainder in North Saanich.

" The officers of the company who left with the first car today were the district engineer, D. O. Lewis, who has had charge of the building of the line; B. T. Chappell, acting assistant general manager; A. Brostedt, district freight and passenger agent; Messrs. Quantic, master mechanic; Graham, bridge and building master; and Rafter, bridge division.

" The train is of the gas-electric motor type, similar to the Victoria & Sidney Railway, except that there is no central entrance, passengers entering and leaving by the rear. The car left this morning in charge of Conductor W. Regan, with Engineer Tom Young. It has accommodation for about 75 passengers."

#### *Connecting-link*

One of the important considerations apart from providing a service between Victoria and Patricia Bay was the connecting-link with the Mainland system of the Canadian Northern Railway by transfer barge and ferry. In 1918 the existing tug and barge system was augmented by the arrival of the car-ferry "Canora," and in this connection the Victoria Daily Times, in its issue of December 7th, 1918, had the following to publish, namely:—

" Victoria's connecting link with the mainland system of the Canadian Northern Railway, the steel passenger and freight car ferry, 'Canora,' Capt. Norman McKay, after a passage of two months from Quebec, reached port at 3 o'clock this afternoon after traversing a distance of 7,444 miles from the St. Lawrence by way of the Panama Canal.

"The 'Canora' was built to carry passengers and freight cars between Patricia Bay, where the Canadian Northern steel connects with Victoria, and Port Mann, on the south side of the Fraser River, the Canadian Northern terminals on the mainland. The car ferry was built by the Davie Shipbuilding and Repairing Company, at Lauzon, Quebec, and was launched on June 10, the christening ceremony being performed by Mrs. R. C. Vaughan, wife of the assistant to the third vice-president of the C.N.R. (later to become president of the company). Capt. Norman McKay reported a very good passage and is especially pleased with the command. Captain McKay was formerly master of the Great Lakes steamer 'Hamiltonian.' He has with him as chief engineer, William Byers, formerly chief engineer of the lake steamer 'H. M. Pellatt.'

"*Still Sailing.*—The 'Canora' is still in existence in her 37th year of service operating regularly out of Victoria. She is 208 feet in length over all and 294 feet of length between perpendiculars, having a depth moulded to car deck of 28½ feet and a displacement of 3,400 tons. At one time at least she had a speed of 14 knots. Her speed, however, is deceptive owing to the type of vessel she is. She probably does not make her maximum speed at this time but she plies very steadily on her useful duties."

#### *Offer Rejected*

Acting as intermediaries between the Canadian National Railways and the receiver of the Victoria and Sidney Railway, Premier Oliver and M. B. Jackson, K.C., who was then member for the Islands, continued endeavouring to bring to a successful issue the proposal that the Canadian National Railways purchase that section of the then idle V. & S. line which connects the intersection of the town of Sidney itself, which is a distance of about 1½ miles. An offer had been made by the Canadian National Railways, but this was rejected by the receiver of the Victoria and Sidney Railway, and it remained for the two representatives of the Province "to handle the matter with the requisite diplomacy to bridge the gulf now separating the two parties to the transaction."

"Consummation of the purchase will probably lead to the inauguration of improved and more frequent train service out of Sidney. While the Canadian National road obtained permission of the receiver of the Victoria & Sidney Company to make use of the two-mile stretch in order to afford some means of access to Sidney, the service up till now has been irregular and only two or three freight trains a week have been traversing the rails. The passenger business has been handled principally by motor bus, although the lumber mills, rubber roofing plant and other industries have been forced to depend entirely upon the railroad."

#### *Abandonment*

Then finally in 1935 application was made by the Canadian National for permission to abandon the line, and this account was reported in the Colonist, on June 21st, 1935, as follows: "Application has been made to the Railway Commission by the Canadian National Railways for permission to abandon 15.82 miles of its lines in Saanich, particularly those portions serving Patricia Bay and Sidney, directors of the Chambers of Commerce were informed at their meeting yesterday. . . ."

#### AIDED DEVELOPMENT

So it will be seen as we now draw rapidly to a conclusion that the days of railway transportation as regards the Saanich Peninsula had come to an end. While none of the railways that have been described paid its way, and while all of them had to discontinue through lack of revenue, each of them helped in the development of our important district. I think the opinion can be expressed that the Victoria and Sidney Railway was essential to that development, and that the B.C. Electric interurban line was somewhat of a speculation but did contribute to the building-up of the western side of the peninsula and

brought about the beginnings of Brentwood and other well-known areas right out to Deep Cove.

With regard to the Canadian Northern Pacific, it is difficult to see how the construction of this line could have really been justified in view of the increasing development of road transit. However, in extenuation it must be reflected that people were still thinking in terms of rail transportation. It is easy to be wise after events and to say that it was obvious that short-haul traffic would not hold up. Logging-railways, yes. The up-Island branch of the Canadian Northern Pacific, still in operation as regards freight, was justified, but with the two railways already in operation it is difficult to defend the construction and operation of a third. It was too much to pay for the connecting ferry link at Port Mann, when the transfer ferry could, as it does now, bring its through freight around to Victoria. It was never justified for local freight or passengers.

This, then, is the outline of transportation in, over, and through the Saanich Peninsula. It has been a colourful history, and the district owes much to the character and individuality of those who have been concerned with its development. While no one would exchange the present modern facilities for those that existed in earlier days, nevertheless, I, for one, would give a great deal to take one more trip on the old V. & S. and "assist," as I pretended I did as a boy, in the operation of the train to Sidney in the days when all the passengers and crew regarded each other as personal friends, and when the atmosphere presented an informality and cordiality that can never be recaptured. (Well I remember "the old familiar car with the stuffed cushions in red—green in the case of the V. & S.—plush—how gorgeous it once seemed! And with a box stove set up in one end of it!") And then on to my island home on the old "Iroquois," or returning again to school back by the "Iroquois" on to the latest possible train again to Victoria in days and under circumstances which, while gone for ever, have throughout the years provided happy memories.

#### REPORT OF THE RAILWAY DEPARTMENT

The trend of industrial expansion throughout British Columbia has continued during the year and many new transportation systems have been installed, inspected, and approved.

The staff of the Department, as of December 31st, 1955, consisted of a Deputy Minister, Chief Inspector, three Inspectors, one draughtsman, secretarial stenographer (Grade 2), and a senior clerk-stenographer.

The railways supervised by the Department include common carriers, industrial railways, and equipment used in conjunction with industrial transportation. In addition, the Department also inspected logging-trucks and mining-trucks used on private roads, as well as buses and trucks used to transport workmen and personnel. Aerial tramways which fall within the scope of the Department's jurisdiction were inspected. Inspections and approval were also made with respect to oil and gas pipe-lines.

