

CANADIAN PACIFIC
RAILWAY

“NORTH SHORE LINE”

C. H. RIFF

CANADIAN PACIFIC
RAILWAY

“NORTH SHORE LINE”

PLACE VIGER STATION

C. H. RIFF

Remodelling of the C.P.R. Place Viger Station and Yards, Montreal.

Most of the work of remodelling the C.P.R. Place Viger station and yards with a view to increasing their capacity and making them more convenient, has been completed, and the new arrangement in the immediate proximity of the station is shown in the accompanying plan. The new arrangement of the terminals and trackage is shown solid, and the old arrangement, now replaced, is shown dotted.

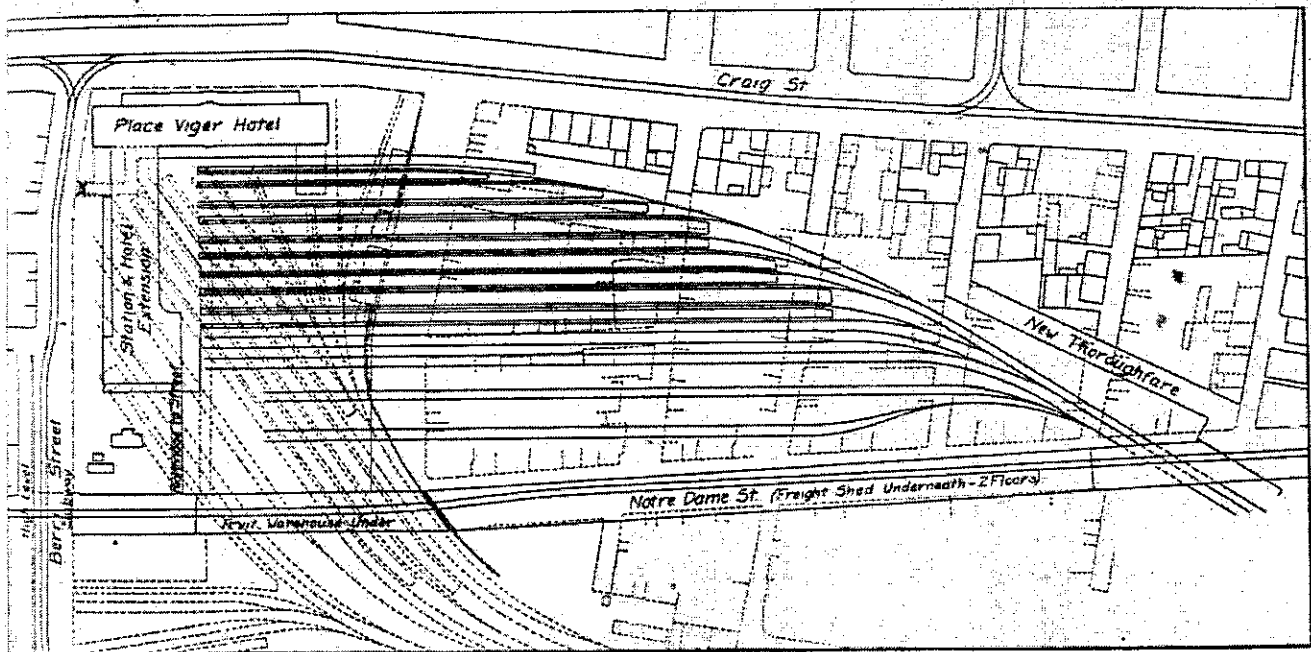
Formerly, the tracks entering the terminals from the right along the water front, branched off at an angle of about 45 degs. into the station yard, this arrangement taking up a great deal of ground without the best utilization of the space occupied. The station tracks were likewise not at all convenient to the waiting room. The freight shed space to the south, below Notre Dame street, was also very much cramped, and was not utilized to the best advantage, from the fact that most of the tracks were short spurs.

When the excavation had been completed, tracks were laid from the east end of the yard towards the then existing tracks, from which the traffic was then diverted. The old tracks being removed, the new ones were extended to the station building extension, which projects south from the old combined station and hotel. The station is now entirely separate from the old building, which is used solely for hotel purposes.

In the passenger terminals there are 10 tracks, with 10 platforms, accommodating 80 cars. A four track car storage yard provides for 48 more. Between the car storage tracks and the Notre Dame street bridge there are four freight tracks with a capacity of 83 cars, used for team freight. Under the bridge there is located a long 2 story shed for freight and fruit. This shed is served by a roadway on the north side and trackage on the south, which becomes a part of the new freight yard with terminal sheds at present under construction to the south of the bridge. This 2 floor shed under the bridge is used for bonded freight. It is 300 ft. long, and has windows and continuous sliding doors on the track side, and 20 separate

The Diesel Locomotive.

In a recent address before the American Society of Mechanical Engineers, wherein he described the progress being made with the acceptance of the Diesel engine as a standard means of developing power, Dr. Rudolph Diesel, the inventor of this type of internal combustion engine, described a locomotive constructed the early part of this year in Germany in which the Diesel engine is the motive power. The locomotive in outward appearance closely resembles an all-steel car, and weighs 85 tons. The wheel arrangement is of the 4-4-4 type, two Diesel engines set at an angle of about 45 degs. at the centre of the car driving on to a jackshaft between the two pair of drivers, this jackshaft being the crankshaft of the engine. Connecting rods from the jackshaft drive the driving wheels. Between these two inclined cylinders, there are two scavenging air pumps driven from the same shaft. Two horizontal air cylinders on the floor in front are driven from two small vertical Diesel engines, this com-



Old and New Arrangements of Terminal Facilities at C.P.R. Place Viger Station, Montreal.

The plan of enlargement made a radical change in the terminals, it being determined that the best arrangement under the circumstances would be to bring the tracks in parallel to Notre Dame and Craig streets, for which purpose considerable property surrounding the yards had to be purchased, the extent of this land absorption being indicated by the dotted blocks in the illustration.

Notre Dame street originally ran along the crest of a rise in the ground parallel to the shore line, between the shore line and Craig street. In the old arrangement, the tracks came through from the shore line to the Craig street level by cutting through this mound, and carrying the highway across on a bridge. The new arrangement necessitated the reduction of the ground level over the whole area of the new terminals, to the level of the former trackage, so that Notre Dame street is now carried across the lowered yards on a viaduct, beneath which are freight sheds. Notre Dame street was temporarily diverted while the excavation work was being pushed forward. The street on the viaduct is at practically the same level as before.

sliding doors on the team side. The sides are galvanized iron, supported on a steel frame. The fruit shed at the west end of this freight shed is built under the old portion of the bridge, and is heated, so that fruit shipments can be properly handled both winter and summer.

The freight yards to the south of the bridge, which are now nearing completion, will contain long freight sheds parallel to the street, occupying the ground right down to the Harbor Commissioners' property, the whole yards occupying a space nearly three times as great as that portion shown in the illustration above Notre Dame street.

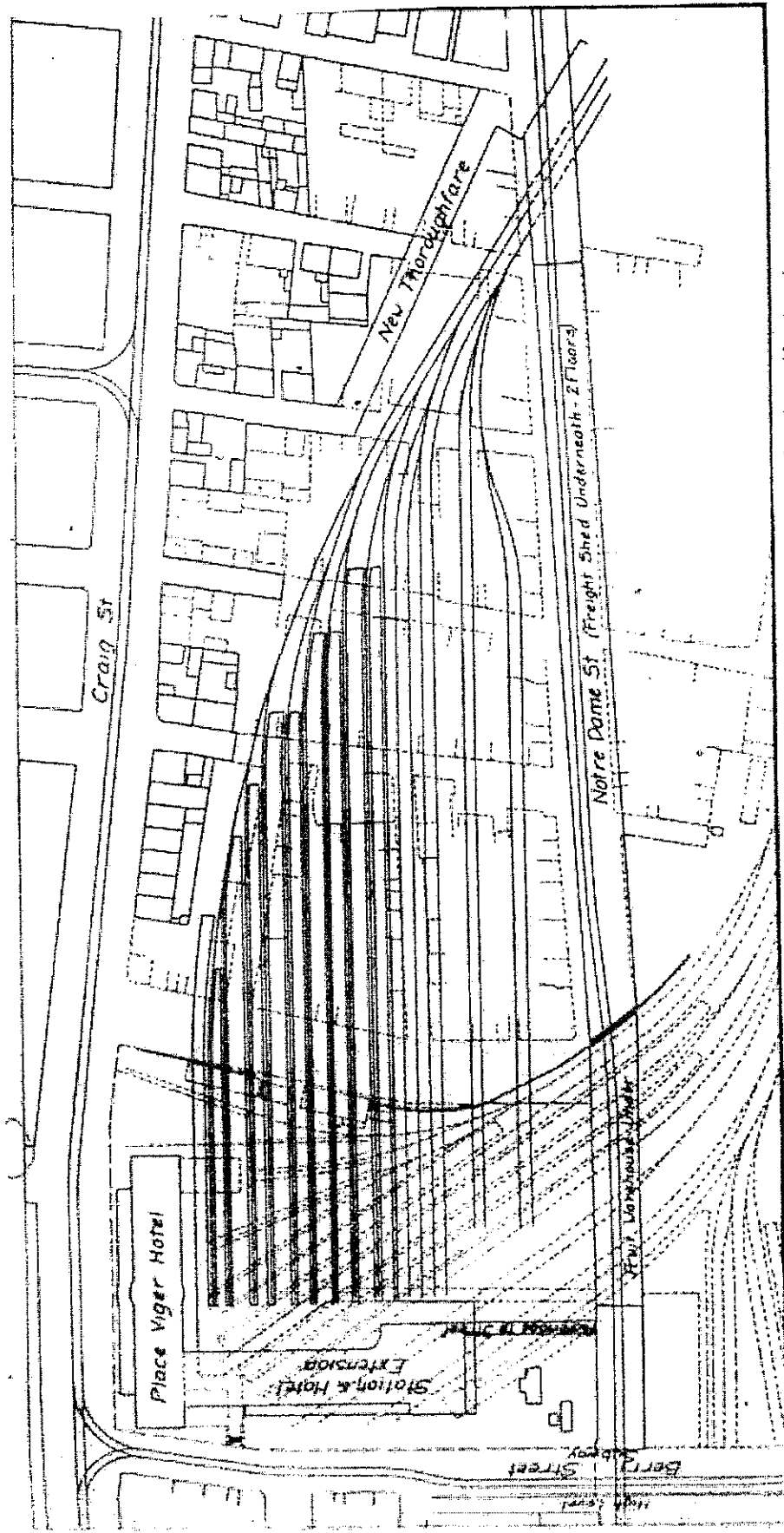
W. J. Chapman, formerly assistant timekeeper at the C.P.R. freight sheds, Fort William, Ont., has been charged with the theft of \$1,017.51, by means of irregularities in the pay rolls. He was arrested in San Francisco.

