

# CANADIAN RAILROAD HISTORICAL ASSOCIATION INCORPORATED.

NEWS REPORT #46

JUNE 1954

Montreal, Canada.

## NOTICE OF MEETING

The regular monthly meeting of the Association will be held in room 920, Transportation Building, 159 Craig Street West, on Wednesday, June 9th, 1954, at 8:00 PM. After the business meeting, the entertainment will consist of a talk by Mr. Harry Whiteman, Terminal Express Agent, Canadian National Railways, Montreal. The subject of his talk will be "A Day in the Life of a Terminal Agent".

When Mr. Whiteman was invited to speak to the Association, he gave us an idea of the variety of the express shipments which come under his jurisdiction. On the day he spoke with Mr. Worthen, as an example, he had on his hands two 3-week old squirrels, and some snakes for a circus. Animal shipments are the most critical ones for an express company, and Mr. Whiteman has handled parakeets, lions, deer and polar bears for the Granby Zoo. He expects that the ultimate will be reached if Granby decides to acquire elephants -- no doubt they would be quite an armful -- even for a Terminal Express Agent. Mr. Whiteman has 42 years of experience to draw on, and as his talk promises to be amusing and instructive we would urge all of our members to try and attend this meeting; as usual, guests will be cordially welcomed.

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## N.M.R.A. CONVENTION

As announced in last month's Report, the Spring Convention of the Northeastern Region, National Model Railroad Association, was held in Montreal on Saturday and Sunday, May 15th and 16th. Approximately 130 delegates attended, and outside of those from the Montreal area, the greater majority were visitors from the New England area of the United States.

A very complete schedule had been arranged by the local host club, the Montreal HO Association. After registration on the Friday evening and Saturday morning, there was a trip made over the terminal lines of the Canadian National Railways using three of the National System's newest air-conditioned main line passenger coaches, nos. 5557, 5558 and 5559. One of the cars, just out of the shop, had never been used before in public service. The route followed was from Central Station, through the Mount Royal Tunnel to Val Royal. At this point, the run was made around the loop in the scrap and storage yard, and the train returned by way of Eastern Junction, Ville St. Laurent, Ballantyne to Turcot Yard, where an inspection of the roundhouse included moving engines out for photographs. In the evening, two model railroad "clinic" discussions were held, followed by moving pictures. On Sunday, the visitors enjoyed a Banquet at the Queens Hotel, and in the afternoon, participated in a sightseeing tour of the city using MTC cars 1325 and 1326. Included was a stop at Cote St. Paul car-house where the Association's rolling stock, car no. 274, performed for the visitors. Members of the MHOA Convention Committee included Mr. H.A. Calvin, Mr. Godfrey Bethune, and Mr. Howard Scodras, aided by many other members of the club.

Recently, the Assistant Editor, on a visit to Toronto, inspected the shop facilities of the Toronto Transit Commission Rapid Transit system, through the courtesy of the TTC. In the following article, Mr. Brown gives us a glimpse of the less familiar side of rapid transit operation.

DAVISVILLE SHOPS OF THE  
TORONTO TRANSIT COMMISSION

by Douglas Brown

Now that the subway has been opened officially to the public and all of the excitement has more or less died down, it is most interesting to take a look behind the scenes in the operation of this rapid transit system.

During the Easter weekend, I had the pleasure of being taken on an inspection tour of the Davisville Shops located near the subway station of the same name. Upon entering the shops, I was introduced to Mr. Falla, representing the T.T.C. and who was to be my guide during the shop tour. The 69,000 square foot building is of brick, concrete and steel construction affording a pleasant view from the nearby residential district. Throughout the subway system one finds that the TTC has succeeded in blending the appearance of its buildings harmoniously with the surrounding area.

All running repairs are carried out at Davisville, such as small electrical repairs, etc. as well as maintenance in the form of car cleaning and servicing. Major repairs are done at the Hillcrest Shops. There are nine tracks in the Davisville building five of them "dead-end". As each track is assigned for a specific use, I shall explain them individually. In the Car Cleaning Section, there are two tracks; the Inspection Section has two, each equipped with pits, and the Wheel Control Section has two. The latter tracks are equipped with high-speed wheel grinding machines of TTC design and manufacture. In addition, the Repair Section consists of three tracks, two of which have pits 220 feet in length. The third track, at floor level, is used for wheel and axle storage, truck repairs, motor changing, etc. When a truck requires a major overhaul, it is taken from the body of the car and placed on a hydraulic lift which is located near a door large enough for a service transport to enter. The platform of the lift is flush with the shop floor so that the truck is moved into position, and by means of the hydraulic system it can be raised to the height of the waiting transport to be taken to Hillcrest Shops. The provision of this simple lift obviates the necessity of an overhead crane.