The head office in Victoria continued in charge of the records of the Department, and, in conjunction with the Bureau of Economics and Statistics, reports were prepared relating to extensions of the Pacific Great Eastern Railway to develop the untouched natural resources of North-east British Columbia. The Construction Department of the Pacific Great Eastern Railway Company, in connection with the extensions of railroad from Squamish to Vancouver and Prince George north, is established within the Department at Victoria under control of the Deputy Minister. The Inspecting Engineers continued the inspection of the road-bed, track facilities, shops, mechanical facilities, and equipment of all the railways and other means of transportation.

The Department inspects and controls safety on logging-trucks and other off-highway equipment, and consequently has had to set up training-schools in various localities to train drivers of heavy equipment in the use of air brakes. The rules and regulations

formulated by the Department are being considered for adoption in industry in parts of the United States.

In the procurement of diesel-electric motive power, the Department's research facilities have been used to the advantage of certain railways and logging operations.

#### INSPECTION OF PACIFIC GREAT EASTERN RAILWAY TRACK, STRUCTURES, AND MECHANICAL FACILITIES

During the year, inspections were made of various phases of the Pacific Great Eastern Railway Operating Department, and during the week of October 2nd a general inspection was made of the railway from Squamish to Prince George by the Department Inspecting Engineers. This inspection was carried out by V-8 track motor. Conditions found are as follows:—

The track road-bed and right-of-way conditions, together with bridges and structures, show a general improvement over previous years. The work and replacements which had been recommended during 1954 were carried out and put into effect by the company, and maintenance officials concerned are co-operating in the improvement programme to the fullest extent. Traffic during 1955 has exceeded that of 1954, and trains are hauling heavier tonnages than was possible during previous years. Recommendations made by the Department as to improvement in the design of diesel-electric motive power have been adhered to by the company, so that now all of the 1,600-horsepower diesel-electric locomotives are equipped with four-wheel trucks, which enable the entire weight of the locomotive to be used for traction, and consequently maximum tonnages can now be hauled over ruling grades.

Three additional 1,600-horsepower locomotives of the aforementioned design were purchased and put into service during the year, and traffic and freight conditions have been such that all existing motive power is pressed into service. During inspection, particular and careful examination was made of the railway condition since the heavier type of power has been used, and it can be reported that the heavier power is easier on track than the former six-wheel arrangement.

On the Squamish subdivision it is to be noted that a rail-wearing condition exists on the heavy curvatures. The company had consequently installed six track-oilers between Mileages 15.0 and 24.0, where curvature was most severe. The study proved the track-oilers to be advantageous, and, therefore, seventy-two additional track-oilers have been ordered and will be installed by the end of 1956. Track-oilers were recommended in last year's Annual Report, and it is felt when the installation is complete that excessive flange wear and track wear will be cut to a minimum on the Squamish subdivision.

Over the years the Department has been quite concerned regarding the condition of ties on this railway, and the tie-replacement programme has been stepped up from 1948 on. The condition of ties generally is much improved, so that 109,793 ties were renewed during 1955. In this respect it is recommended that in view of the improved condition of ties and ballast on the railway, the company should give consideration at this time to setting up a programme of tie-renewals using creosote-treated ties. This would reduce maintenance and improve the condition of the railway. Until now treated ties would not have been advisable as the ballast on the railway was in poor condition.

The importance of ballasting cannot be overestimated as new rails and new ties require a foundation upon which to be laid. In this respect an excellent job has been done by contract during 1955, where 27.7 miles of track has been given a 6-inch ballast lift between Mileages 311.4 and 339.1. Former Annual Reports have shown a ballasting programme so that ultimately the entire railway will be completely reballasted. The following statistics are quoted:—

*Complete Ballasting*

	Miles	Year
Mile 201 to Mile 206 .....	5.0	1953
Mile 182 to Mile 201 .....	19.0	1954
Mile 349 to Mile 369 .....	20.0	1954
Mile 311.4 to Mile 339.1 .....	27.7	1955

It is recommended that the ballast programme be continued during the coming years, as with increased traffic conditions and new rail this becomes a most important phase of the maintenance and rehabilitation project on this railway.

The rail-renewal programme inaugurated in 1951 has been carried forward during 1955, so that 114.5 miles of 85-pound rail have been laid to replace worn-out 60- and 70-pound rail between Mileages 3.5 and 154.3. The following statistics are quoted with regard to the rail-renewal programme:—

	Miles	Year
70-pound relay—Mile 8.5 to Mile 12.9 .....	4.4	1953
85-pound rail (new)—		
Mile 3.5 to Mile 8.5 .....	5.0	1955
Mile 12.9 to Mile 29.4 .....	16.0	1951
Mile 29.4 to Mile 35.6 .....	6.2	1952
Mile 35.6 to Mile 40.3 .....	4.7	1954
Mile 40.3 to Mile 53.0 .....	9.7	1954
Mile 53.0 to Mile 57.6 .....	4.6	1955
Mile 86.0 to Mile 122.8 .....	36.8	1955
Mile 122.8 to Mile 154.3 .....	31.5	1954
Mile 349.0 to Mile 429.0 .....	80.0	1952 <sup>1</sup>

<sup>1</sup> Prince George Extension.

It is understood the rail programme will be continued in effect so that at least 50 miles of new 85-pound rail will be laid during 1956, and it is felt the exact locations where relay is now required should be left the discretion of the Chief Engineer of Way Maintenance. The recommendations as to the placement of new rail outlined in the Annual Report of 1954 have been adhered to and are now in effect. The anticipated increase in traffic when the extensions are in operation leads one to believe that the rail-replacement programme should be stepped up so that all the 60-pound rail will be replaced within the next two or three years.

Bridges were inspected. Decking and ties as required have been renewed by the company, and in some places bridges have been replaced by fills. The following bridge statistics are quoted:—

Work Done	Mileage	Year
Renewed .....	148.0	1954
Renewed .....	148.4	1954
Refilled, replaced by fill .....	321.4	1954
Replaced by fill .....	38.0	1954
Replaced by fill .....	170.2	1954
Renewed .....	144.7	1955
Renewed .....	258.6	1955
Renewed .....	343.6	1955
Renewed .....	364.7	1955
Repaired and partially rebuilt .....	346.5	1955
Repaired and partially rebuilt .....	363.7	1955
Repaired and partially rebuilt .....	407.2	1955
Replaced by fill .....	38.0	1955
Replaced by fill .....	343.6	1955

During 1955 forty-four bridges in all were either replaced or repaired, and, as shown in the above table, in some cases bridges were replaced by fills.

The year 1955 was marked by extreme flood conditions. At one period during the year, parts of the railway were inoperative due to washouts. In this respect four washed-out culverts were replaced and extended and eleven culverts were renewed. Some of the bridge replacements in the above tables were necessary as they were washed out during flash floods.