H. W. D. Armstrong, M. Can. Soc. C.E., Chief Engineer, Fredericton and Grand Lake Ry., Fredericton, N.B., writes,—"I must congratulate you upon the increasing volume and value of the Canadian Railway and Marine World."

pressed air being used to increase the power of the engine by increasing the area of the indicator diagram, the process being new. The air is stored in cylinders near the other end of the car, where are also located the cooling water tanks. A large muffler in the top of the car subdues the blast of the exhaust.

Dr. Diesel gave what in his opinion are some of the reasons for the slow adoption of the Diesel engine in America. The causes assigned include cheap coal, cheap engines, lack of capital, and generally good profits without undue thought concerning economy. These reasons stand out prominently in comparison with Europe with its world competition.

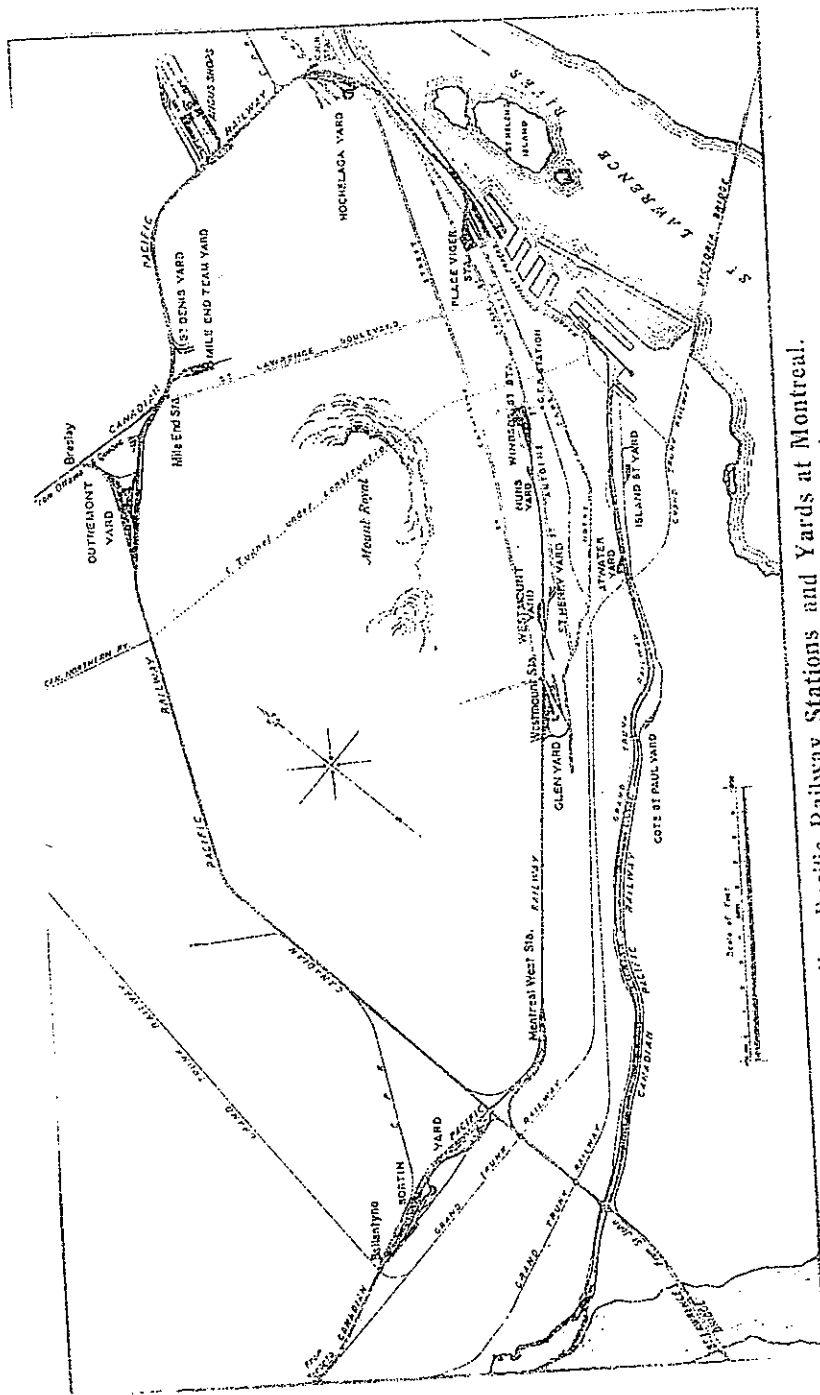
An obstacle to the use of the internal combustion engine for hauling trains has been the impossibility of accelerating the train from standstill with an engine of normal size and of maintaining any considerable overload at any speed. A petroleum electric locomotive is now proposed, in which the prime mover is an internal combustion engine, using crude oil, kept continuously running to drive an electric generator, which in turn delivers electrical energy to four 220 h.p. polyphase motors.



Old and New Arrangements of Terminal Facilities at C.P.R. Place Viger Station, Montreal.

CANADIAN
PACIFIC

MONTREAL
TERMINAL
C. H. RIFF



Canadian Pacific Railway Stations and Yards at Montreal.

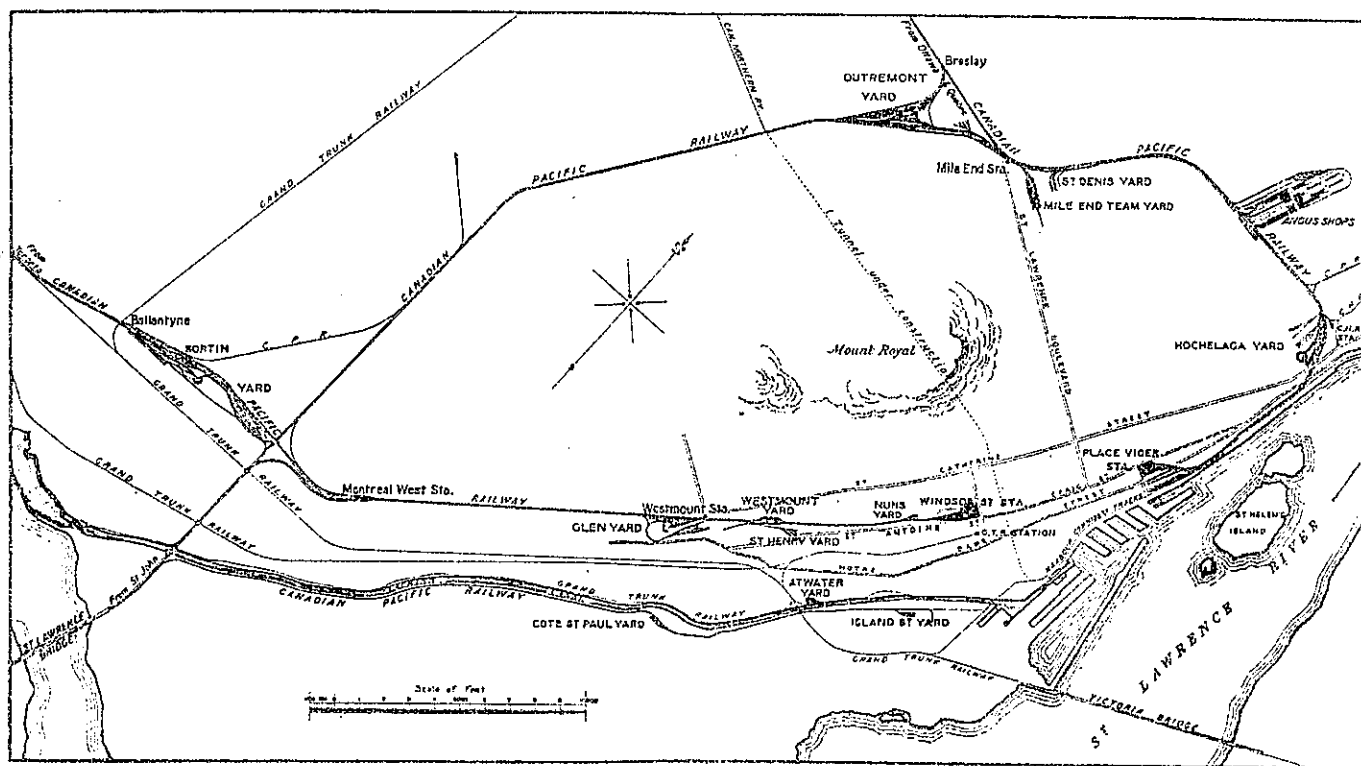
A NOTABLE GROUP OF RAILWAY TERMINALS

ILLUSTRATING BY DIAGRAM AND BRIEF DESCRIPTION THE OUTSTANDING FEATURES OF THE CANADIAN PACIFIC RAILWAY TERMINALS AT QUEBEC, MONTREAL, WINNIPEG AND VANCOUVER.

