

November, 1953 - Number 94

The Society meets on the third Friday of each month in Room 486, Toronto Union Station at 8:30 p.m. The next meeting will be held on November 20th, at which time, it is hoped, the entertainment will consist of a showing of one or more films produced by the Pennsylvania Railroad.

RDC TRIP - The Canadian Pacific Railway will place the two RDC cars on trains 629, 630 and 631 on November 9th, rather earlier than previously announced. Accordingly it has been decided that the U.C.R.S. Dayliner excursion will be moved forward to November 21st. With ten or more participants, it is expected that a party rate on fares may be obtained. Members will ride the RDC cars (train 631) to London, and return on either train 22 or 632. Further details of the excursion appear on page 9.

A word of thanks is given here to the many members of the Society who supplied 35 mm. slides for the October meeting program, and particularly to Mr. Dave Ross, of the Delaware and Rutland Model Railroad Club, who showed an interesting collection of old glass slides which featured principally heavy railroad electrification of 35 to 40 years ago.

GREAT WESTERN RAILWAY CENTENARY MONTH

On November 10th of this year, the attention of all Ontario rail enthusiasts should be focused upon the CNR line from Hamilton to Suspension Bridge (Niagara Falls), as 100 years ago that date, the first regular train operated on the Great Western Railway, original owner of this stretch of track, between the named terminals. The operation of this train marked the beginning of a colourful history for the railway which probably did more than any other to open up and develop Southwestern Ontario.

It was recognised quite early in the 19th century that long distance railways (beyond the primitive portage roads) would prove a great boom in Upper and Lower Canada. Seven railway charters of considerable magnitude had been issued by 1841, but none of these had been acted upon up to that time, while railway construction was proceeding apace in the United States. One of these seven unfilled charters was granted in 1834 to the London and Gore Rail Road Company "for the purpose of constructing a single or double track wooden or iron railroad from London to Burlington Bay; and also to the navigable waters of the Thames and Lake Huron; and to employ thereon the force of steam or the power of animals, or any mechanical or other power." In 1836 a survey for the route was made from Hamilton to Detroit River.

The original 1834 charter was renewed in 1845, and the name changed at this time to the Great Western Railroad. The power to build was also extended. Still the promoters, who by this time included Sir Allan MacNab, Hamilton's leading citizen of the day, could not raise sufficient funds to begin construction of this important future link in the Canadian economy. By 1851, the only lengthy stretch of railroad in Canada was the unfinished St. Lawrence and Atlantic, which was being built to give Montreal connection to an all-year port (Portland, Maine). Only 60 miles of track existed in Canada at this time, as contrasted with 9021 miles in the United States.

However, a variety of political and economic factors combined to produce the railway building boom of the 1850's, the first of three such "booms" in Canadian history, spaced at approximately thirty year intervals. Several railway projects began in earnest at this time, given new life in some cases by promises of government assistance. Two of these lines were major undertakings, the Grand Trunk and Great Western Railways. The Grand Trunk project was intended

as a main line of communication for British North America. This it eventually became, although not as completely so in later years as its original builders had hoped.

The Great Western, by contrast, was designed more as a link route bridging the gap between Detroit and Buffalo, and securing thus a great proportion of the growing and lucrative traffic of the American Mid-West. The southwestern portion of Ontario, or then Canada West, resembles an arrow pointed at the heart of the continent, a deep southerly penetration of Canadian territory surrounded by American soil. As the greatest towns of the United States were growing up in the latitude of this projection, the promoters of the Great Western hoped to be able to tap the lion's share of the traffic. As construction finally got underway in 1851 (ground broken at London in 1849 at a great public ceremony, but nothing further done), the railway's backers had the through American traffic in mind. They realised, nevertheless, that the intervening country was potentially a source of valuable on-line traffic.

The Provincial Gauge of 5 feet 6 inches was forced upon the railway by the governmental legislature, and dampened somewhat its effectiveness as a bridge route; nevertheless, the Hamilton group headed by Allan MacNab, with English financial backing, pushed the road forward with a speed in peculiar contrast to the years of inaction and indecision which had plagued the project since the original charter of 1834 and survey of 1836. The years 1852 and 1853 were ones of busy activity all along the proposed route, with construction proceeding not in a direct continuous line, but usually from those points where supplies could be assembled most easily and leaving the most difficult segments until the last. Supplies had to be hauled over the uncertain roads of the day with all of the attendant difficulties and increased expense (over rail shipment).