Extensive excavations were carried on at "Mud Hill," south of Quesnel, for a line reversion, and 20 miles of ditching was completed over the entire railway. At Cottonwood Bridge the drainage-tunnel was repaired.

During the inspection, Cottonwood Bridge was examined. There was no evidence of any settlement. The gravel laid for run-off was not sloughing, and it is noted that vegetation is beginning to sprout so that the future permanency of the embankment will be assured during rainy and run-off periods.

It was pointed out during the inspection that six new company sidings have been installed during 1955 with a total of 8,821 feet, that nine company sidings have been lengthened with a total of 7,804 feet of trackage, and that thirteen private sidings have been built during the year entailing 7,683 feet of trackage. In most cases 70-pound rail, which has been replaced by new 85-pound rail, was used in construction of sidings. At Prince George a new station and freight-yard were under construction at the end of the year with considerable terminal facilities also under construction, and it can be reported that a number of buildings along the line have been rebuilt and repaired. Twenty buildings have had exterior coats of paint applied, and ten buildings have had their interiors painted. In all, forty-nine buildings have been repainted in one form or another during the year.

The barge-slip at Squamish is considered an important adjunct to the railway, as when the Vancouver-Squamish extension is completed, the barge-slip will still be necessary at Squamish to take care of barge shipments from Woodfibre. Towers have therefore been rebuilt, and two dolphins have also been rebuilt.

Three new 1,600-horsepower diesel-electric locomotives were delivered during 1955 and put into operation, leaving only three steam-locomotives in operating service. It is expected that upon the arrival of eight additional 1,600-horsepower diesel locomotives in 1956, the company will be able to dispense with steam power altogether. The company has been working to a programme of not maintaining water-tanks, and consequently several water-tanks have been dismantled. With the advent of complete dieselization, no water-tanks will be required on the entire railway.

Shop facilities have been improved at Squamish, Lillooet, and Williams Lake, and while the shops are quite old at these terminals, a sincere effort has been made by the company at rehabilitation. Shops have been whitewashed, heating-boilers have been installed, and it can be reported that housekeeping conditions in these shops are very much improved over former years. At Squamish, however, an entire new diesel-maintenance shop is urgently required. This shop is required in the immediate future, and it is recommended that modern facilities be installed to turn wheels and to service and maintain diesel-electric locomotives. When a new shop is installed, the availability of locomotives will be increased as more locomotives can be kept working on the road. At the present time the Squamish shops are handicapped by endeavouring to maintain motive power over open pits in a roundhouse designed for steam-locomotives. Consequently the construction of a new shop as outlined cannot be too strongly stressed.

The unprotected crossing at Quesnel, reported last year, is being taken care of within the Department. An automatic flasher warning-signal is now on hand and will be installed by the company during the first quarter of 1956.

The construction of the Squamish-Vancouver extension progressed during 1955 to the point where it is expected that traffic should commence during 1956. Several inspec-

tions have been made of various facets of construction which concerned the Inspection Department. This entailed a study of crossings in West Vancouver and the recommendation of automatic crossing gates and signals at certain localities. In other instances it was necessary to inspect rock cuts so that dangerous rocks can be removed during construction which might otherwise in the future present a hazard to the travelling public.

On the northern extension from Prince George to the Peace River an inspection was made of the construction as of October, 1955. Certain crossings were studied and instructions issued. It can be reported the project on the northern extension is progressing as scheduled, and further inspections will be made as the construction project progresses.

#### CONCLUSION

It can be reported that conditions on the Pacific Great Eastern Railway continue to improve. Appropriations for improvements and replacements have been used to good advantage, so that now the railway is in a much safer condition than during former years. However, with the expected increase in traffic when the extensions are in operation, it cannot be stressed too strongly that rail replacements, ballasting, and betterments must be continued under a continuing programme as already in progress on the railway. Shop facilities at Squamish require immediate attention to take care of the increase in motive power necessary to handle the traffic. Sanding facilities and shop storage-tracks have been provided at various points, but it is expected that additional tracks and storage facilities will soon be in order. The rail-wear problem is being taken care of by the company as seventy-eight mechanical track-oilers are expected to be in operation on the Squamish subdivision before the end of 1956.

The use of rail diesel cars is being anticipated by the company for application during 1956. The acquirement of this equipment is necessary as the present passenger-coach equipment is outmoded and to a large extent has outlived its usefulness. The new rail diesel cars will replace passenger-trains in a number of cases, and it cannot be too strongly recommended that every consideration should be given to passenger safety in the operation of this new type of equipment. There is no doubt that passenger schedules can be speeded up due to the lighter equipment and the improved condition of the railway, but particular attention should be paid to the type and number of personnel employed in this type of train service.

#### GENERAL INSPECTION OF RAILWAYS AND OTHER TRANSPORT

*General Trends.*—During 1955 transportation facilities throughout British Columbia kept pace with the industrial development. This applied to public and common-carrier transportation as well as privately owned transportation systems used in off-highway traffic. Notwithstanding public opinion that rail haulage has decreased on a national basis, it is interesting to note that in British Columbia rail haulage has increased and additional railways are being built. It is also interesting to note that the transcontinental systems are extending rail lines into new localities and improving services throughout Canada.

On the Pacific Great Eastern Railway both passenger and freight traffic have increased over 1954, and on the British Columbia Electric Railway freight transfer movements from Huntingdon to New Westminster have increased so that additional diesel-electric motive power has been placed in service, with further power on order from the builders in Eastern Canada.

In the industrial field of railroading the trend from railway to truck haulage continues. The railway on the Queen Charlotte Islands was abandoned in favour of trucks during 1955, while on the other hand 22 miles of main-line railway is under construction at Englewood, so that the Canadian Forest Products will operate 70 miles of main-line

railway at Englewood. Three new diesel-electric locomotives have been procured for this logging-railroad, with a number of additional cars. The new railway at Englewood is expecting to serve an iron-ore claim in the vicinity of Nimpkish Lake, and if this project materializes, it is expected that a major amount of iron ore will be handled by the railway to shipping-bunkers at Beaver Cove. Meantime this railway is to be used for logging purposes. It is understood that the Franklin River railway of MacMillan & Bloedel Ltd. is to be extended into the Nitinat Valley, although application to begin construction has not yet been received by the Department. Other operations which continue to use railway have intensified their maintenance programme during 1955 with a view to permanent operation. The Canadian Collieries (Dunsmuir) Limited is using railway at the shipping-wharves and feeding the railway by motor-truck from the Tsable River mine. The operation of the trucks now falls within the Department's jurisdiction and inspections were made. The Morrissey, Fernie and Michel Railway in Eastern British Columbia has continued to operate to full capacity during 1955 and is contemplating the purchase of an additional locomotive.