THE efficiency of a modern railway terminal is not manifested in bells and bustle. To perfect a terminal organization and management, efficient as well under ordinary conditions as when subjected to tests involving maximum demands and extreme conditions, is the greatest problem for the executive head of a busy transcontinental. Nowhere in the complexity of the business world is there greater justification for employing methods which have back of them principles harmonizing with the results of scientific study and re-

over its 12,900 miles of track, is one of the most remarkable evidences of terminal organization and management.

Thus, while a would-be but belated traveller may occasionally deign to recast, in a twinkling, the whole system, there is much to be learned from a study of the terminals that handle the major portion of Canada's long-haul traffic. Only a few will be referred to here: The eastern terminals at Montreal and Quebec, the terminal at Vancouver, where transcontinental trains connect with coastal and trans-Pacific steamers, and the Winnipeg



Canadian Pacific Railway Stations and Yards at Montreal.

search, toned down by the best skill that training and experience can command. Such a terminal must be the acme of organization, but it must first be well located and well arranged. A terminal system cannot be here to-day and there to-morrow to comply with the vicissitudes of restless traffic.

The Canadian Pacific Railway has strategically located its more important terminals at St. John, Quebec, Montreal, Toronto, Fort William, Winnipeg and Vancouver. In a single year (1913) this railway earned nearly \$90,000,000 from freight, and \$35,500,000 from passenger traffic. Or, the standard of its terminal organizations is perhaps better illustrated by the manner in which it met the exacting demands created by the complete disorganization of business in 1914 and the necessity of economy arising out of depression and war. The rapidity and uniformity with which the company, in a few months, reduced maintenance and transportation expenses

yards, through which rolls an enormous volume of traffic between eastern and western Canada.

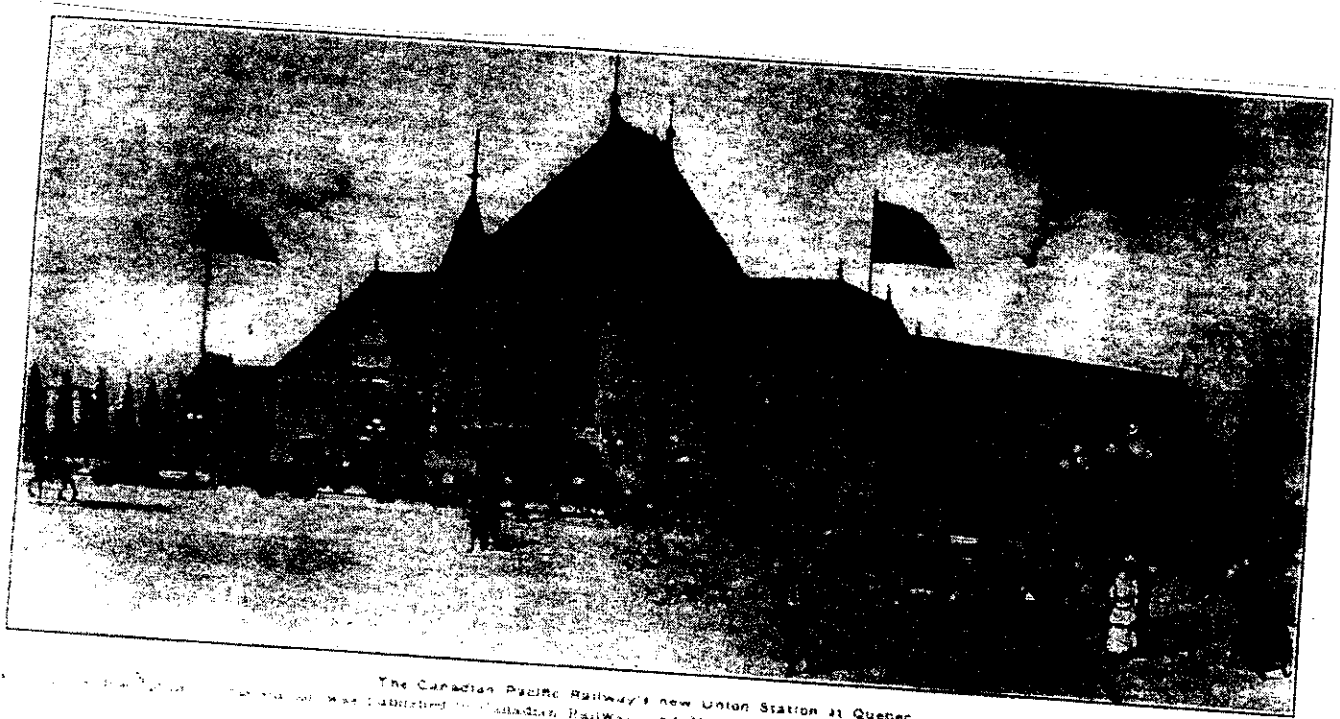
C.P.R. Terminal at Montreal.

As the accompanying plan indicates, the tracks of the Canadian Pacific Railway very nearly surround the city of Montreal with main lines radiating to the north, west and south. The line to the north leads to Quebec, the Laurentian Mountains and Ottawa; the line to the west leads to Toronto and is at the same time the short line to Ottawa. The line to the south, which crosses the St. Lawrence River on the new double track bridge, leads to all points east and south on the C.P.R. on the southerly side of the St. Lawrence River.

Passenger trains for the east, south and west run from the Windsor Street station with stops in Montreal at Westmount and Montreal West. Trains for the north run from Place Viger with a stop at Mile-End. The

CANADIAN
PACIFIC
RAILWAY
-NORTH SHORE-
QUEBEC
TERMINAL

C. H. RIFF



The Canadian Pacific Railway's new Union Station at Quebec.
The station was published in Canadian Railway and Marine World for September and a ground plan showing the location
was published in the October issue.

The New Canadian Pacific Railway Station at Quebec.

The foundation stone of the new station which the C. P. R. is building at Quebec as a new station, was laid by the Mayor of the city, Aug. 12. The C. P. R. was represented by P. L. Wanklyn, General Executive Assistant, and other officials, the Lieutenant Governor and the Premier representing the State.

The plans show a building designed in a new adaptation of the chateaux of the 17th century, which is calculated to add to the architectural features of the city. The building, which is being erected at the corner of St. Paul and Henderson streets, will have a frontage a large open paved plaza, approximately 300 x 200 ft., flanked on either side by broad sidewalks leading to the main entrance. Between the sidewalks and the building will be large spaces which will be planted with Lombardy poplars and blue spruce and other shrubs. The main building will be of Argenteuil granite, Deschambault stone, and Citadel brick, with high sloped roof of copper. The main entrance, which will be from St. Paul St., will be 25 ft. wide. Above it will be a window about 10 ft. in height, of metal sash, divided into three sections. At the crown of the arch will appear the arms of seven of the historic Governors of Quebec, viz., Montmagny, who was the first Governor of Canada, from 1636 to 1650; De Tracy, Viceroy of Canada, 1665; La Potherie, Governor of Canada, 1726 to 1730; M. de La Potherie, one of the French Generals in the capture of Quebec when the English conquered Canada in 1759; Wolfe, the general who led the English to victory on the Plains of Abraham in 1759, and died on the battlefield; Talon, Governor of Canada, 1672; Talon, Intendant of New France, 1665 to 1672.

The main facade of the building will be dominated by a central tower with turrets at the angles, at the bases of which will be niches, bearing in one case the fleur de lys of France, and at the other the Tudor rose, the thistle and the shamrock of the United Kingdom of Great Britain and Ireland. High upon the roof will be an ornamental clock with a dial 8 ft. in diameter, on which will appear the city's arms. The building will be L shaped, the central block 175 ft. long, and wing 200 ft. long. At the entrance will be a lobby approximately 45 x 65 ft. and 60 ft. high, to be entirely of tapestry brick with ornamental tile in faience tile. The room will be reached from the St. Paul St. side and also from the roof, the spaces in the roof being filled with ceiling lights. The central ceiling light will contain a cartoon in leaded glass showing the Dominion of Canada, with thousands of miles of the C. P. R. dominating the industrial and prairie sections marked in distinct colorings. The ceiling of the dome will be constructed entirely of mosaic tile with ornamental patterns arranged in blue, red and gold. The main niche of the big lobby will also be in faience tile and will carry a series of tiles symbolic of the C. P. R., viz., its electric lines, railways and steamships. The first floor will be divided into ticket offices, baggage room, parcel room, Customs offices, telegraph and news stand. From the vestibule a marble staircase will lead to the offices on the first floor which will be

occupied by the C. P. R., and space will also be provided for the accommodation of the National Transcontinental Railway. The main concourse will be 65 ft. by 125 ft. and 40 ft. high, constructed of tapestry brick with faience insertings in color. All of the ornamental work in this room will carry the characteristic ornaments of the French Chateaux and Dolphin and Tridents interspersed with the Tudor rose. Opening off the concourse will be the station agent's room and the usual conveniences. Train gates will separate the concourse from the train shed which will be on the same low principle as Windsor St. station in Montreal. There will be 11 tracks and the platforms will be well lighted. In the concourse near the train gates will be installed train indicators electrically illuminated.

The power house will be situated on the St. Paul St. side of the building. It will contain the necessary equipment to supply main station and the freight shed across the tracks towards the river.

The building was designed by M. H. E. Prindel, architect, Montreal, and the construction is being supervised by D. H. Mapes, Engineer of Building Construction, C. P. R., and T. E. Vidette for the contractors, the Downing Cook Co. This description is abridged from the Quebec Chronicle.

National Transcontinental Railway Operation.

The operation of the National Transcontinental Railway by the Dominion Government is raising some questions affecting its connection with the Intercolonial Ry. The first of these is at Moncton, where for several miles the two lines run side by side westerly. It is reported that in order to facilitate traffic, and to reduce cost of maintenance it is proposed to build about a mile of line to connect the two tracks, and to run all the traffic over one of the lines.