Underneath the shop floor is located two tracks for the storage of spare trucks to be used when needed. Access to these tracks is had by stairs or by drop table. The drop table installation consists of three table tops, one in each of the three repair pits. The table tops are raised and lowered by means of a screw type hoist mounted on a powerful carrier which, in turn, operates on a track laid beneath, and at right angles to, the running tracks. Also, in the basement section, there is a store room housing a complete inventory of spare parts.

The TTC employs a modern Car Cleaning Department at this shop. It consists of tracks, one for exterior washing, and the other for interior cleaning. The washing equipment is completely automatic, being operated by a "seeing-eye" unit. As the car moves along the track (under its own power) it passes through a detergent spray, it is then scrubbed by hand, and the final operation is a combination spray-rinse and scrubbing by large mechanically operated brushes. These brushes touch all parts of the car except the trucks. Later, the car is placed on an adjoining track for interior cleaning.

Located near the shop building is the storage yard, where the cars are kept when they are not in use. This storage yard is mainly concentrated in the lower end of the property on five tracks, each one six hundred feet long.

Through an expert maintenance staff, the trains are permitted to run with consistent "on-time" performance at all times. In off-peak periods, they exceed themselves. For an example, I shall conclude by listing a typical trip made on Friday, April 16th.

L.	Eglinton	11:55 AM	A	Wellesley	12:03 $\frac{1}{2}$ PM
A	Davisville	11:56 $\frac{1}{2}$	L	"	12:04
L	"	11:57	A	College	12:05
A	St.Clair	11:58	L	"	12:06
L	"	11:58 $\frac{1}{2}$	A	Dundas	12:06 $\frac{3}{4}$
A	Summerhill	11:59 $\frac{1}{2}$	L	"	12:07
L	"	12:00 Noon	A	Queen	12:07 $\frac{3}{4}$
A	Rosedale	12:00 $\frac{1}{2}$ PM	L	"	12:08
L	"	12:01	A	King	12:08 $\frac{3}{4}$
A	Bloor	12:02	L	"	12:09
L	"	12:02 $\frac{3}{4}$	A	Union Station	12:10

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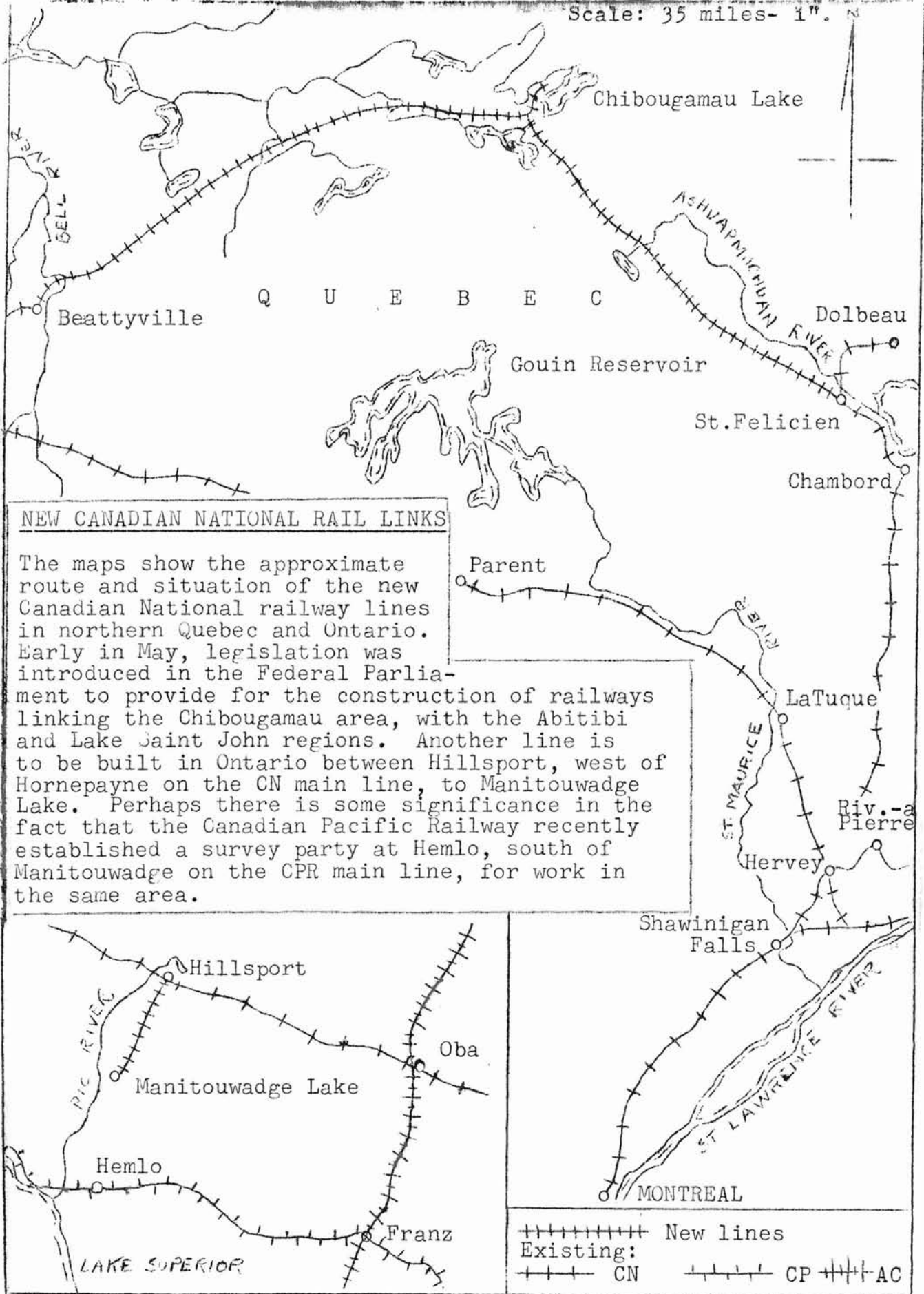
MISCELLANEOUS ITEMS
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During the month of May, the bell from Central Vermont Railway Locomotive No.700 "Norwich University", a 2-10-4 type, was presented to the University which is situated at Northfield, Vermont. The engine, which was been retired preparatory to scrapping, was in use for 27 years. Four years ago, it had been christened with the University name as part of a celebration honouring Grenville M. Dodge.