*Logging-railways.*—All logging-railways in the Province were inspected during the year. This entailed track inspection, bridge inspection, log-dump inspection, as well as inspection of all equipment, rolling-stock, and locomotives. All locomotives in operation were hydrostatically tested and certificates issued. In some operations both the logging-truck roads and the railways were inspected jointly, as in many cases the two types of transportation are jointly operated. Accidents were investigated and recommendations made by the Department Inspectors to prevent recurrences. Railway personnel—namely, locomotive engineers, conductors, rail-car operators, and dispatchers—were examined and certified by the Department Inspectors, and in many operations truck-drivers were trained as to safety, and later examined and certified to operate air-equipped logging-trucks. In a number of instances, log-dumps were especially inspected, as a considerable hazard exists where logs are dumped from rail cars. In some cases the Department's approved protective device was installed, and it is gratifying to note at this time no serious accidents occurred at dumping operations during the year.

*Truck-logging.*—In the truck-logging operations not connected with railway, a number of inspections were made where truck-drivers were instructed, examined, and certified. Most of the inspections involved recommendations by the Inspectors as to improvement in air-brake installation and operation. Air-brakes are safe only where they are properly installed and maintained. During 1955 the Department formulated regulations to govern logging-trucks. Five drafts of the regulations were prepared and sent out to industry. A number of committees were appointed to discuss the regulations with the Department. The majority of committees concurred with the fifth draft, and consequently the "Industrial Transportation Act" was proclaimed on November 10th, and the regulations pursuant to the Act were published, to come into effect on January 1st, 1956. Notwithstanding, however, during 1955 the Department Inspectors worked with the view of the proposed regulations coming into effect before the end of the year, and consequently a sincere effort was made on their part to bring equipment into line with the requirements of the proposed regulations. In this respect the Inspectors worked with the engineering staffs of the truck-manufacturers in Vancouver so that equipment would meet with the impending regulations. It must be stated that the truck-manufacturers co-operated with the Inspectors so that an improved air-brake system could be used before the end of 1955 and incorporated into the new equipment being manufactured for the logging industry. It is also interesting to note that in many cases logging-trucks operate jointly on private roads and public highways. Consequently the higher standards of safety incorporated into logging-trucks and enforced by this Department will have a marked effect in the safety of the same vehicles operating on public highways. In fact, a number of the improvements developed for logging-trucks in the Department have been

adopted on the highways and on the industrial roads in the United States, and it is the hope of the truck-manufacturers in Vancouver that the safety standard developed by this Department can be incorporated into all vehicles operating on the highways in British Columbia and other Provinces as well as in the United States.

In making inspection of logging-roads and private industrial roads, the Inspectors paid due regard to the condition of bridges, log-dumps, and loading-works, and while specific specifications have not been stipulated in the regulations, bridges are required to be safe for loads which may be imposed upon them by any vehicular traffic encountered.

In taking over the control and safety of logging-trucks, mining-trucks, and heavy equipment used on industrial roads (other than highways) and certifying the drivers of the equipment involved under the terms of the "Industrial Transportation Act," it has become necessary to institute training centres in various parts of British Columbia. The Department of Education has co-operated with this Department in establishing truck-driver training classes at the Dominion-Provincial Vocational School in Nanaimo, where our Inspectors conduct courses every month so that the trainees at the school can receive training, and at the same time the drivers of logging-trucks in that area are notified to attend the classes, where they are later examined and certified. In other cases, arrangements have been made through the facilities of the Royal Canadian Mounted Police detachments in the various localities. The Officers Commanding in various areas have co-operated in obtaining lecture-halls and providing space for applicants to be examined, while in other cases training has taken place in logging camps, where applicants have taken the examination.

During 1955 the Vancouver office of the Department moved to larger quarters in the Hospital Insurance Building at 636 Burrard Street, where an examination and lecture room is available. Consequently courses are conducted in the Vancouver office, where various operating personnel are examined. Up to the end of 1955, 388 air-equipped logging-truck operators have been examined and certified, and in addition 541 highway drivers have written examinations as to their knowledge in the use and operation of air brakes.

*Highway-driver Training.*—Inasmuch as logging-trucks in many cases operate jointly on highways and private industrial roads, and also considering that oil-trucks and other heavy vehicles, which in most cases operate on public roads, also gain access to privately owned industrial roads, it was considered necessary in the interests of safety to train drivers licensed to operate on public highways in the use of air-brakes. This training has been conducted through the sponsorship of the Royal Canadian Mounted Police and the Motor-vehicle Branch at various localities on Vancouver Island, where it is interesting to note that since the institution of these courses and examinations, the insurance rates in this area have been appreciably lowered due to decrease in the number of industrial accidents both on private roads and public roads alike.

*Mining-railways.*—Regular inspections were made on the various mining-railways throughout British Columbia. The Morrissey, Fernie and Michel Railway at Fernie was inspected and the equipment tested. The narrow-gauge steam railways used in conjunction with the mines were also inspected and the boilers hydrostatically tested. Engineers were examined and certified. At Kimberley the rail haulage system was inspected, as were locomotives of that line. It can be reported that no serious accidents occurred at either of the two aforementioned operations. At the smelter of the Consolidated Mining and Smelting Company at Trail, several inspections were made of the narrow-gauge railway serving the smelter. Accidents to workmen were investigated and recommendations made by the Inspectors. At the Trail operation the operators of equipment are examined by the company on their knowledge of special rules. The Department checks the examinations and issues special permits. This is done in the interests of safety, as it is considered a dangerous practice to let untrained workmen operate small industrial locomotives.

*Mines Department.*—All the air-locomotives of the Crow's Nest Pass Coal Company were hydrostatically tested and certified. Copies of Inspectors' reports and certificates were filed with the Chief Inspector, Department of Mines. This is done through an inter-departmental arrangement of many years' standing, where the Railway Department Inspectors inspect surface trackage and equipment which is technically under the jurisdiction of the Department of Mines. There is no duplication of inspections in this case as the Department of Mines does not employ railway inspectors and has this Department do the railway inspection. This is a good example of interdepartmental co-operation to avoid duplication of inspection services.

*Pulp-mills and Industrial Plants.*—The yards, trackage, and barge-slips of the various pulp-mills in British Columbia, which operate their own industrial railways, were inspected during the year. This entailed locomotive inspection, track inspection, close-clearance inspection, and examination and certification of personnel. At the Elk Falls Paper Company mill at Duncan Bay a gasoline-locomotive has been procured to take the place of a steam-locomotive, and at the pulp-mill situated at Port Mellon considerable work has been done with the company on the part of the Inspectors in endeavouring either to convert the present steam-locomotive to diesel or to procure a diesel locomotive. At the Columbia Cellulose Company at Prince Rupert a special inspection was made regarding close clearances.