The second matter affects St. John, N. B., and was discussed with the Minister of Railways on the occasion of his recent visit there. The Minister is reported to have said that the Department's engineers were studying the problem of better transportation connection with St. John, in connection with the operation of the N. T. R., and the engineers seemed to favor an entrance to the city by the western side of the harbor. When the matter had been further considered, F. P. Gutelius, General Manager, would discuss the matter with the Board of Trade and the City Council. (Aug., pg. 307.)

Rogers Pass Tunnel Contractors' Suit.

In the original hearing of the action brought by McIlwee Brothers, against Foley, Welch and Stewart, general contractors for the construction of the five mile tunnel on the C. P. R. at Rogers Pass, B. C., for \$527,000, the court awarded just over \$30,000 damages. The plaintiffs appealed and judgment was given by the British Columbia Court of Appeal, Aug. 10, under which the plaintiffs become entitled to practically the full amount claimed. It is expected that Foley, Welch and Stewart will carry the case to the Supreme Court of Canada.

September 1915

Umbrella Roofs at C.P.R. Stations at Montreal

The C.P.R. has completed recently umbrella roofs over four of its passenger platforms at Place Viger Station, Montreal, three being each 496 ft. long and one 403 ft. long. The baggage platforms which occur between each passenger platform are not covered. The umbrella roofs consist of reinforced concrete throughout. The posts are symmetrical 2-armed units,

face and gives a very pleasing effect from below.

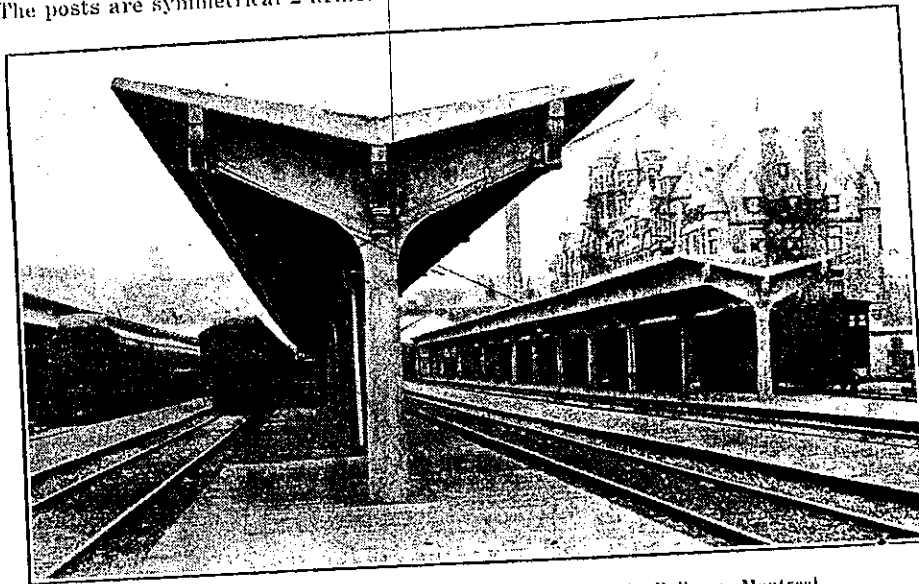
Where down pipes occur in the roof, the Siegwart beams were made of shorter length and trap castings were cast into a small section of solid concrete poured on the work. The rain water pipes are of Tonceau metal and are located at every second panel, 62 ft. c. to c., and connect

was done immediately the forms were taken off, by rubbing down with sand and wooden floats. The structural steel hangers were manufactured previously in a structural shop, and after erection they were painted to match the general color of the concrete.

The wiring for the whole structure is laid in standard conduit work, with the necessary outlet boxes. The conduits pass through pre-cast holes in the posts, and two lights per panel are attached to fixtures on the lower side of the centre purlins. This gives ample light at night, and the fact that the outer edges of the roof slabs are 18 in. above the top of cars, provides ample light during the day, even when both tracks adjacent to a platform are occupied by trains.

Similar work was carried out at the Union Station, Quebec, in substantially the same manner as described above for Place Viger, with a few exceptions, one of which was that a few of the posts were poured on their sides, and were lifted up later and grouted into the pockets already referred to in the pedestals. Generally, however, the posts were cast in a vertical position, after the reinforcement had been put together and stood up in its final vertical position. This method was found more convenient, from the point of view of maintenance of traffic on platforms. The roof slabs are of mill construction 3 in. thick timber instead of Siegwart beams as at Place Viger.

The accompanying illustrations show the general appearance of the finished work, including the connection of the new platform covers with the existing midway space at Place Viger station. This consists of 1½ in. mortar work, floated or expanded metal reinforcement attached to the existing structural steel work, which gives a pleasing appearance, as can be seen from the illustrations, from both inside and outside of the midway.



Umbrella Roofs, Place Viger Station, Canadian Pacific Railway, Montreal.

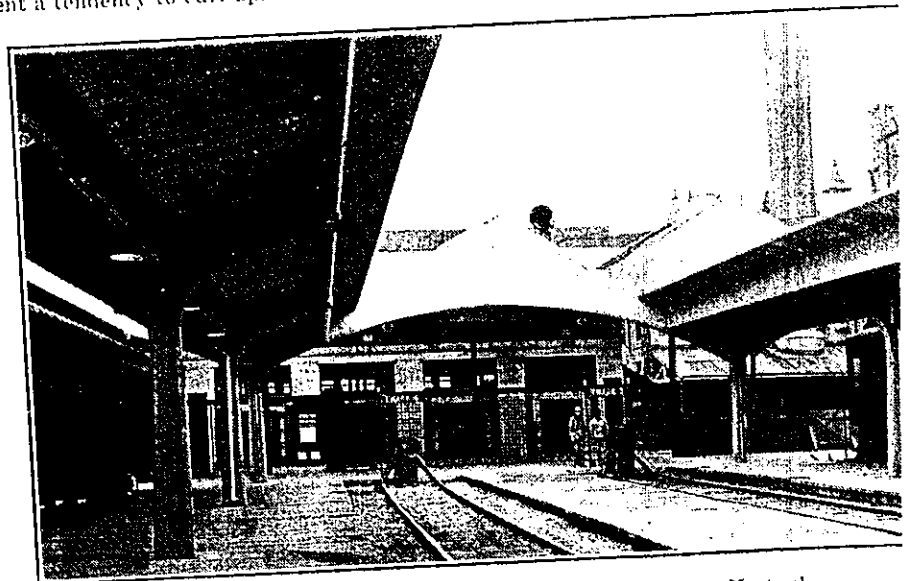
on which are supported reinforced concrete purlins, which in turn support the reinforced concrete roof slabs, which are waterproofed with the usual membrane and asphalt covering. This unit system of construction, constitutes a very interesting, and what is believed to be, an original method of construction.

The actual method of construction was as follows: The pedestals were first built in their proper locations, an oblong pocket 1 ft. x 1 ft. 10 in. being left in them for the reception of the posts, which were intended to be manufactured as units, and later to be inserted and grouted into the pockets. It was found, however, in some cases, more economical to erect the reinforcement as units in the pockets, clamp the forms around them, and then, when all adjustments had been made, to pour the concrete from a travelling crane platform. After the forms had been removed, the structural steel slings were put in place. In the meantime the purlins had been cast as units in the yard and they were erected from the same traveller. This having been accomplished, the reinforced concrete roof slabs were laid as if they were ordinary mill construction wood work. All reinforcement of the posts and purlins consisted of rails, bent where necessary, and securely attached to one another. This construction lent itself readily to a systematic and speedy erection. It allowed the work to be proceeded with without interfering with passenger traffic on the platforms, or with train operation on the tracks.

When the skeleton was erected the roof slabs were lifted up into place from the deck of a flat car by a light travelling crane. These roof slabs are of special construction known as Siegwart beams, a Belgian design. They are 4 x 12½ in. wide. They were specially manufactured with one end closed and all lower edges had a ½ in. chamfer, which gives the impression of a series of V joints 12½ in. apart. This served to break up the sur-

face with the existing drainage system in the yard.

The roof covering consists of a membrane, composed of 5 ply roofing felt, laid in pitch, with a continuous galvanized iron reinforcing piece along the edge of the roof; the function of this reinforcing piece being to keep the membrane in contact with the end of the roof slab and prevent a tendency to curl up. In addition to



Umbrella Roofs, Place Viger Station, Canadian Pacific Railway, Montreal.

this it provides a uniform drip edge which extends ¾ ins. below the lower surface of the slab. Details of the manner in which the first layer of roofing material was folded back and attached to the upper side of the membrane are clearly shown on the plans. The upper surface of the membrane is protected against abrasion by snow shovelling, by a layer of asphalt.

The surface finish of the whole work

The work at both Montreal and Quebec was executed under the supervision of M. R. Fairbairn, Assistant Chief Engineer, the designs being made by P. B. Ley, Engineer of Bridges, and the work was carried out by J. E. Beatty, District Engineer. The Atlas Construction were the contractors for the Montreal work, and the Byers Construction for the Quebec work.

Canadian Pacific Railway Terminal Improvements at Quebec.