The name of the company was changed to the Great Western rail-WAY in 1853. The Hamilton - Niagara Falls segment was the first to be opened to regular traffic. This occurred on November 10, 1853, when a celebration train composed of six cars of merrymakers left Hamilton heading for dinner at Niagara's Clifton Hotel. The train broke down some miles short of its destination, and "the first run" had to be completed by road. Nevertheless the road was open, and Hamilton had obtained a very significant connection to the Niagara Frontier.

Construction of this first link was relatively simple, with the ascent of the escarpment posing the only major problem. This was accomplished at Merriton, on much the easiest of the four railway grades up the escarpment east of Hamilton. The route selected was virtually straight from the foot of this grade to the point where the railway came up against Burlington Heights.

The servicing and terminal yards at Hamilton were located on a marshy section on the south side of Burlington Bay west of James Street; the passenger station was located at Caroline and Stuart Streets, a location which it maintained until 1930.

Shortly afterwards (December 17, 1853) the line to London was opened, the originally planned course of the London and Gore Rail Road. Construction here proved a much more difficult task.

In the first place, the railway was located away from navigable water for the most part, so supplies had to be hauled in by road. Moreover, some of the most difficult of the morainic hills in Southern Ontario intervened in the path of construction. The crossing of the northeastern corner of Coote's Paradise (a marshy area at the western end of Burlington Bay) required two years of incessant work of filling before a permanent track could be laid across it.

Immediately west of the Hamilton terminal, the line was forced to abandon the straight course it had followed through the Niagara Peninsula, and to skirt Burlington Heights, then cross this ridge by means of a deep gravel cutting and bridge the neck of water which at that time connected Coote's Paradise to Burlington Bay. This expensive routing was the whim of Sir Allan MacNab who wished to make sure that the railway passed his estate (now Dundurn Castle on York Street, Hamilton).

In an attempt to bridge the neck of water draining Coote's Paradise, great oaken piles were driven into the soft material at the bottom without striking solid rock. The expedient of filling

the marshy stretch with loads of gravel was then undertaken. For two years, continuously 24 hours a day, gravel and rock were poured into the hole; but as this material disappeared and spread out on the bottom, the appetite of the marsh seemed insatiable. Finally the gravel remained above water level, but even so it settled and threw the grade out of alignment. Trestling was undertaken at this point; this also sank, but finally, after more dumping, the roadbed remained stable and permanent track could be laid across this difficult segment.

The Desjardins canal also proved troublesome. In order that a railway swing bridge might be built, the course of the canal through Burlington Heights had to be changed. While this work was in progress and the canal blocked, the Great Western paid the town of Dundas an indemnity for the inconvenience which it suffered. Nevertheless, by this date, the canal had largely outlived its usefulness. The half-mile embracing the crossing of Coote's Paradise and the canal was undoubtedly the most difficult stretch of construction on the entire railway, and probably has been the most difficult piece of railway construction in Southern Ontario.

The GWR main line had to climb from Lake Ontario level (about 275 feet at the north end of Coote's Paradise) to the Lake Erie level (one of 800 feet) in a few miles west from Dundas. This necessitated a long steady grade, one which has been an operating problem right to the present day, and which can never be rectified. A familiar sight today are the pusher Mikados waiting at Bayview Junction to assist the next freight train up the Dundas "hill".

In making this ascent, the Great Western could not serve Dundas on the town's own level, but secured a right-of-way two hundred feet up the escarpment face. This provided the turning point in the struggle for supremacy between Hamilton and Dundas which had been very real up until that time.

The GWR ignored the town of Brantford in its westward passage, and this fact gave rise to a rather peculiar layout of rail lines in the vicinity in later years as Brantford grew. The most peculiar feature is the fact that a segment of the 1853 Great Western main line north of the town is now totally abandoned. The railway did construct a branch, also now abandoned, into Brantford some 18 years later. West of the Grand River crossing (at Paris) GWR locating engineers had an easier time of it, and west of London, the table-top countryside of this part of Ontario made for long stretches of tangent.

The Hamilton to London opening was closely followed in January 1854 by the opening of the London - Windsor portion, and the main line was completed.

Later in 1854, construction began of a branch line, under the charter of the Galt and Guelph Railway from Harrisburg (east of Paris) northerly to Galt, and this line was extended to Guelph, on the GTR main line, in 1857.

The Great Western was quite prosperous for the first few years, and the expected through American traffic arrived, but only because of the fact that an alternate route did not exist at this time — the necessity of changing freight car bodies to wide gauge trucks for the haul over the Great Western was onerous and expensive. Early traffic consisted primarily of agricultural produce from the recently opened Mid-West and the supplies for the growing town of this region.