*Shipyards.*—Inspection was made of the trackage and cranes of the shipyards operating throughout the Province, and at Yarrows Limited, Esquimalt, a dock crane was inspected and certified at the company's request. At the Capital Iron and Metals Limited, Victoria, where ships are dismantled, the locomotive cranes and trackages were inspected.

*Steel-mills.*—The locomotive cranes and tracks at the two steel-mills in Vancouver were inspected several times during the year. In two cases it was necessary to recommend that boilers be replaced on the locomotive cranes, and in several instances it was necessary to examine and certify the operators.

*Kitimat.*—During 1955 the construction at Kemano was reopened in order to install two additional generators. This entails the construction and lining of the second penstock. The hoisting and lowering of pipe within the penstock falls within the jurisdiction of the Department, and consequently inspections were made as to strength of cables and safety of hoisting equipment. At this operation the aerial tramway was also inspected and certified. At Kemano the Morrison-Knudsen Company examines its own employees under Department supervision and the Department issues certificates for hoistmen and rail-haulage motormen.

At the Kitimat smelter an inspection was made of the railway yards and trackages. Two diesel-electric locomotives are employed to switch the yards and interchange cars with the Canadian National Railway. It was necessary to examine personnel at this operation and make recommendations as to safe railway practices.

*Cheakamus Dam, B.C. Electric.*—Mannix-Stolte Limited is constructing 8 miles of tunnel near Garibaldi for the purpose of a power project for the British Columbia Electric Company. The hoisting and underground rail operation of this project falls within Department's jurisdiction, and underground inspection was made of trackage and hoisting apparatus employed. Special rules and regulations were formulated and approved by the Minister. The locomotives and cars were inspected, and a safety-signal system was recommended by the Inspectors which was installed by the company.

*Federal Board of Transport.*—All Department Inspectors are appointed by the Board of Transport Commissioners as Locomotive Inspectors to examine fire-protective appliances on all locomotives operating under the Board's jurisdiction within the Province. Railway passes are supplied by the Board through the Department of Lands and Forests, to whom copies of reports are submitted, with originals of all reports sent direct to the Board of Transport Commissioners in Ottawa. Thus a liaison exists between the Federal

Board of Transport Commissioners, the British Columbia Railway Department, and the Department of Lands and Forests.

With reference to the foregoing paragraph, 194 inspections were made of fire-protective appliances on the Canadian Pacific Railway, Canadian National Railway, and Great Northern Railway, and reports submitted, while sixteen such inspections were made on the Pacific Great Eastern Railway and other industrial railways which were not reported to the Federal authority.

*B.C. Electric.*—On the B.C. Electric Railway, inspections were made of all diesel-electric locomotives and certificates issued. Electric locomotives were also inspected and certified. Inspections were made of the automatic cross-signals at Scott Road and King George Highway. Dispatching was checked by the Inspectors, and it can be reported this operation is being properly handled by the company. In the City of Vancouver, street-cars have been replaced by trolley-buses. The Inspectors have not inspected trolley-buses as, while they are technically considered to be street-railway equipment by the company, they appear to be inspected by the Public Utilities Commission, and consequently the Department has not made inspections as its policy is to avoid dual inspection wherever possible.

*Aerial Tramways.*—All existing aerial tramways which carry passengers within the Province were inspected during the year. In some cases it was necessary to make several inspections where haulage-ropes and chairs were defective.

The condition of the main-haulage rope of the Hollyburn Aerial Tramway was such that it was necessary for an Inspector to withdraw the certificate and shut down the operation until the new haulage-rope was installed. When the new haulage-rope was installed, certain recommendations were made which were carried out by the company. The Department Inspectors also assisted in designing double chairs for this aerial tramway. Inspector Tyler inspected the Red Mountain Aerial Tramway near Rossland, and over the past three years has been making recommendations to bring this tramway up to a better standard of safety. It can be reported at this time that the Inspector's recommendations have been put into effect by the company, so that now the aerial tramway is in much better condition than originally.

Inspections were made of the two aerial tramways on Grouse Mountain near Vancouver. These tramways are in excellent condition, and no serious accidents have been reported. The new aerial tramway built by the Department of National Defence in the Interior of British Columbia (exact location not mentioned) has not yet been placed in operation but is being extended, and the Commanding Officer in charge has requested in writing that, when completed, the Department is to make an inspection and submit a report. At the Cassiar Asbestos Company on the northern boundary of British Columbia, a 3½-mile aerial tramway has been constructed. This was inspected by the Department when it was near completion, and certain recommendations were made and at the same time rules and regulations were drafted to cover this special tramway. However, inasmuch as this tramway is considered to be part of a mine operation where it operates between mine and mill, the jurisdiction of this tramway should fall within the scope of the Department of Mines as it is transporting ore and miners the same as would a shaft in a mine. Consequently in future this Department will not inspect this tramway. However, adjacent to the aerial tramway an industrial road is operated, which will require to be inspected from time to time.

*Traffic and Safety Councils.*—To perpetuate the safety work instituted in 1953 in co-operation with the Royal Canadian Mounted Police and Motor-vehicle Branch, Traffic and Safety Councils were formed at Colwood, Duncan, Nanaimo, Port Alberni, and Courtenay. These councils now operate independent of the Department, but co-operate in a large measure in regard to safety matters. In this respect the Department Inspectors from time to time, and during 1955, have given safety lectures and provided films for the betterment of safety on the highways. During 1955 a sincere attempt was made by

Department Inspectors to institute a Traffic and Safety Council in Greater Victoria. After several meetings the project was abandoned as it was impossible to obtain co-operation between various police departments, City Councils, and municipalities involved. At the present time no Traffic and Safety Council exists in Greater Victoria, while on the other hand the Traffic and Safety Councils functioning in other parts of Vancouver Island are doing a good job and highway and public safety is being improved.

*Railway Safety.*—Public safety and safety to workmen is the main concern of the Department, and consequently safety programmes which have been sponsored and encouraged over the years in various parts of the Province have been carried forward during 1955. The safety programme is carried out in three ways: (1) Education of the public as to safety and safe methods through public educational programmes sponsored by Traffic and Safety Councils; (2) education of workmen as to safe methods; and (3) education of companies as to training their employees in safety and keeping a progressive safety programme in operation. The Department has found the last method the best, as the onus and responsibility should be incumbent upon the company to train its employees. Safety must be the criterion of company executives, and subordinates and employees will naturally follow their example in all matters concerning company policy. The Department has found that in most cases accidents have been caused by employees not thinking or acting safely, and consequently it follows that it should be company policy in every case to give priority to safety programmes to train its employees.