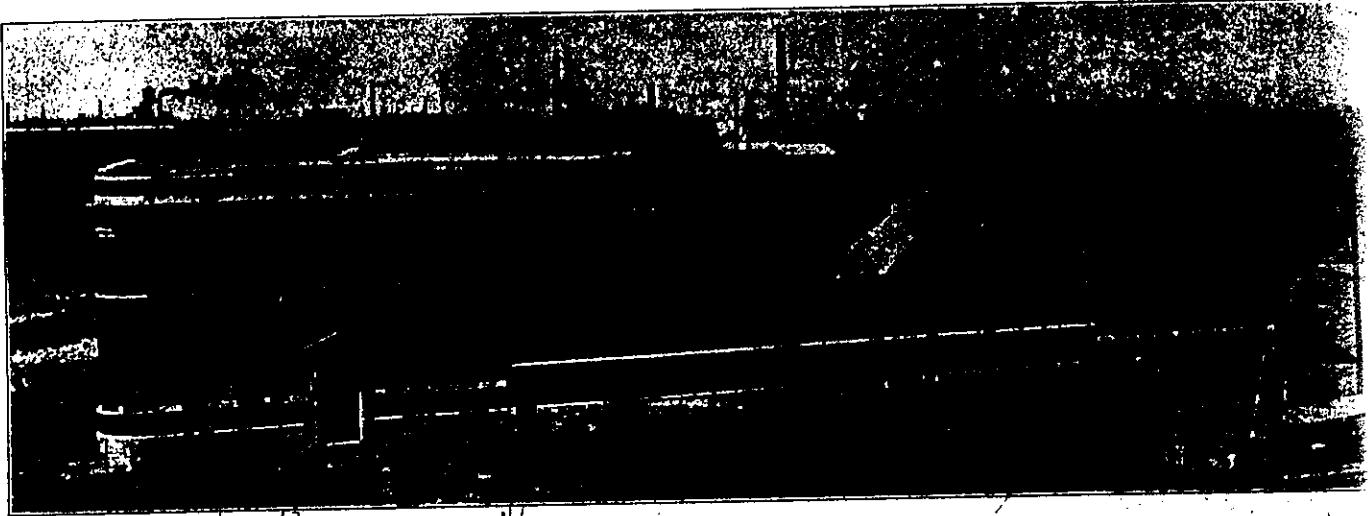
The entire remodelling and extension of the C.P.R. passenger and freight facilities on the Palais grounds at Quebec became necessary some little time ago on account of the normal growth of business, and to their proposed use by both the C.P.R. and the National Transcontinental Ry. as a union terminal. The work which is shown on the accompanying plan was started dur-

and will stub-end toward the extension of Ramsay St. The common working and set off tracks for this yard and the wharf tracks will be built between the two and connect with the main tracks well to the west, in order to reduce to a minimum the interference of freight movements with the throat of the passenger station yard.

The new freight sheds are complete and

baggage, mail and express facilities in west wing.

The station yard will include for present eight stub end tracks, varying capacity from 7 to 10 cars and a locomotive and three through tracks varying from twelve to fourteen cars and an engine. The through tracks are provided for handling pilgrimage trains which run through



Canadian Pacific Railway Freight Terminals in the City of Quebec.

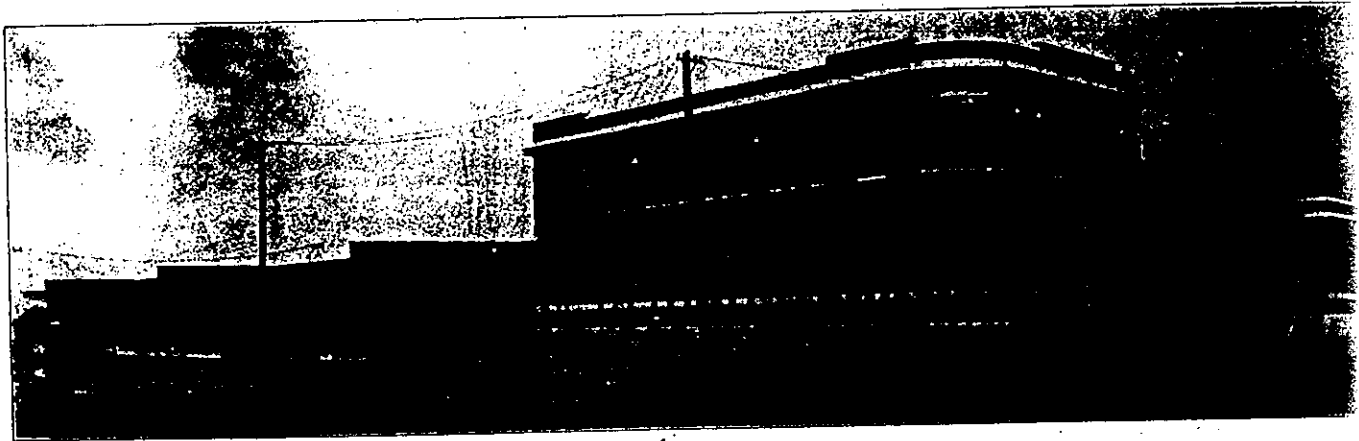
The building to the left, at the rear of the office building, is the inbound freight shed; the building to the right is the outbound freight shed.

ing the summer of 1914, and is being carried out in such a manner as to keep all facilities in full service. The construction of the new freight facilities released the old ones; these were demolished to make room for the new passenger station, and when that is completed the existing station will be removed to permit of the construction of the passenger car yard. It is intended to have the work all completed by the summer of 1917.

in service. The outbound shed is 30 ft. wide and 360 ft. long, and the inbound shed proper is 50 ft. wide and 460 ft. long, the balance of its length being given over to a 2-story office building. Each shed is served by three tracks, the outbound having a capacity of 27 cars, and the inbound a capacity of 39 cars, while a trucking platform between the two sets of tracks permits of their ready use for less than car lot transfer purposes. The sheds are so

St. Anne de Beaupre, and for such trains may at some future time run through the National Transcontinental Champlain Market Station by this route.

The tracks are arranged in pairs at centres, with 18 ft. combination baggage and passenger platforms between pairs; the southerly track will be reserved for lining car load baggage and express business. Space has been left for future additional tracks between the present stub tracks



Canadian Pacific Railway Freight Terminals in the City of Quebec.

The building to the left is the inbound freight shed, the office building is in the centre of the illustration, and part of the outbound freight shed is shown at the right.

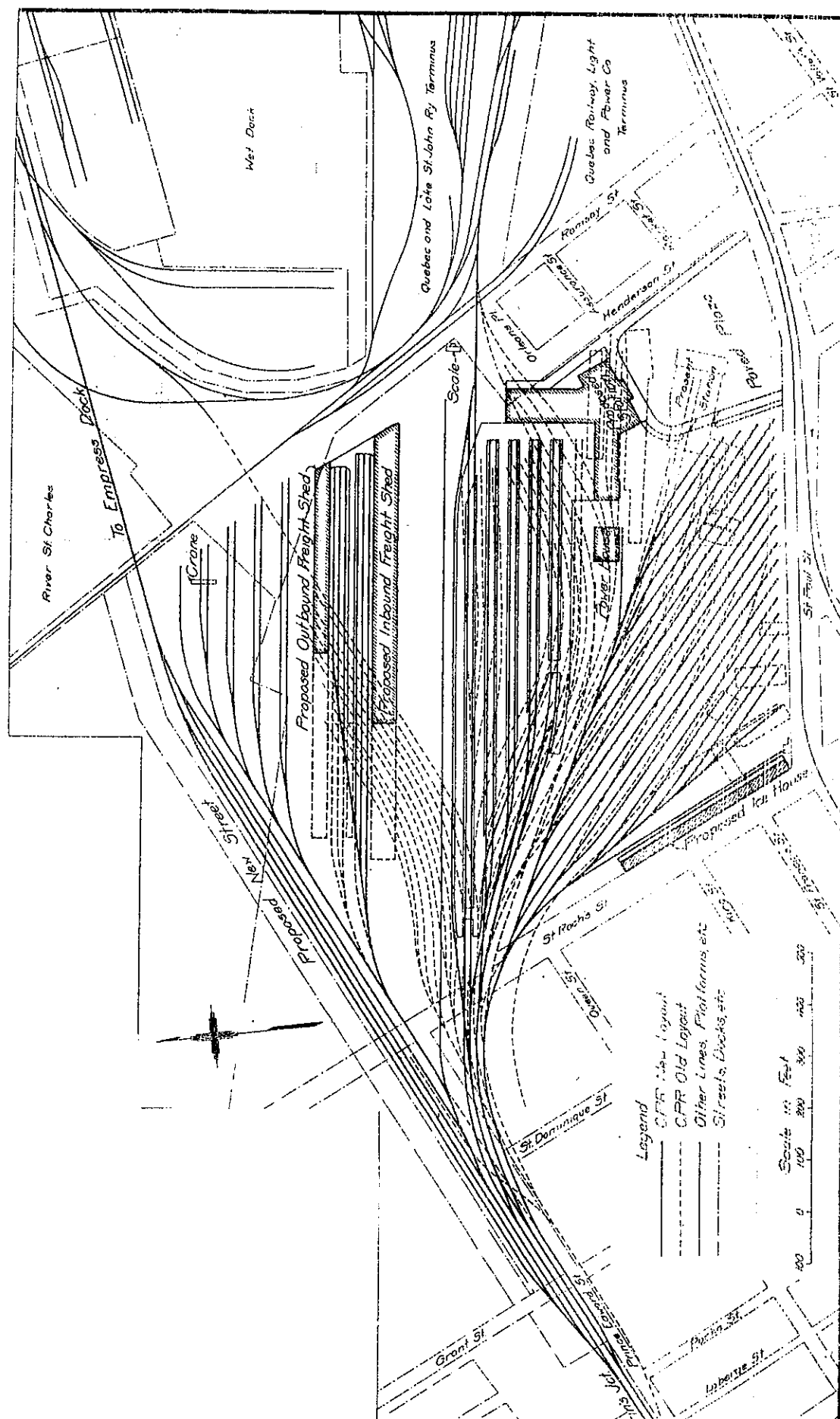
The track leading to the Louise Embankment and the Empress Wharves is to be relocated some 400 ft. to the north, partly on ground reclaimed from the St. Charles River. This will give a more direct route to the waterfront, and also permit of constructing the new team yard in such a position that teams need not cross the heavy train movement to and from the wharves. This team yard, of about 105 cars capacity, will also be built on the reclaimed ground,

located that they may at any time in the future be increased in length as more capacity is required.

The new passenger station, which is under construction, is located on the site of the old freight sheds. The ticket offices, baggage checking counters, and similar public facilities will be located in the portion of the building fronting on the proposed plaza. The waiting rooms and accessories will be in the north wing, and the

the baggage wing of the station, between the through tracks and the sheds.