Canadian National Railways has applied to the Board of Transport Commissioners to abandon the railway line from Scotia to Parry Sound, Ont., 50 miles. Claiming an operating loss of about \$55,000 per year for the past six or seven years, the CNR's action will remove one more segment of the once busy Canada Atlantic Railway main line across central Ontario. The line between Ottawa and Lake Huron has already been severed between Algonquin Park and Whitney, following a serious washout a number of years ago.

A new type of ceremony was seen in Edmonton at the end of April when Alberta's Lieutenant Governor Hon. J.J. Bowlen, drew the first spike heralding the start of the removal of the 9.2-mile former Edmonton, Yukon & Pacific Railway, in Edmonton. Boasting an optimistic name, the EY&P never got out of the city limits of Edmonton. Passenger service over the line was suspended 26years ago.

Scale: 35 miles- 1".



**NEW CANADIAN NATIONAL RAIL LINKS**

The maps show the approximate route and situation of the new Canadian National railway lines in northern Quebec and Ontario. Early in May, legislation was introduced in the Federal Parliament to provide for the construction of railways linking the Chibougamau area, with the Abitibi and Lake Saint John regions. Another line is to be built in Ontario between Hillsport, west of Hornepayne on the CN main line, to Manitouwadge Lake. Perhaps there is some significance in the fact that the Canadian Pacific Railway recently established a survey party at Hemlo, south of Manitouwadge on the CPR main line, for work in the same area.

+++++ New lines  
 Existing:  
 +++ CN      +++ CP      +++ AC

During the week preceding the timetable change on the 25th of April, the Canadian Pacific Railway's British Columbia Lake and River Service steamer "Minto" made its last run on the Arrow Lakes. With the commencement of the summer schedule, the Company withdrew from the Arrow Lakes service, inaugurated by a predecessor Company before the turn of the century. Service will be provided on the Lower Arrow Lake only, by an independent operator. The "Minto" was built in Toronto in 1898, and was shipped west by rail, crated in sections. Along with a sister ship "Moyie", which presumably is still in occasional service on Kootenay Lake, it was intended for service in the Yukon at the time of the gold rush. The Klondike strike had lost some popularity by the time the two crated vessels arrived in British Columbia, and they were diverted, assembled and placed in service, the "Minto" on the Arrow Lakes, and the "Moyie" on Kootenay Lake. The "Minto" and "Moyie" are among the last of a once numerically-strong breed of Canadian lake and river boats, and they are both sternwheelers. Disposition of the "Minto" has not yet been announced by CPR officials.

As a result of the operation of Budd RDC-3 car D-100 by the Canadian National Railways between Fredericton and Newcastle, the schedules have been speeded up, that of the Newcastle-Fredericton run by 35 minutes, while the Fredericton-Newcastle service has been improved by 45 minutes. It is understood that the car is not in service on the run at the present time, due to insufficient express shipment capacity. When the spring restrictions on the New Brunswick highways are removed, the express shipments will be moved by truck, permitting re-introduction of D-100 to service.