The Department has set up three safety trophies: (1) A safety shield for logging-railways, (2) a cup for mining-railways, and (3) a trophy for the Pacific Great Eastern Railway which is to be competitive between divisions. In 1952 the Canadian Forest Products (Englewood Division) was awarded the logging-railway trophy, and it has since been held by the Comox Logging and Railway Company Ladysmith operation. The mining-railway trophy has been held since 1952 by the Morrissey, Fernie and Michel Railway at Fernie. On the Pacific Great Eastern Railway the trophy has not as yet been awarded, as no organized, competitive safety programme has yet been established.

It is a fact that the industrial railways show a keen sense of competition in safety matters. Most of the logging companies, mining companies, and railways each employ a full-time safety supervisor whose duties are to supervise safety matters and to intensify the competitive spirit for safety between employees. The Department Inspectors have conducted many safety lectures on the Pacific Great Eastern Railway with a view to the company establishing a competitive safety programme. As previously pointed out, railways employ safety supervisors and use safety and instruction cars, and if all employees are to be safety-conscious, the above method is known to give results.

Notwithstanding the aforementioned with regard to employee safety on the Pacific Great Eastern Railway, it can be reported that the record for public safety on the railway is quite good as there never has been any serious accident on the railway where passengers have been fatally injured. However, it is reasonable to assume that public safety will be assured to a greater extent on any railway where the company sponsors a good safety programme for the benefit of its employees.

*Accidents.*—No fatal accidents were reported during the year on logging, mining, or industrial railways. Fatal accidents occurred to workmen on the Pacific Great Eastern on the Quesnel-Prince George extension, where a speeder was derailed and two employees were fatally injured. On the same railway an accident occurred to a contractor's employee, where a speeder operated by the contractor failed to stop at a red flag. These accidents might have been prevented if proper safety education had been made available to the employees concerned.

A few logging-truck accidents and logging-railway accidents were investigated. In some cases workmen were not injured but equipment was badly wrecked. In such cases the employees in charge of the equipment were instructed as to its safe use, and in the case of logging-trucks the companies were instructed that a maintenance programme is required to maintain air-brakes and safety appliances used in industry.

Following is a report of equipment inspections during 1955:—

Hydrostatic tests applied to boilers.....	95
Internal and external inspections of boilers.....	5
Internal-combustion locomotives inspected and certified.....	6
Internal-combustion locomotive cranes inspected and certified.....	7
Air-locomotives hydrostatically tested.....	9
Rail-cars inspected and certified.....	26
Air-receivers tested and inspected.....	8
Diesel-electric locomotives inspected and certified.....	40
Electric locomotives inspected on narrow-gauge electric railways.....	14
Diesel-electric locomotives inspected on Alcan project.....	2
Locomotives inspected other than hydrostatic tests.....	36
Number of cars inspected on industrial railways.....	400
Number of cars inspected on common-carrier railways.....	108
Miles of underground trackage inspected at Alcan project.....	18
Miles of track inspected.....	750
Aerial tramways inspected in British Columbia and certified.....	5
Aerial tramway inspections conducted.....	9
Locomotive engineers examined and certified.....	3
Conductors examined and certified.....	3
Power-car operators examined and certified.....	6
Train-dispatchers examined and certified.....	5
Internal-combustion locomotive engineers examined and certified.....	8
Engineers examined and certificates issued, Pacific Great Eastern Railway.....	4
Engineers examined and certificates issued, B.C. Electric Railway.....	5
Motormen examined and certified, Consolidated Mining and Smelting Company of Canada.....	23
Logging-truck operators examined and certified.....	118
Students examined and certified at Dominion-Provincial Vocational School, Nanaimo.....	93
Accidents investigated on logging and industrial railways.....	1
Fatal accidents on logging and industrial railways.....	<i>Nil</i>
Accidents on Pacific Great Eastern Railway.....	10
New diesel-electric locomotives.....	6
Second-hand diesel-electric locomotive imported.....	1
Safety lectures conducted by the Department.....	4
Truck air-brake lectures conducted by the Department.....	47
Inspections made of locomotive fire-protective appliances on P.G.E. Railway and industrial railways.....	16
Inspections made of locomotive fire-protective appliances on C.P.R., C.N.R., and G.N.R. for Board of Transport Commissioners.....	194

#### LIST OF APPENDICES

A list of Executive Council certificates issued is given in Appendix A.

Accidents on railways are shown in Appendix B.

A list of locomotive cranes in industrial plants inspected by the Department is shown in Appendix D.

A summary of the mileage of all railways operating in the Province is shown in Appendix E.

## APPENDICES

## APPENDIX A

## CERTIFICATES ISSUED UNDER THE PROVISIONS OF THE "RAILWAY ACT"

	Certificate No.
Granting application Columbia Cellulose Co. Ltd. for exemption from standard clearances .....	846
Approving application B.C. Electric Railway Co. Ltd. to construct spur track across Twentieth Street, Municipality of Burnaby .....	847
Approving Supplement No. 19 to Tariff B.C.E.R. No. 1873, B.C. Electric Railway Co. Ltd. ....	848
Granting permission to Aluminum Co. of Canada Ltd. to operate trains over its terminal railway at Kitimat .....	849
Approving revised Standard Freight Tariff No. 100A, section 4, of the P.G.E. Railway .....	850
Approving application for constructing a highway crossing over and a pipe crossing under tracks of P.G.E. Railway at Mile 7.93, Municipality of West Vancouver .....	851
Granting application of Elk Falls Co. Ltd. for exemption from standard clearances .....	852
Approving Rules and Regulations Governing Storage and Handling of Inflammable Liquids and Liquid Petroleum Gases on or adjacent to Railway Property .....	853
Approving safety rules governing operation of 2700 level surface and underground railway at Sullivan Mine of Consolidated Mining & Smelting Co. of Canada Ltd., Trail.....	854
Granting application of Department of National Defence for approval of location of aerial tramway for R.C.N. magazine, Kamloops .....	855
Approving Supplement No. 20 to Tariff B.C.E.R. No. 1873, B.C. Electric Railway Co. Ltd. ....	856
Ordering installation of flashing light signal and control circuit at P.G.E. Railway tracks and Davie Street (Arterial Highway 47R), Quesnel .....	857
Granting application for exemption from standard clearances of the Annacis Industrial Estate .....	858
Granting permission to Imperial Oil Ltd. to construct a pipe-line from Ioco to Burnaby .....	859
Approving special rules and regulations of Mannix Ltd. governing rail haulage and hoisting on Mannix-Stolte Cheakamus Power Tunnel Project, Squamish .....	860
Granting B.C. Electric Railway Co. Ltd. leave to construct an extension to its trackage to serve Annacis Island .....	861
Granting B.C. Electric Railway Co. Ltd. leave to construct a spur track across a road allowance south-west of junction of Jardine Street and Boyd Street, New Westminster .....	862
Granting permission to Eastern British Columbia Railway Co. to change location of company's head office from Tadanac, B.C., to 601-626 West Pender Street, Vancouver, B.C. ....	863
Approving B.C. Electric Railway Co. Ltd. application pursuant to section 16 for location of an extension to existing trackage near Ewen Avenue, New Westminster, to Annacis Island .....	864
Approving issue by B.C. Electric Railway Co. Ltd. of 3¾-per-cent general mortgage bonds, 1955 series .....	865
Approving application of Lignum Ltd. to construct a blower pipe over tracks of P.G.E. Railway at Mile 277, Williams Lake .....	866