The passenger car yard stub end ward St. Paul St. will have a capacity of 130 cars. Its construction has not yet started, as it will be on the site of the present station and station yard. The wing of this yard, the station and yard and the freight sheds will all be fed from a central power house located



Canadian Pacific Railway, Passenger and Freight Terminals in the City of Quebec

CANADIAN
PACIFIC
RAILWAY
-NORTH SHORE-
WOLFE'S COVE
TUNNEL

C. H. RIFF

The Canadian Engineer

A Weekly Paper for Civil Engineers and Contractors

C.P.R. Quebec Tunnel Signal System

All Signals Controlled and Switches Operated Electrically
From Tower at Cadorna

By E. S. TAYLOR

Signal Engineer, Canadian Pacific Railway, Montreal

BENEATH the historic Plains of Abraham, where Wolfe and Montcalm met in 1759 in a battle which cost them both their lives and won Canada for Britain, a mile-long tunnel has just been completed by the Canadian Pacific Railway, as a direct link between its main line and the new berthing-place of its great white empresses, at Wolfe's Cove, where the British general landed his forces.

The new dock, which is part of the five-year program of the Quebec Harbor Commission, was built primarily for the new 42,500-ton "Empress of Britain," the biggest and fastest ship plying between ports of the British Empire, and will be used by all liners of similar tonnage calling at the port.

This new project with its facilities to handle boat trains and its tunnel connection to the main line, called for a signal system which would speed train operation and provide proper protection to all train moves.

The Canadian Pacific operates a single track line from the west which enters Quebec on the north and terminates in the heart of the city near the mouth of the St. Charles River. The single track line of the Canadian National Railway joins the Canadian Pacific on the outskirts of the city in such a way as to form a double track to and past the tunnel connection. These tracks also serve the Quebec Central Railway into the city. Over these main tracks pass most of the traffic into and out of Quebec so that it is reasonably heavy, consisting of 40 or more scheduled trains a day exclusive of the special boat trains for passengers and freight through the tunnel.

One of the interesting features of this new project is a unique and modern signal system for the safety and guidance of trains into and out of Quebec, and also for those which use the tunnel.

One operator seated before a control machine as used in a G.R.S. centralized traffic control system, located in a tower

at Cadorna, controls all the signals in the territory operates the switches by electrical power. This machine has two kinds of controls; one in the form of small levers to operate the track switches to the normal or reverse position according to the route to be taken by the train; the other in the form of rotary controllers, or buttons, which, when

turned, operate proper signals for a train to proceed. The machine has a capacity of 24 switch points, although only eight are used for the present facilities. The remainder are left for future development. The 20 rotary controllers are for the signals.

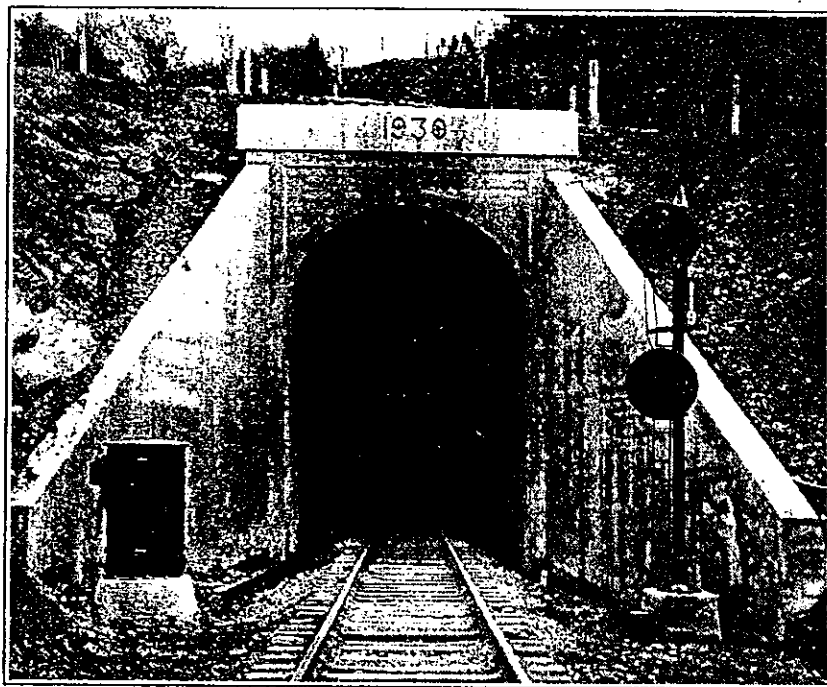
The electrical circuits are so designed that it is necessary to lock all track switches in the route set up for a train to be in their proper positions and see that they are locked by electrical means and all controlling signals must be "Stop" before the train is given the proper indication or token means of the signal "go."

In addition the control machine is provided with an illuminated track diagram containing a series

of miniature red and amber lights used to show that the switches when operated are responding to the movement of their respective levers and also to show the position of a train as it travels over the route from one location to another.

Each power-operated track switch has a dual control, one through the operator's control lever; the other by means of a manual lever when it is necessary to operate the switch by hand. These power machines, known as "G. Model 5D," which operate by means of an electric solenoid, positively lock up the track switch before a signal is given to a train or before the train passes over it. There are 11 such electrically-operated track switches.

The signals consist of one to three units depending on the information to be conveyed to the engineer. Each unit displays, through a single, but powerful lens, three different



NORTH PORTAL OF TUNNEL

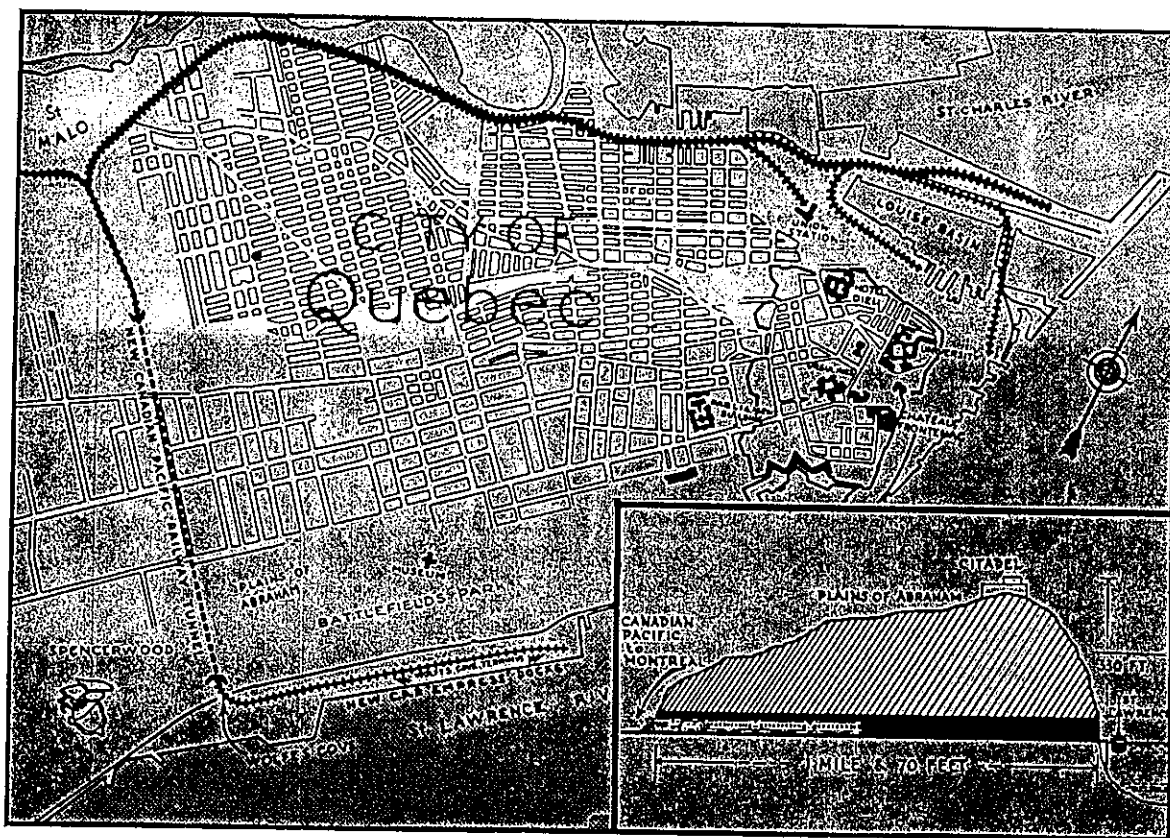
tie to the east of the historic site of Wolfe's Landing, the centre line being directly under Belvedere Avenue. The grade on the branch is carried out about level from the existing main line to the north portal of the tunnel and drops through the tunnel on an 0.8% grade.

There will be no grade crossings of streets on this branch line. Champlain Street, alongside the St. Lawrence, is the only street which would be crossed at grade level, but grade separation for this street is being provided by constructing a diversion and carrying it over the tunnel lining extended past the face of the cliff a sufficient distance to accommodate the roadway.

Geological Conditions

The selection of this location was influenced by the topographical features, the expected geological formation and the desire to avoid interference with

In establishing the centre line care was taken to insure accurate chainage and levels. A 500-ft. steel band tape was used and measurements were taken with the tape held at a uniform tension, approximately parallel to the surface and between fixed points. The angle between the tape and a horizontal line was read and the horizontal and vertical distances between such points calculated. The distance was also calculated by using the measured distance on the slope and the difference in elevation between points as established by level. These operations were carried out several times until similar and accurate results were obtained, after which a number of fixed points were made permanent by constructing concrete monuments each carrying a metal plate on which the point was fixed. The foundations for these monuments were carried below frost level. Where ground level would be disturbed along the



Map of the city of Quebec showing the location of the C.P.R. tunnel now under construction. Inset is a section of the city showing the depth of the tunnel below the historic citadel.

the existing appearance and conditions of the terrain at the historic site of Wolfe's Landing. Published data of the geological formation were studied and a further examination of the geological structure was carried out by means of trenching from the surface to the rock at a number of locations. The overburden on the plateau is generally from five to twelve feet deep. From the information obtained it was expected that most of the tunnel would run through Quebec City limestone and that possibly one hundred yards or so would be in shale formation at the north end of the tunnel. Considerably more of the shale formation has been encountered than expected. Both these rocks are quite soft and weather on exposure. The limestone is self-supporting but has to be protected to prevent weathering. The shale has to be supported immediately with timbers to hold it in position until concrete lining can be placed.

centre line during construction, points were referenced out and the reference points were established in permanent form. Location of the line outside the tunnel portion was fixed and handled in the same manner as the tunnel portion. There is about 2,300 feet of such line between the main line and the north portal, and at the south end about 300 feet, between the south portal and the junction with the Harbor Commissioners' railway.