Canadian National has put into effect a new numbering system for sleeping and parlour cars. Like the Canadian Pacific, which adopted this system some time ago, initial digits in route numbers will incorporate the train number. Unlike the CPR however, it is the intention of the CNR to arrange the cars in numerical order in their trains, numbering from the rear of the train.

Chesapeake & Ohio Railway, installing a two-way radio system on switch engines in the Sarnia Terminal yards of their Canadian Division, Pere Marquette district, claim this as the first such installation in Canada. (We are subject to correction, but did the Canadian National not experiment with two-way radio on yard engines, at the Longue Pointe yard in Montreal some years ago? -Ed.)

Following on the heels of the opening of the railway to Lynn Lake in Manitoba, moves under way by the Manitoba provincial government may lead to early construction of a 100-mile rail line by the Canadian National Railways between Gypsumville and Grand Rapids, Man.

Dieselization of Montreal-Toronto trains by the Canadian Pacific has resulted in the utilization of an interesting operational pattern for the units. Each night, two units are assigned to each of two sections of trains 21 and 22 respectively, from Montreal and from Toronto. When the four units arrive in Toronto in the morning, two of them continue as far as Windsor, Ont. on the same train; one unit goes to Owen Sound on train 705. The last remaining unit returns to Montreal on day train 36. In the evening, the two units return on train #22 from Detroit, and continue with the train to Montreal. The unit which went to Owen Sound on train 705 returns on train 708, and combining with the unit arriving

From Montreal on day train #35, returns overnight to Montreal on the other section of train #22. With the arrival of both sections of #22 in Montreal in the morning, both units from one section and one unit from the other section combine, to handle train #354 to Quebec, while the remaining unit goes on train #36 to Toronto. In the evening, the units which went to Quebec on #354, return on #355, and combining with the unit arriving on day train #35 from Toronto, return overnight on both sections of #21 to Toronto, two units per section. (If this is not clear, we suggest that you get out your timetable and work it out. -Ed.)

It is reported that clearing of Pacific Great Eastern Railway's right of way between Squamish and North Vancouver is progressing rapidly, and it is said that survey work on the extension of the line from Prince George, the northern terminus, to the Peace River area will commence as soon as weather permits.

Checkers have been riding Montreal commuter trains recently, reportedly to assemble data with a view to study the possibilities of a pooled service by the CPR and CNR on the Montreal and Lakeshore suburban runs.

First units of the Canadian Pacific Railway multi-million dollar passenger equipment order from the Budd Company of Philadelphia, Pa. are expected to be delivered in June. It is expected that the first cars will be sleeping cars.

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One hundred years ago, the Grand Trunk Railway commenced the construction of the Victoria Bridge across the Saint Lawrence River between Montreal and St.Lambert; a structure, which, for many years, was considered the eighth wonder of the modern world. The work was famous for the boldness of design, the ingenious methods of construction, the speedy completion and the famous men connected with it. So that these early engineering triumphs will not be forgotten, we are starting a series of articles entitled "Crossing the River" which will describe not only the Victoria Bridge itself but other projects to connect Montreal with the South Shore.

CROSSING THE RIVER  
Part I.

by Robert R. Brown

From time immemorial, the Saint Lawrence River has been the great highway of eastern Canada; for centuries, and perhaps millenii, carrying the canoes of Indians, and since the XVII Century, the commerce of a growing nation. At the same time, it formed a barrier between the opposite shores and it was not until the advent of the steamboat that people ventured across to the other shore unless some very important reason compelled them to do so. Only in wintertime was it safe and easy to cross and even then sudden movements of the ice would often create serious hazards, During the early winter freezeup and during the spring debacle, crossing was particularly dangerous and the usual whaleboats and birch bark canoes could not be used because the sharp edges of the ice would cut through the sides in no time, and the occupants would soon find themselves floundering about in the icy water. To cross at such dangerous times, dugout canoes, made

... single logs, were used, and well into the XIX century, too. A very fine specimen of one of the dugouts, which was used to take the mail across from Montreal to Longueuil, may be seen in the Chateau de Ramezay Museum.

During the winter months all navigation ceased and Montreal was cut off completely from the sea except by overland routes to Portland, Boston or New York. These routes terminated on the opposite shore and much thought was given to improve the means of crossing the river safely and easily. The two principal trans-fluvial ferries ran to Laprairie and to Longueuil; with a steamboat running to Laprairie as early as 1822, and a similar service beginning, to Longueuil, in 1829. After 1852, the Laprairie service was of little importance and served only local needs, but the Longueuil ferry was active until about 25 years ago, and for a brief period, from 1852 to 1863, the St. Lambert ferry was the most important of the lot.