## CERTIFICATES ISSUED UNDER THE PROVISIONS OF THE "INDUSTRIAL TRANSPORTATION ACT"

Approving Rules and Regulations, Part XX, Governing Operation and Safety of Automotive Cars, Crew Cars, Buses, Motor-trucks, Trailers, and Vehicular Traffic on Industrial Roads .....	1
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## APPENDIX B

## ACCIDENTS REPORTED, 1955

*On Railway*

B.C. Electric Railway Co. Ltd.—	Killed	Injured
Passengers .....	---	2
Employees .....	---	1
Other persons .....	---	2
Pacific Great Eastern Railway Co.—		
Passengers .....	---	1
Employees .....	2	2
Other persons .....	5	2
Industrial railways—		
Employees .....	---	---
Other persons .....	---	---
Locomotive cranes—Employees .....	---	---
Aerial tramways (industrial) .....	---	---
Totals .....	7	10

*Level Crossings*

	Unprotected Crossings			Protected Crossings		
	Killed	Injured	Number of Accidents	Killed	Injured	Number of Accidents
Under jurisdiction of the Provincial Government—						
After sunrise .....	3	2	6	---	---	---
After sunset .....	1	7	11	---	---	---
Totals .....	4	9	17	---	---	---
Under jurisdiction of the Board of Transport Commissioners for Canada—						
After sunrise .....	2	18	31	4	1	4
After sunset .....	1	21	22	2	1	5
Totals .....	3	39	53	6	2	9
Total number of accidents in British Columbia .....	7	48	70	6	2	9

APPENDIX C  
LIST OF RAILWAYS AND SUMMARY OF MILEAGE  
*Industrial Railways*

No. and Owners/Name of Railway	Head Office	Operating	Mileage		Gauge
			Main Track	Sidings, etc. Total	
<b>STANDARD GAUGE</b>					
<i>Mainland</i>					
1. Begbie Pole-yard.	Revelstoke	Begbie	0.92		0.92 <sup>1</sup>
2. Crow's Nest Pass Coal Co. Ltd.	Fernie	Fernie, Coal Creek, Elk River, and Michel	7.15		7.15
3. Columbia Cellulose Co. Ltd.	Vancouver	Watson Island		5.68	5.68 <sup>1</sup>
4. Dominion Tar & Chemical Co. Ltd.	Montreal	North Vancouver	1.00	7.00	8.00
5. Morrissey, Fernie & Michel Railway Co.	Fernie	Fernie, Coal Creek, and Elk River	3.62	2.69	6.31
6. O'Brien Logging Co. Ltd./Northern & Eagle River	Vancouver	Stillwater	4.50	0.50	5.00
7. Pacific Coast Terminals Co. Ltd.	New Westminster	New Westminster		5.20	5.20
8. Kelley Logging Co. Ltd.	Vancouver	Aero	8.00	12.00	20.00
9. Canada Creosoting Co. Ltd.	Montreal	North Vancouver		0.75	0.75
10. Howe Sound Transportation Co. Ltd.	Vancouver	Port Mellon	1.00	2.00	3.00
Totals, Mainland			31.39	30.62	62.01
<i>Vancouver Island</i>					
11. MacMillan & Bloedel Ltd.	Nanaimo	Harmac Pulp Division	1.80		1.80
12. Elk Falls Paper Co. Ltd.	Duncan Bay	Duncan Bay	1.00		1.00
13. MacMillan & Bloedel Ltd.	Vancouver	Franklin River	47.60	5.50	53.10
14. B. C. Forest Products Ltd.	Vancouver	Youbou	16.50	2.20	18.70 <sup>2</sup>
15. B. C. Forest Products Ltd./Renfrew Division, South	Vancouver	Port Renfrew	16.50	3.90	20.40
16. B. C. Forest Products Ltd./Renfrew Division, North	Vancouver	Port Renfrew	12.00	1.00	13.00
17. Canadian Collieries (D.) Ltd./Wellington Colliery Railway	Union Bay	Union Bay	1.00		1.00
18. Canadian Forest Products Ltd.	Vancouver	Englewood	88.37	13.07	101.44
19. Comox Logging & Railway Co.	Ladysmith	Ladysmith	23.40	5.05	28.45
20. Hillcrest Lumber Co. Ltd.	Mesachie Lake	Mesachie Lake	6.00	1.50	7.50 <sup>2</sup>
21. MacMillan & Bloedel Ltd./Copper Canyon Railway (Camp No. 1)	Chemainus	Chemainus, Seymour, Cowichan Lake District	1.58	3.81	5.39
22. MacMillan & Bloedel Ltd./Nanaimo River Railway	Chemainus	Dunsmuir District	1.00	3.10	4.10
23. Mayo Lumber Co. Ltd.	Paldi	Paldi	0.50	0.25	0.75
24. Osborn Bay Wharf Co. Ltd.	Mesachie Lake	Crofton			0.33
25. Western Forest Industries Ltd./Gordon River	Honeymoon Bay	Cowichan Lake District	7.00	0.60	7.60 <sup>3</sup>
Totals, Vancouver Island			224.58	39.98	264.56
26. Powell River Co. Ltd.	Vancouver	Cumshewa	7.00	15.00	22.00
Totals, industrial railways, standard gauge			262.97	85.60	348.57

<sup>1</sup> All leased.

<sup>2</sup> Includes 5 miles leased.

<sup>3</sup> Includes 7 miles leased.