The location plan, profile and book of reference were approved by the Board of Railway Commissioners on July 2nd, 1930, and the contractor was advised at once to proceed with the work. Prior to this date, competitive bids had been received from several of the leading contracting firms and the Dominion Construction Company, having submitted the low tender, was selected to do the work. The spread in price between three low bids on this job

Contract Record and Engineering Review

Devoted to Construction and Engineering

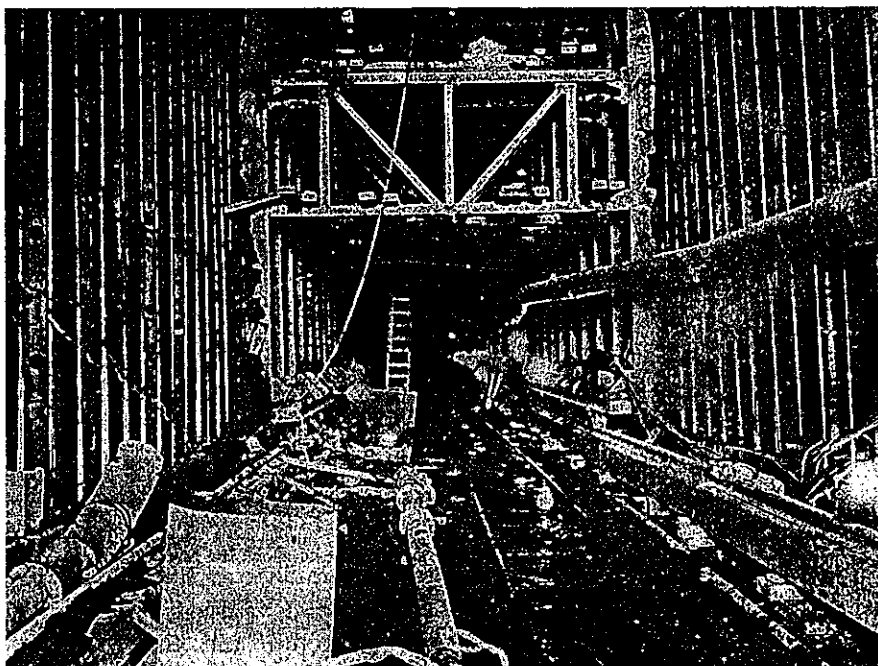
45

Toronto, March 25, 1931

No. 12

Methods of Driving **One-Mile Railway Tunnel** Under City of Quebec

*Canadian Pacific Railway Co. Building Connection
to New Wolfe's Cove Landing*

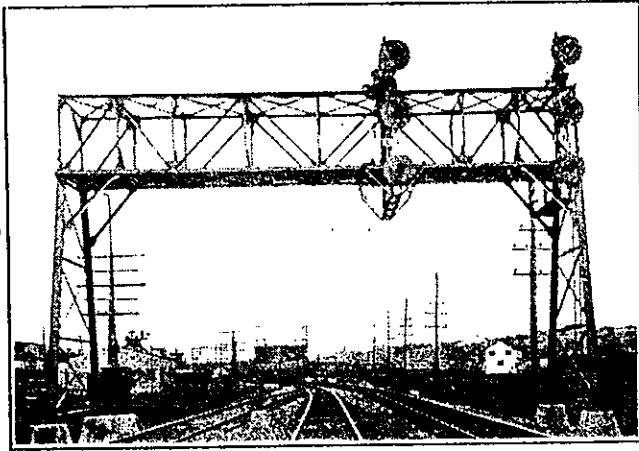


The C.P.R. Wolfe's Cove tunnel at Quebec, Que., under construction. A view inside the north portal.

At the present time the facilities of the port of Quebec, Que., are being enhanced by the construction of the Wolfe's Cove terminal which will be used for the first time next year by the Canadian Pacific Railway Co.'s new 42,500-ton steamship "Empress of Britain." The handling of traffic to and from the new terminal the Canadian Pacific Railway decided to build an anchorage line, and following fairly extensive studies of various routes covering the territory from Cape

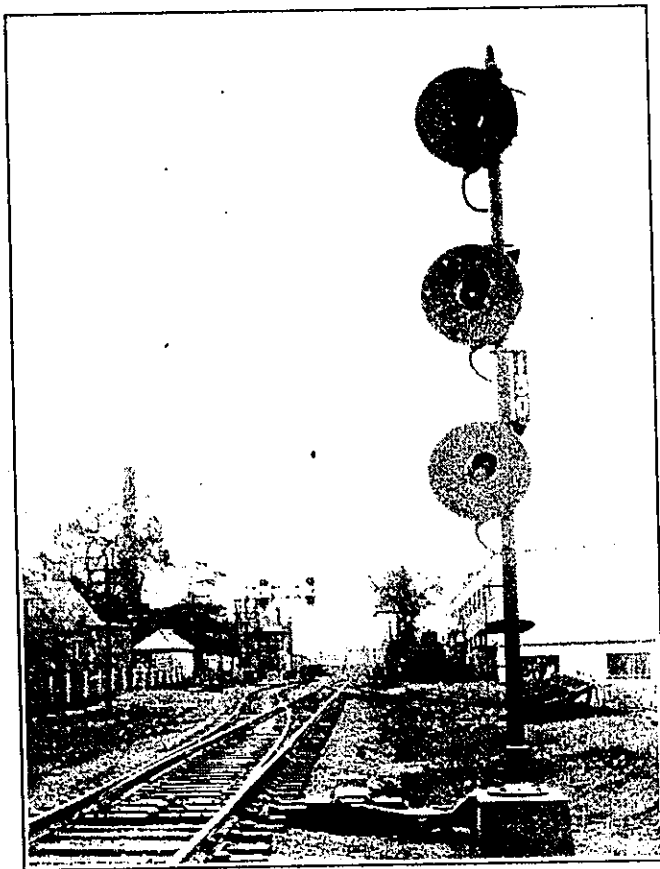
from a point on the main line about $2\frac{1}{2}$ miles west of the Palais Station at Quebec, to the Wolfe's Cove terminal site. The new line is $1\frac{1}{2}$ miles long, one mile being in tunnel through the ridge which lies between the valley of the St. Charles River and the St. Lawrence. This ridge rises to a height of 250 to 350 ft. above the St. Lawrence. The railway where the branch takes off is 60 feet above the St. Lawrence, while the Harbor Commissioners' railway is about 20 feet above river level. The tunnel passes

colored indications according to the operation of its mechanism. Red indicates "stop"; yellow indicates "caution," proceed prepared to stop at next signal; green indicates "proceed." These signal indications are in accordance with the usual and established practice. There are 42 of such



GANTRY TYPE SIGNAL BRIDGE

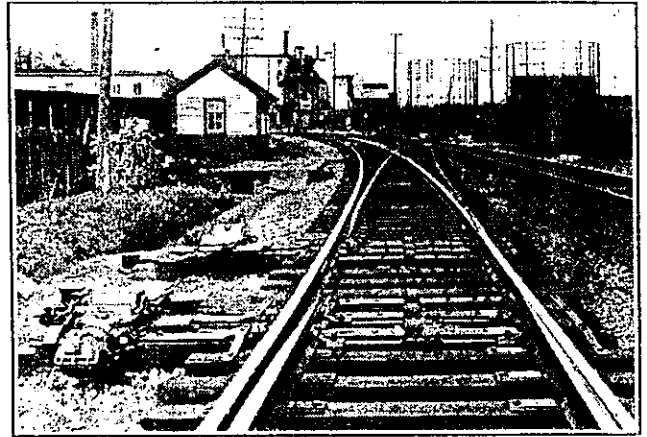
units. These signals operate by direct current at low voltage. When current to the signal flows in one direction its mechanism intercepts a tiny green glass between the electric light and the lens so as to display a green indication. When this current is reversed the mechanism of the signal operates in



THREE-UNIT SEARCHLIGHT-TYPE HOME SIGNAL

the opposite direction and places a yellow glass between the lamp and lens so that a yellow or "caution" indication is displayed. When the current is stopped or no current flowing to the signal its mechanism assumes a neutral or balanced position by the force of gravity so that a red glass comes

"stop" indication. This signal, known as "Type SA" is in common use on the Canadian Pacific Railway. Although a small lamp is used of low wattage, due to a scientifically

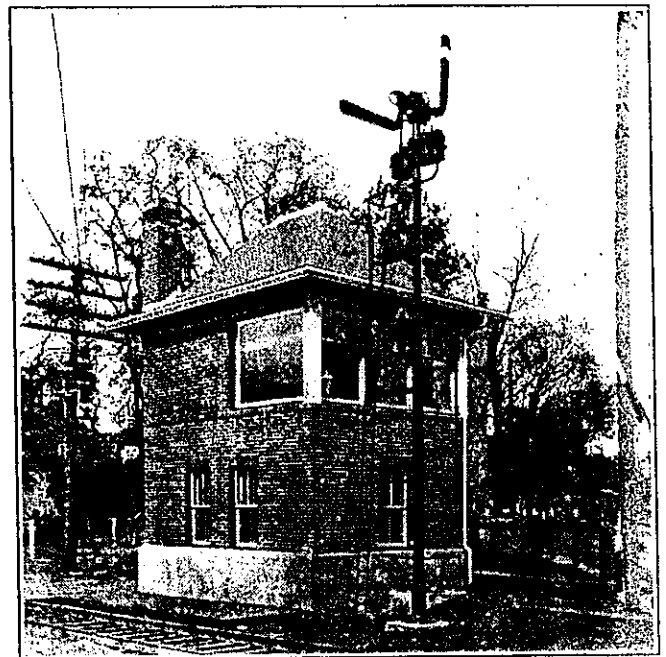


GENERAL VIEW OF CROSSOVER LAYOUT

constructed mirror and lens the signal indication is powerful enough to be seen nearly a mile in bright sunlight.