Canada's first public carrier, the Champlain and Saint Lawrence Railroad, served as a portage line linking with the navigable waters of the St. Lawrence River and Lake Champlain and it reached the south shore of the Saint Lawrence at Laprairie in the summer of 1836. Its terminus was 7 miles from Montreal and the company had to build a specially-designed steamboat, the Princess Victoria, to navigate the treacherous waters of the shallow Laprairie Basin and the rapids which then existed off Pointe St. Charles. For a few years, the railway did not operate in winter, so the annual freeze-up did not matter very much, but even then the pattern of Canada's great future was beginning to unfold and it was realized that something better would soon be needed.

Early in 1852 the Champlain and St. Lawrence Railroad abandoned its original terminus at Laprairie and built a new line from Cote de la Bataille to St. Lambert, where it descended into a cutting, known until recently as the Gully, passed under Riverside Drive, and then ran out on to a long wharf which extended out to and beyond Moffats Island. The station at the end of the wharf was called South Montreal and ferry boats ran from there to the foot of Jacques Cartier Square. The wharf, in reality a sort of bridge, was a remarkable structure for 1851 when the art of bridgebuilding was little known in Canada. It was more than 1200 yards long and that made it about half as long as the Victoria Bridge. Between the St. Lambert shore and Moffats Island, and probably west of the Island too, there was a continuous cribwork structure, backfilled with stone and earth, which carried the track well above the high water mark. At intervals of 56 feet, centre to centre, there were sluiceways, 20 feet wide, to permit the water to flow through and, as part of the river was very shallow with comparatively little strong current, the obstruction, amounting to 64%, was of little consequence. Undoubtedly the structure was protected from the violence of the spring break-up by well-placed rip-rap but fortunately the worst ice-shoves occurred elsewhere. Beyond the island, the wharf extended 300 yards to deep water. The South Montreal terminus, and its peculiar bridge, was abandoned in 1864, after the Champlain trains began using the bridge.

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With this issue, we are including a copy of the Royal Bank of Canada's current newsletter, dealing with Canadian Railways.

Editorial Office: 6959 De l'Epee Ave., Montreal.



# THE ROYAL BANK OF CANADA

## MONTHLY LETTER

HEAD OFFICE: MONTREAL, APRIL 1954

### RAILROADS IN CANADA

CANADA uses more railway transportation per person than any other country in the world, and Canada's unit cost of transportation is the lowest of all the hard currency countries.

Our standard of living and economic development depend upon abundant sources of transportation. Dr. R. W. Miller, of the Graduate School of Business Administration, Harvard University, has said that the United States and Canada would cease as organized, civilized communities within one month if transportation were to suffer a severe paralytic stroke.

As has been remarked so often in these Monthly Letters, our treasures of natural resources have been in existence through countless thousands of years, but it took the genius of human invention and the energy of human endeavour to make them available for the use of mankind.

The backbone, and many other important bones, of Canada's transportation today is 43,000 miles of railway. These railway lines opened up our west for agriculture, brought Canada together as a vigorous nation and made available for use the forests and minerals of eastern and central Canada. Today they carry the goods we produce to seaports for shipment to all the world and to market places on this continent.

Railways are one of the factors in establishing the relative economic condition of various areas. Montreal, Halifax, Saint John and Vancouver have the natural advantage of being seaports, but the railway lines extend this advantage to inland cities like Winnipeg, Regina and Edmonton, to the ore-producing fields of northern Quebec and Ontario, and to agriculture everywhere.

Besides the material benefits wrought by railway transportation, there are moral and intellectual advantages. Men cannot live by going quickly from place to place, but the exchange of views and the dispersion of culture and thought tend to remove national and provincial antipathies. Ideas, like goods, have to be spread abroad upon the earth.

#### *Canadian Railroads*

What railways have we in Canada? Because of their size the Canadian National and the Canadian Pacific constitute the country's railways, for all practical purposes, but there are several important regional railroads operated independently. These lines total 5,400 miles.

When we boast that Canada has more miles of railway per capita than any other country it is a wholesome exercise to look backward toward the beginning. Only six years after the opening of the first railway in the world, the Liverpool and Manchester, a charter was granted to a group of business men in Montreal for construction of the Champlain and St. Lawrence railroad. This 14½-mile line, connecting the St. Lawrence with the Richelieu, went into service in 1836, and for ten years it was the only railway in British North America.