The great Niagara Suspension Bridge was opened in May 1855, greatly facilitating through traffic. The GWR also transferred freight to ships for a time at Hamilton, for water transport to Oswego, Cape Vincent and Ogdensburg, in competition with the Grand Trunk.

A 68% increase in traffic was registered in the second year's operation of the railway - the industrialisation of the City of Hamilton was given its start with the arrival of the Great Western, which made possible the importing of Pennsylvania coal.

Early rolling stock and rails were purchased in Great Britain and the United States. The first GWR locomotives were brought piecemeal to the property by ships on Lake Ontario. After being unloaded, they were assembled by mechanics brought from England for this purpose. The first

locomotives purchased came from Bristol, England and Lowell, Massachusetts.

Although the Great Western desired primarily to make its bid for through traffic as a bridge route, the management began to think of attracting more local traffic by constructing a number of feeder lines. In 1855, the company secured control of an enterprise which had a separate incorporation as the Hamilton and Toronto Railway (See U.C.R.S. Bulletin No.11), but had not yet completed its line for traffic. The Great Western, in taking over this line as a subsidiary, thought of it as a branch line. Originally, during the time that the railway east from Toronto was under a separate ownership (Grand Trunk) this no doubt was true. But eventually this 40 miles of track became as busy, if not more so, than any other line in the Dominion. Yet even today, railroad men refer to this as the "Toronto Branch".

The line was actually opened to traffic in December and was accordingly merged with the GWR to form a major feeder for the company. Also completed soon thereafter was a railway from Komoka to Sarnia. The railway now provided a short cut across the circuitous navigation route between Lake Huron and Lake Ontario.

The railway became a major industry for the city of Hamilton. In addition to possessing the company's local head office (aside from the British control), the principal car and locomotive repair shops and a rail rolling mill were located here. The principal shop building was erected in 1849, and became no small factor in the city's growing industrial economy, and Hamilton's renown as a railway centre grew apace. The shops began to build engines for the road the road and thereby reduced the dependence upon foreign sources for new motive power. A number of famous locomotives of the day were turned out for the system's own use in 1860 and 1861. In another respect the shops created a "first". Although it is a very little known fact, particularly in the United States, the world's first sleeping car was manufactured in Hamilton in the Great Western shops by Master Car Builder Samuel Sharpe, in 1857. This was two years before the Pullman and Wagner concerns in the United States brought out their pioneer vehicles. Another Great Western innovation was the practice of sorting letters enroute in order to speed mail delivery.

Complicating factors entered to disturb the early traffic pattern so well established by the railway. The Grand Trunk cut deeply into Great Western territory with its lines westward from Toronto to London and Sarnia. The attractions of an all-Canadian route from the Lower Lakes to Montreal and Quebec was beginning to take its toll of the Great Western traffic. Then too, the Grand Trunk absorbed the Buffalo and Lake Huron Railway, which with its line between Fort Erie and Goderich, cut a diagonal swath through the Great Western's domain. Although this line was never very profitable, it had some effect.

From 1866, the GWR was permitted to lay a third rail to Standard gauge on its main line, and no break of bulk or truck interchange was thereafter necessary. The "provincial" gauge was generally abandoned by the Canadian railways in the early 1870's, and the Great Western had removed all of its outside rail by 1873.

However, more trouble loomed for the Great Western as rival lines were constructed. The Lake Shore and Michigan Southern line south of Lake Erie was formed by the consolidation of a number of early short roads and this took away much of the American traffic. On top of this was the incorporation in 1868 of the Erie and Niagara Extension Railway (renamed Canada Southern in 1869). This company had as its purpose the construction of a direct route between Fort Erie and Amherstburg, handling traffic between the two America frontiers.

Construction proceeded quickly on this new trunk line, and the excellence of the resulting piece of railway was a further blow to the Great Western's position. The Southern was laid out with very few curves and mild grades, and to this day remains perhaps the best stretch of railway line, physically, in Canada. The route was opened in November, 1873, and the Michigan Central Railroad soon acquired a controlling interest in the Canada Southern (diverted to Windsor) - by

1883 the Canada Southern was completely swallowed up by American interests. The Great Western lost a great part of the through interchange traffic when the NYC - MCRR connection became the Canada Southern line.