APPENDIX C—Continued  
LIST OF RAILWAYS AND SUMMARY OF MILEAGE—Continued  
Industrial Railways—Continued

No. and Owners/Name of Railway	Head Office	Operating	Mileage		Gauge
			Main Track	Sidings, etc.	
NARROW GAUGE Mainland					
27. Canada Creosoting Co. Ltd.	Montreal	New Westminster	6.00	.....	6.00 30" and standard.
28. Britannia Mining & Smelting Co. Ltd./Tunnel Railway	Britannia Beach	Britannia Beach	3.17	1.79	4.96 36".
29. Consolidated Mining & Smelting Co. of Canada Ltd.	Trail	Trail	19.00	.....	19.00 18".
30. Consolidated Mining & Smelting Co. of Canada Ltd.	Trail	Kimberley	9.00	33.01	42.01 18", 36".
31. Dominion Tar & Chemical Co. Ltd.	Montreal	New Westminster	{ 3.00	.....	3.00 30".
Totals, Mainland			43.17	34.80	77.97 Standard.
Vancouver Island					
32. Canadian Industries Ltd.	Montreal	James Island	8.25	1.75	10.00 36" and standard.
Totals, Vancouver Island			8.25	1.75	10.00 Standard
Totals, industrial railways, narrow gauge			51.42	36.55	87.97 and narrow.
Totals, all industrial railways in British Columbia			314.39	122.15	436.54 Ditto.
Common Carrier					
33. Pacific Great Eastern Railway	Vancouver	Vancouver, Squamish to Prince George— Main line Siding Spurs, wyes, etc. Private spurs	430.80 <sup>4</sup>	..... 35.84 17.97 12.00	..... ..... ..... ..... Standard. " "
Totals			430.80	65.81	496.61
Street and Interurban Electric Railways					
34. B.C. Electric Railway Co. Ltd.	Vancouver	Vancouver and vicinity	91.88	18.40	110.28 <sup>5</sup>
Grand total			.....	.....	1,043.43

<sup>1</sup> All leased.<sup>4</sup> Includes 3.46 miles leased.<sup>5</sup> Includes 61.70 miles leased.

## APPENDIX D

LIST OF CRANES AND OTHER AUXILIARY MOTIVE POWER IN INDUSTRIAL PLANTS  
INSPECTED BY RAILWAY DEPARTMENT

Alaska Pine & Cellulose Ltd.	Crane No. D.R. 304.
Alberta Lumber Co. Ltd.	Crane No. 42998 B.C.
Anderson Bros. Lumber Co. Ltd.	Crane No. 11905 B.C.
	Crane No. D.R. 302.
Arrowhead Wood Preservers Ltd.	Crane No. D.R. 293.
	Crane No. D.R. 322.
	Crane No. 22633 B.C.
Associated Foundry Ltd.	Crane No. D.R. 305.
Baxter, J. H., & Co. Ltd.	Gas Crane No. 1.
B.C. Cement Co. Ltd.	Crane No. 21439 B.C.
B.C. Forest Products Ltd. (Sawmill)	Crane No. D.R. 320.
Burrard Dry Dock Co. Ltd.	Crane No. 50514 B.C.
	Crane No. D.R. 292.
	Gas Locomotive Crane No. 4.
Canadian Industries Ltd.	Whitcomb Locomotive No. 8.
Capital Iron & Metals Ltd.	Crane No. D.R. 295.
	Crane No. 44386 B.C.
Columbia Cellulose Co. Ltd.	Diesel-electric Locomotive No. 1.
Consolidated Mining & Smelting Co. of Canada Ltd.—	
Kimberley	Electric Locomotives Nos. 1, 2, 3.
Trail	12 narrow-gauge electric locomotives.
Dobson Bros.	Crane No. D.R. 289.
Dominion Bridge Co. Ltd.	Crane No. 44129 B.C.
	Crane No. 44317 B.C.
	Crane No. D.R. 347.
	Crane No. 44013 B.C.
	Gas Locomotive No. 1.
Esquimalt Dry Dock	Crane No. 22582 B.C.
	Portable Boiler D.R. No. 314.
Hillcrest Lumber Co. Ltd. (Sawmill)	Crane No. 40049 B.C.
	Crane No. 44315 B.C.
	Crane No. 41298 B.C.
King, M. B., Lumber Co. Ltd.	Crane No. 12430 B.C.
Lions Gate Lumber Co. Ltd.	Crane No. 12370 B.C.
Lumby Timber Co. Ltd.	Crane No. D.R. 343.
Mayo Lumber Co. Ltd.	Crane No. D.R. 321.
MacMillan & Bloedel Ltd. (Sawmill)	Crane No. 44666 B.C.
	Gas Internal-combustion Locomotive No. 50.
	Diesel-electric Locomotive No. 1.
Northern Construction Co. Ltd.	Crane No. 43505 B.C.
Osborn Bay Wharf Co. Ltd.	Crane No. 21526 B.C.
Sigalet & Co. Ltd.	Crane No. 21089 B.C.
Sooke Lake Lumber Co. Ltd.	Crane No. 22632 B.C.
Timber Preservers Ltd.	Crane No. 43807 B.C.
	Crane No. D.R. 288.
Timberland Lumber Co. Ltd.	Crane No. 12368 B.C.
Vancouver Steel Co. Ltd.	Crane No. D.R. 316.
	Crane No. D.R. 342.
Victoria Machinery Depot Ltd.	Crane No. D.R. 291.
Western Bridge & Steel Fabricators Ltd.	Crane No. D.R. 355.
	Crane No. D.R. 309.
Western Plywoods Ltd.	Diesel Crane No. 142.
Yarrows Ltd.	Electric dock crane.

## APPENDIX E

## MILEAGE OF ALL RAILWAYS OPERATING IN THE PROVINCE

	Mainland		Island		Total	
	Main Line	Sidings	Main Line	Sidings	Main Line	Sidings
Under the jurisdiction of the Board of Transport Commissioners for Canada—						
Canadian Pacific Railway.....	1,857.92	533.87	200.29	52.14	2,058.21	586.01
Canadian National Railways.....	1,342.65	379.39	90.17	24.39	1,432.82	403.78
Great Northern Railway.....	140.77	39.09	-----	-----	140.77	39.09
B.C. Electric Railway (leased).....	26.06	23.73	-----	-----	26.06	23.73
Totals.....	3,367.40	976.08	290.46	76.53	3,657.86	1,052.61
Under the jurisdiction of the Provincial Government—						
Pacific Great Eastern Railway.....	430.80	65.81	-----	-----	430.80	65.81
B.C. Electric Railway.....	91.88	18.40	-----	-----	91.88	18.40
Industrial Railways—						
Standard gauge.....	31.39	30.62	224.58	39.98	255.97	70.60
Standard gauge, Queen Charlotte Islands.....	7.00	15.00	-----	-----	7.00	15.00
Narrow gauge.....	43.17	34.80	8.25	1.75	51.42	36.55
Totals.....	604.24	164.63	232.83	41.73	837.07	206.36
Grand totals.....	3,971.64	1,140.71	523.29	118.26	4,494.93	1,258.97

Total mileage of all railways in British Columbia, 5,753.90.

VICTORIA, B.C.

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