There were three great periods of railway construction: the 1850's, when the Grand Trunk and the Great Western were built; the 1870's and 1880's, when the Intercolonial and the Canadian Pacific were built, and the 1900 to 1917 period which saw construction of the Grand Trunk Pacific, the National Transcontinental and the Canadian Northern.

In 1867 the colonies that came together in Canada's Confederation had 2,529 miles of railway which had cost about \$160 million.

#### *The Canadian Pacific*

The first lonely railway arm reaching westward was an audacious challenge to nature and to fortune. It had to be driven through the rocks, bridged across the muskegs of Northern Ontario, carried across trackless plains for over a thousand miles, and it had to breach four separate mountain ranges to reach the Pacific Ocean. For nearly two thousand miles there was not in sight — nor even in early prospect — enough traffic to pay for operation of its trains. It had nothing to recommend it except the visions of men.



But it was tackled with such spirited energy that the last spike was driven five-and-a-half years before the contract said the job should be done. The first train from Montreal to the Pacific reached Port Moody in July, 1886. The "great wilderness" so much feared by detractors of Canada had passed from existence.

We mentioned the "last spike" in the C.P.R. transcontinental line. There is a "last spike" ceremony in every railway extension (only a few months ago the C.N.R. president drove the last spike of the Lynn Lake extension into the open spaces of Northern Manitoba) but actually no real last spike can be driven, for railways must keep growing or die. During 1952 the C.P.R. spent \$60 million on improvements and additions, and it plans capital outlays of \$475 million during the succeeding five years to replace worn-out facilities and to continue the programme of improvements and additions needed to keep pace with our expanding economy.

### *The Canadian National*

In mileage, the Canadian National Railway is the largest in North America, and it is the only railway serving all ten provinces. To its 24,150 miles of first main track must be added about 9,000 miles of secondary track, yards, sidings and spurs, making a grand total of 33,046 miles. It has more than 5,000 stations, nearly 6,000 bridges and 64 tunnels. It is Canada's largest employer and Canada's largest buyer.

The Canadian National system had its beginning in Canada's first railway, which became part of the Grand Trunk in 1852 and hence part of the Canadian National in 1923. The C.N.R. came into being when the Canadian government was trying to create a unified system out of a transcontinental mass of unco-ordinated lines which it had acquired to prevent their collapse through bankruptcy. The formation of the Canadian National Railways did not represent a deliberate experiment in socialism. It was a device to protect the people of Canada from a disastrous breakdown in transportation. All sorts of expedients were tried before government ownership was resorted to.

The lines were, for the most part, poorly equipped and in bad physical condition. Many of them had been constructed into areas which did not develop trade. Not only did the new management face the problem of rehabilitating plant and equipment, building morale, and unifying the crazy-pattern mileage, but it had to bow its back under the indebtedness of the lines it took over, shouldering a quite fantastic burden of interest.

Today, the C.N.R. can boast of many things. It was the first railway in North America to put a diesel-electric road locomotive into service. Its rolling stock has improved steadily. Its property investment account expenditures in the year 1952 amounted to \$125 million, including \$82 million for new equipment.

### *The C.N.R. and the C.P.R.*

No exact comparison can be made between the two railways. It would be unrealistic to criticize side by side a railroad that was built as a single integrated

unit and one which was a conglomeration of roads, not only not co-ordinated, but in many instances competitive.

The majority of the provincial representatives and of the representatives of other bodies who appeared before the Royal Commission on Transportation favoured continuance of the present system of two large railways, with the necessary corollary that the Canadian Pacific must be allowed to live and to operate as a privately owned railway.

Amalgamation has few friends. Various forms of joint operation have been carefully considered and condemned. Unification has been strongly opposed by labour unions (which fear loss of jobs), by shippers (who question whether the quality of service could be maintained without competition), and by communities (which would, many of them, suffer if the necessary efficiency of operation demanded abandonment of lines).

There is a real measure of co-operation between the railroads. Efficient transportation service is being performed by both C.N.R. and C.P.R. through pooling arrangements. Much wasteful competition has been eliminated and better schedules have been arranged. Standardization of freight car design, carried out as a joint effort, has benefited both lines.

### *Railroad Services*

These two Canadian railroads are engaged in a country-wide service. The business done at Halifax on the Atlantic and at Vancouver, 3,500 miles away on the Pacific, ends up in the same ledger. A haul of 4,506 miles is possible between two points on one railway: St. John's, Newfoundland and Prince Rupert, B.C. The average haul between east and west is about 1,800 miles; the average haul of all traffic in 1949 was over 400 miles per shipment. In the United Kingdom in 1948 it was only 72 miles.