In an attempt to combat the new company more effectively, the Great Western constructed its "air line", a direct connection between Fort Erie and Glencoe, and one which generally paralleled the Canada Southern. This was effective to some extent, and in 1897 the Wabash Railway negotiated trackage rights over the "air line" to connect Detroit and Buffalo. The agreement is still in force, and virtually all of the trains using the route are those of this American road at the present time. Except for the construction of a short cutoff from Niagara Falls to Allanburg, the Great Western Railway did not indulge in further construction. However, control was acquired, through bond purchase, of the Wellington, Grey and Bruce Railway (Guelph - Southampton and Palmerston - Kincardine, the London, Huron and Bruce Railway (London - Wingham) and the Brantford, Norfolk and Port Burwell Railway (Brantford - Tillsonburg). The London and Port Stanley Railway was leased in 1872 for a period of 20 years.

The competition between the Great Western and the Grand Trunk's rival lines in Southwestern Ontario became so intense that both companies were suffering greatly therefrom. Then too, the Hamilton directors of the Great Western began to realize that through traffic for their road had better possibilities from their exploiting the all-Canadian route north of Lake Ontario via Toronto, than did any further hope of American traffic. The rival Canada Southern with its magnificent route had forever ended the Great Western's chances of having a great share of this. Thus came about the bold decision which was manifested August 12, 1882, whereby the Great Western ceased to exist as a separate entity. The lines which had comprised Hamilton's railway were completely taken into the Grand Trunk fold.

With the merger, the GWR departments were taken over by Grand Trunk departments located in various cities other than Hamilton. The offices went to Montreal, the locomotive shops to Stratford and the car shops to London. The local operating headquarters went to Toronto, a more convenient location for the Ontario portion of the Grand Trunk. The locomotive shops at Stratford was greatly enlarged in 1888, this enlargement necessitated by the relocation there of the Hamilton facilities, including much of the machinery that had been employed in the Great Western shop.

Traffic on the Great Western lines did not suffer from the change in management. Rather it increased as the Grand Trunk had less occasion to route its through freight via Stratford and Berlin with the better route through Hamilton available. With the exception of the Lynden - Paris portion, all of the Great Western's Toronto - Sarnia line now forms a vital link in the CNR main line. The Grand Trunk diverted the main line via Brantford in 1905 when it constructed a cutoff to the city from Lynden, on the old GWR main line, and used the Brantford - Paris segment of the old Buffalo and Lake Huron.

Tangible traces and relics of the old Great Western are very few today. The Toronto passenger station lasted through various subsequent uses until early on May 17, 1952 when it was destroyed in a spectacular fire (see *Newsletter* 77). However, many miles of CNR right-of-way remain as a testimonial to Great Western locating and construction engineers.

There follows a list of the operating divisions of the Great Western Railway on August 11, 1882, at the time of the GTR merger:

<u>DIVISION</u>	<u>EXTENT</u>	<u>MILEAGE</u>
Main Line	Niagara Falls - Windsor via Hamilton and London	229.5

Air Line ("Loop Line")	Fort Erie - Glencoe	145.0
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Toronto Branch	Hamilton - Toronto	39.0
Wellington, Grey & Bruce	Harrisburg - Southampton via Galt, Guelph, Palmerston	129.0
Wellington, Grey & Bruce (Southern Extension)	Palmerston - Kincardine	67.0
London, Huron & Bruce	Hyde Park Junction - Wingham	68.8
Sarnia Division	Komoka - Sarnia	51.0
Petrolia Branch	Wyoming - Petrolia	0.5
L. & P. S. Branch	London - Port Stanley	28.9
Brantford, Norfolk & Port Burwell	Harrisburg - Tillsonburg Junction	42.7
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TOTAL MILEAGE	(ALL LINES IN ONTARIO)	801.4

CPR RDC CARS ARRIVE

The Canadian Pacific Railway's two RDC-1 cars 9050 and 9051, assigned to the Toronto - Detroit "Dayliners", arrived at Toronto's John Street roundhouse on October 24, 1953 from Montreal. The cars made a two hours trial run out of Toronto with press representatives on October 24th, and then were placed on public display at North Toronto Station on October 28th and 29th, coupled to a pair of immaculate express refrigerator cars (Nos. 5856 and 5857). The cars will enter service on the Toronto - London portion of the Dayliner run on November 9, 1953, and will be extended to Detroit on November 30th.

Few modifications appear to have been made from the standard RDC-1; the principal variation consists in a rather liberal use of paint on the exterior - there is a broad maroon band on the letterboard, a narrower one yet at belt rail level, and the ends are completely covered by diagonal yellow and black striping. (This similar to the markings now being applied to the ends of Lake Erie and Northern - Grand River interurban cars, in an effort to increase visibility at grade crossings).

A folder giving details of service is enclosed with this mailing.