The ability of the railroads to move vast quantities of raw material to central locations for fabrication and then to distribute finished commodities to the far ends of the nation and to shipping points is the key to Canada's industrial health. With the exception of pipelines for the transportation of liquids, no other instrument of land transportation can compete with the railways for low cost.

The railways are constantly bringing in improvements and supplementary services such as expedited movements, fast freight schedules, and "specials" for livestock and perishables. Striking evidence of improved efficiency is found in the C.N.R. performance figures over the past 25 years. Comparing 1952 with the boom year 1928 it is found that the C.N.R. furnished 67 per cent more freight transportation with six per cent fewer locomotives and five per cent fewer freight cars, while the average speed of freight trains increased by 27 per cent.

Both companies now operate services which link the shipper's shipping door with the addressee's receiving door. These truck and rail routes for less-

than-carload or package freight are no longer novelties, but are part of the regular railroad schedule. They not only speed up and make more convenient the service between cities, such as Toronto and Montreal, but they provide tributary service to smaller places.

Passenger service, too, is receiving attention, though the railroads are inclined to look a little glumly at their passenger-traffic ledgers. Less than eight cents of every dollar earned by the C.N.R. comes from passenger fares.

The Royal Commission which reported in 1951 came to the conclusion that "freight and passenger services are essential and if the passenger fares cannot be raised to produce sufficient revenues to enable the passenger traffic to pay its own way the freight traffic must bear the burden."

Both railways operate many subsidiary services: hotels, telegraphs, express, steamships, airlines; both conduct research, assist in agricultural development, and participate in immigrant settlement. Each railroad has a department devoted to assisting Canada in developing its industries and natural resources.

### *Problems*

Like all other businesses, the railroads have their problems, and, as is usual, these have mostly to do with making financial ends meet. An absorbing analysis of Canada's transportation problems is given by Dr. H. A. Innis, one of the commissioners, in his memorandum printed as an appendix to the *Report of the Royal Commission on Transportation*, February 9, 1951, obtainable from the Queen's Printer, Ottawa.

Donald Gordon, C.M.G., Chairman and President of the Canadian National Railways, said in an address: "The railways must justify their existence by rendering the kind of service the public wants at a price they are prepared to pay. Freight shippers, the travelling public, and other customers of the railways do not extend their patronage and support for mere reasons of sentiment, nor do they do so because they have no other choice. Indeed, the growth of competitive forces in the field of transportation has marked a significant change in the economic climate and presents a continuing challenge to railway management and railway men generally."

The Royal Commission referred directly to motor truck competition as a factor making it increasingly difficult for railroads to maintain service at a charge that pays. "Truck competition in Central Canada has grown to such a size as to eat into the railways' revenues by capturing a great portion of their most profitable traffic and by making it necessary for them to reduce their rates to what looks like a dangerously low point in order to retain some of it." The Commission went on to say that the difficulty of the problem is added to by the fact that truck traffic, in by far its largest form, comes under provincial, instead of federal, control, and the trucks are divided between private vehicles carrying the goods of their owners and the trucks that work for hire.

W. A. Mather, President of the Canadian Pacific Railway, touched upon the matter in an address in September. He pointed out that the railways have no longer a monopoly of land transport, but are in competition with trucks which run on highways built and maintained by the state, with air transport and with pipelines. Public and politicians alike continue to act as if trucks, airplanes and pipelines did not exist, and the railways remain under old regulations.

Mr. Mather's solution is stated in these words: "No competing transportation service must be put, deliberately or inadvertently, in the position of being burdened with a service or an obligation at a rate or on terms which demonstrably do not cover the costs of providing the service. Such a principle, I suggest, carries with it the obvious corollary that no transportation service can continue to be subjected to an obligation from which, if it should clearly constitute such a burden, it cannot escape either by raising its price or by withdrawing the facility."

It is time for all concerned to reconsider their attitude toward railroad economies, in the opinion of the Royal Commission, in whose report it is said: "Our railways should be allowed to practise similar economies (to those in the U.S.A.) in cases where operations are shown to have become substantially unnecessary or to be definitely unprofitable, especially, of course, when it is shown that reasonable service can be assured by other agencies."

### *Progress*

Notwithstanding their problems, the railways continue to press ahead in their attempt to improve the service they give.

The changeover from steam power to diesels is making steady progress, and this change may well go down in history as one of the most significant developments of this mid-century period.

The diesel makes faster starts under full load and hauls greater tonnage; it can be available for service for more than 90 per cent of the time compared with the 50 per cent of the steam locomotive; its maintenance costs are lower. The diesel car offers opportunities for developing new sources of profitable traffic and for reducing the costs of branch lines and local runs.