ELECTRIC RAILWAY NOTES

TORONTO - The Hillcrest shops of the Toronto Transportation Commission are now engaged in the conversion of two man 1922-built Peter Witt car 2528 into a "staff maintenance" or garbage collection car for use on the Yonge Street subway. Because of this conversion, the car was used with trailer 2909, on the on the Michigan Railroad Club's TTC excursion last May 30, 1953. It appears that the present ends will remain on the car despite double-end conversion; one of the present two front doors has been blocked up while an opposing door has been cut into the back end between two body posts. The centre step well has been removed, leaving a door at subway platform height.

Old Toronto & York Radial Railway differential dump trailer 850, used for many years at

Hillcrest by the TTC as a scrap metal car, will become the sixth subway service car, a snow loader. Work is now underway on this unit.

Brill cars still in service on the Bay route are Nos. 2582, 2586, 2590, 2594, 2596, 2598, 2668 and 2670. The other ten cars still on the roster remain in storage at Russell.

The temporary tracks laid in 1950 on Maitland and Alexander Streets, which were used by Yonge cars during subway construction on the Alexander - Dundas portion, were removed during October.

MONTREAL - *A New Subway Plan* - On October 23, 1953, the Montreal Transportation Commission made public its initial and second stage plans for the provision of rapid transit electric railway service for the City of Montreal. The first-constructed route would be 7.78 miles in extent, embracing 16 stations and costing an estimated 117 million dollars. In general terms the line would be laid out as follows: From a terminal at Atwater and St. Catherine, under St. Catherine, then diagonally southeast to Victoria Square, under St. James Street easterly through Place D'Armes and Champ De Mars, to swing north under St. Denis to a point just north of Cremazie Boulevard.

The Commission states in its report that 87 million dollars of the subway cost should be divided among all the municipalities of the Metropolitan area, while the remaining 30 million dollars would be obtained from fares. It is estimated that a five-year construction period would be required for this first route. 3.39 miles of the route would be actually tunnelled through earth and rock, while the remainder would be constructed using cut-and-cover and open cut sections.

Downtown stations would necessarily be located close to ground level with no mezzanines.

Further legislative authorization is needed before construction begins. One of the five M.T.C. commissioners dissented in the report, believing that a subway is not necessary in Montreal.

Future routes, on which no detailed cost estimates were made, were suggested as follows:

(1) An extension from Atwater north-westerly to Sherbrooke, then along the line of Sherbrooke northerly near Girouard through Snowdon terminus, and along Decarie Boulevard (probably on existing car tracks) to Church Avenue in Ville St. Laurent.

(2) An extension easterly under St. Catherine from Dominion Square to the vicinity of Papineau, then north-easterly to Delorimier and Ontario, then easterly under or near Ontario to Viau, then south to St. Catherine.

(3) A branch from #2 at Frontenac following the general line of Frontenac and Iberville Streets to Jean Talon, then east to Pie IX Boulevard.

These additional routes would build the system to one of twenty-three miles.

➤ ST. DENIS ABANDONMENT - Seventy five buses took over the St. Denis car service from Craig Terminus to Cremazie on November 8th. The open track section north from Cremazie will continue as an isolated car line designated route 24.

➤ OTTAWA - The last car to Rockcliffe on the OTC "R" line was 804, leaving Buena Vista loop at 1:08 A.M., October 19th. Rush hours only bus service replaces the outer portion of the car line which now terminates at Sussex and John loop.

➤ VANCOUVER - The British Columbia Electric Railway abandoned the Burnaby Lake interurban line on October 23rd, and on the same date shortened the Central Park line to Park Avenue (city limits), so that this route now operates wholly within the city of Vancouver. The Marpole-Steveston and Marpole-New Westminster interurbans continue in service.

➤ N. S. & T. - An NS&T Railway official has stated that the proposed Welland - Port Colborne highway link does not constitute a threat to continued passenger operation on the Welland subdivision. The four remaining interurban cars have been rehabilitated to a degree in recent months, and have had "cat's-eye" stop lights placed on the ends because of the street operation through Humberstone.

L.&P. S. - The CNR has informed the City of London, owners of the London and Port Stanley

Railway, that it is interested in purchasing the electric line if the city can dispose of the passenger business.

U.C.R.S. RDC TRIP

Tickets for the RDC trip of November 21st will be on sale at the UCRS meeting of November 20th at the reduced party rate of \$5.00. Members who are planning to attend the meeting are urged to purchase their tickets at that time and thereby avoid delay. A UCRS representative will be on duty at the clock in the main concourse of the Union Station on Saturday before train time to provide tickets for those not attending the meeting.