Another mark of progress is the provision of better facilities for the handling of cars and their freight at terminals and reshipping points. Most spectacular development is the C.P.R.'s push-button retarder yard outside Montreal. An 85-car train can be switched in about 25 minutes, with its cars directed by push-buttons on to the proper one of 48 tracks ready to be made up into trains for as many destinations. The average number of cars handled in a day is 2,300.

### *Speed*

Speed is not an obsession in Canada as it is in some other countries. Claims about how fast one can go

from here to there on "ultra-speedy" or "superspeed" trains form little part of the Canadian railroad picture.

There is good reason for this. Canada is served by two great railroad systems, whereas the United States, for example, is served by several hundred shorter regional railways. The Canadian railways seek sustained accomplishment over all their trackage, rather than bursts of speed over segments of the route.

We have not gone in for fast through trains. There is not enough "terminal" traffic, that is, people travelling between say Montreal and Vancouver, to justify special trains. The stage of our development demands the sort of service we now have. Canadian trains, stopping at many stations, have a great deal of express carrying to do — what the railroads call "head-end work." This is increasing, rather than diminishing, because the flag stops of a few years ago have become more than that, and the increasing population clustered around them must be served.

It would be a bad thing for the country's development, the railway companies believe, to play up quick runs from city to city and ignore the thousands of small communities that lie between them.

### *Transportation Policy*

Each form of transportation has its advantages and its disadvantages, each can function economically and advantageously in certain particular fields. If a shipper wants a small amount of goods moved for a short distance with quick delivery, the trucks should be at his command. If he must have light articles from a distance in a hurry, air cargo space would be available. Water transportation, where it is to be had, is efficient for bulk cargo if there is no demand for speed. Pipelines are obviously best for conveying petroleum. And if the shipper is interested in moving commodities at low cost, with reasonable expedition, he will use the railroads.

The history of the legislation in Canada indicates that Parliament has always felt that the government should take an active interest in the railways. In fact, Canadian railways have been projected and built as manifestations of public policy, often with financial assistance recommended by the government, agreed to by Parliament and paid for by the people of the country. They were part of a deliberate, patient effort to create a country that was not a natural outcome of economic geography. The great railroad systems "stitched it together" from sea to sea. The national policy which actuated them is told in detail in the *Report of the Royal Commission on Transportation*.

An important feature of the national transportation policy is that the two great railway systems shall have the opportunity to operate side by side, providing needed services to the country and serving as a check and a balance on each other without destroying the opportunity of the privately-owned road to live and progress and to earn a fair revenue.

The Royal Commission report remarked that while the C.P.R. is entitled to an opportunity to earn a fair return on its railway investment the C.N.R. as a publicly-owned enterprise operating certain properties and providing certain services irrespective of their commercial merits should be expected to do the best it can at rates fair to the Canadian Pacific. The attempt to establish comparability, either to excite emulation or to make one railway a check on the other, should be definitely abandoned. "It is not practicable," said the *Report*, "to arrange suitable handicaps for such a race."

### *Regulation of Railroads*

In an address to the Railway Club in February Mr. N. R. Crump, Vice-President of the Canadian Pacific Railways, said: "The division of work between road, rail, water, air or pipeline should be governed by the consumer, but each of the competitors should be governed by similar conditions, rules and regulations. Then the consumer would best be able to pick the service fitting his needs and his pocketbook."

Many persons have no conception of the extent to which railways are subject to outside authority. As Mr. Gordon pointed out in an address, the regulations are so minute as even to specify that a conductor, ejecting a passenger who refuses to pay his fare, must first stop the train!

Representation in behalf of the railroads in recent years have not wept over the amount of competition there is, or the degree of regulation, but have deplored the fact that the several classes of competitors are not required to observe the same rules.

These railroads, looking back upon their remarkable record of building and serving the nation during the last hundred years, have a keen pioneering outlook for the world of tomorrow. They know that the average ton miles of freight handled each year for each citizen is about 1,500. They know, too, that the increase in population of 3½ million between the last two censuses demands increased carrying of that many times 1,500 ton miles. They are, in their plans to cope with the new needs of the country, moving along with technological advances in railroading, and at the same time seeking ways to economize without sacrificing the high quality of their service.

Canada has reached a stage of maturity in which its economic existence depends increasingly upon its facilities for the sure and speedy and economical transport of raw materials and finished products.

One end of steel is found in the distant places where Canadians are tapping the natural resources of their country — the wheat fields, the oil fields, the mines, and the forests — and the other end of the track is at a warehouse, a factory or a shipping dock.

The problem in transportation is to provide adequate modern services at the lowest possible cost, without unnecessary or uneconomic consumption of labour and materials.