The Control Tower

The control tower, known as Cadorna Interlocking, is built of reinforced concrete with concrete ceilings and an asbestos roof. It is steam heated and arranged for the complete comfort of the employees. It is located at St. Valier Street, on the northwest side of Quebec, and although the tunnel entrance and most of the controlled tracks are out of



CADORNA OPERATING TOWER

sight of the operator, he can operate the trains with complete satisfaction and safety by means of the illuminated diagram before him.

Power at 550 volts a.c. 3-phase is delivered at the tower by the Quebec Railway Light & Power Co. It is then stepped down to 220 volts for the operation of the plant. Various voltages are secured for different purposes and the power is also converted to direct current by means of rectifiers to charge the various storage batteries.

Parkway cable has been used through the installation

electric light
When this
operates in

The control tower, known as Cadorna Interlocking, is built of reinforced concrete with concrete ceilings and an asbestos roof. It is steam heated and arranged for the complete comfort of the employees. It is located at St. Valier Street, on the northwest side of Quebec, and although the tunnel entrance and most of the controlled tracks are out of

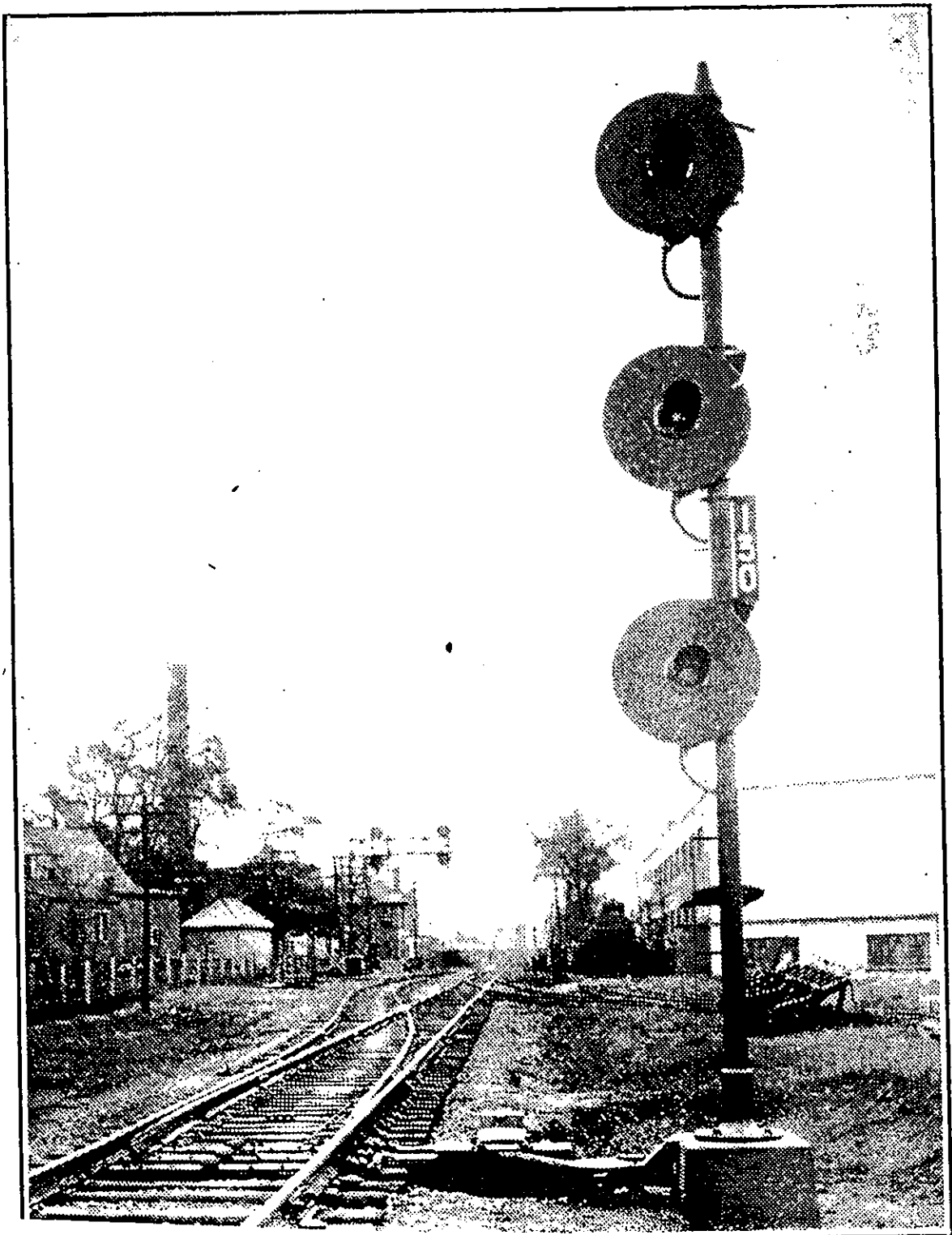


CADORNA OPERATING TOWER

sight of the operator, he can operate the trains with complete satisfaction and safety by means of the illuminated diagram before him.

Power at 550 volts a.c. 3-phase is delivered at the tower by the Quebec Railway Light & Power Co. It is then stepped down to 220 volts for the operation of the plant. Various voltages are secured for different purposes and the power is also converted to direct current by means of rectifiers.

between the
ation is
flowing
balanced



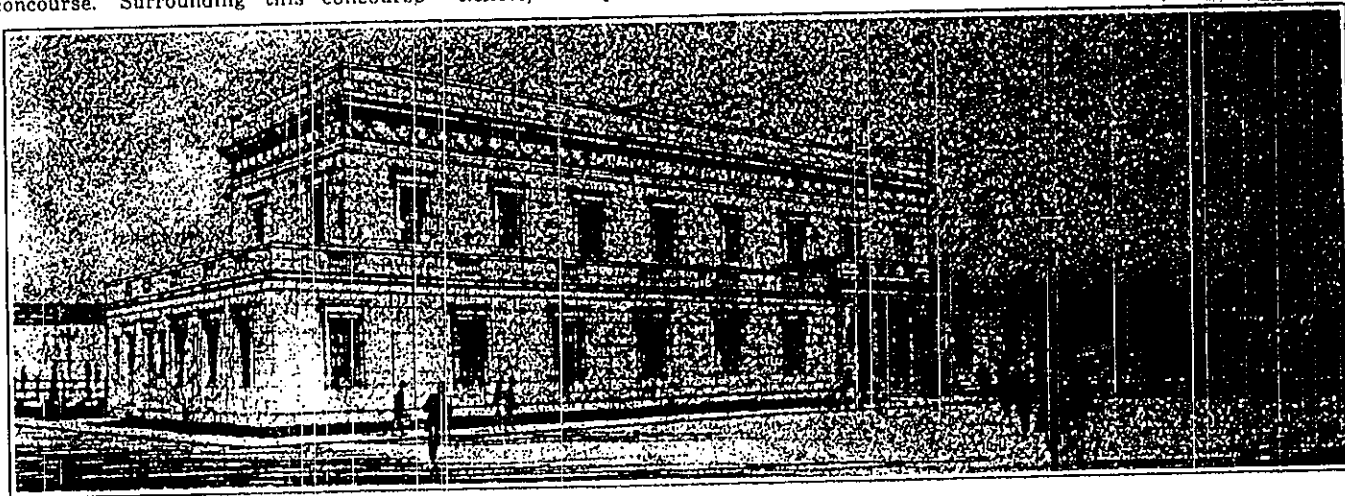
CANADIAN
PACIFIC
RAILWAY
-NORTH SHORE-
DIARY

THREE RIVERS
STATION

Canadian Pacific Railway Construction, Betterments, Etc.

Three Rivers Station.—The contract for the erection of a station at Three Rivers, Que., has, we are officially advised, been let to Thompson-Starrett Co. The building will have its main front on Champflour St., with one side abutting on St. Martin St. The building is Italian in design, the exterior being frankly expressive of its purpose as a station. The central portion covering the general waiting room and concourse will be carried out as an evidence of these important features in the station plan, and also to afford good lighting to these interior areas. The building will be of fireproof construction, faced on the exterior with Deschambault stone; the interior wall finish of the concourse and general waiting room will be of tile faience, ornamental plaster and mural decoration, and the floors will be laid with a combination of tile and terrazzo. The entire main floor will be given to the general requirements of a modern station building. The main entrance will be from Champflour St. through a vestibule into a general concourse. Surrounding this concourse

20 ft. of the width. At the north end are the private offices, enclosed in glass. Next to them is an open counter devoted to the steamship and general information offices. The 10 ticket wickets occupy the center. At the south end is a special department for attending to the demands made by the ticket clerks and the various ticket offices throughout Montreal for sleeping and parlor car tickets. It has direct telephone connection with the clerks at the wickets and with many points in eastern Canada and the eastern United States. Telegraph connection with these outside points is also provided. Consequently, requests for reservations on trains leaving Montreal or such points can be handled by this department with the least possible delay. Six clerks will be constantly on duty to deal with the demand for reservations. Each of the ticket wickets represents what is technically known as a universal ticket-selling unit. Such units carry a complete stock of Canadian Pacific, New York Central, and Delaware & Hudson tickets, and by this system an intending

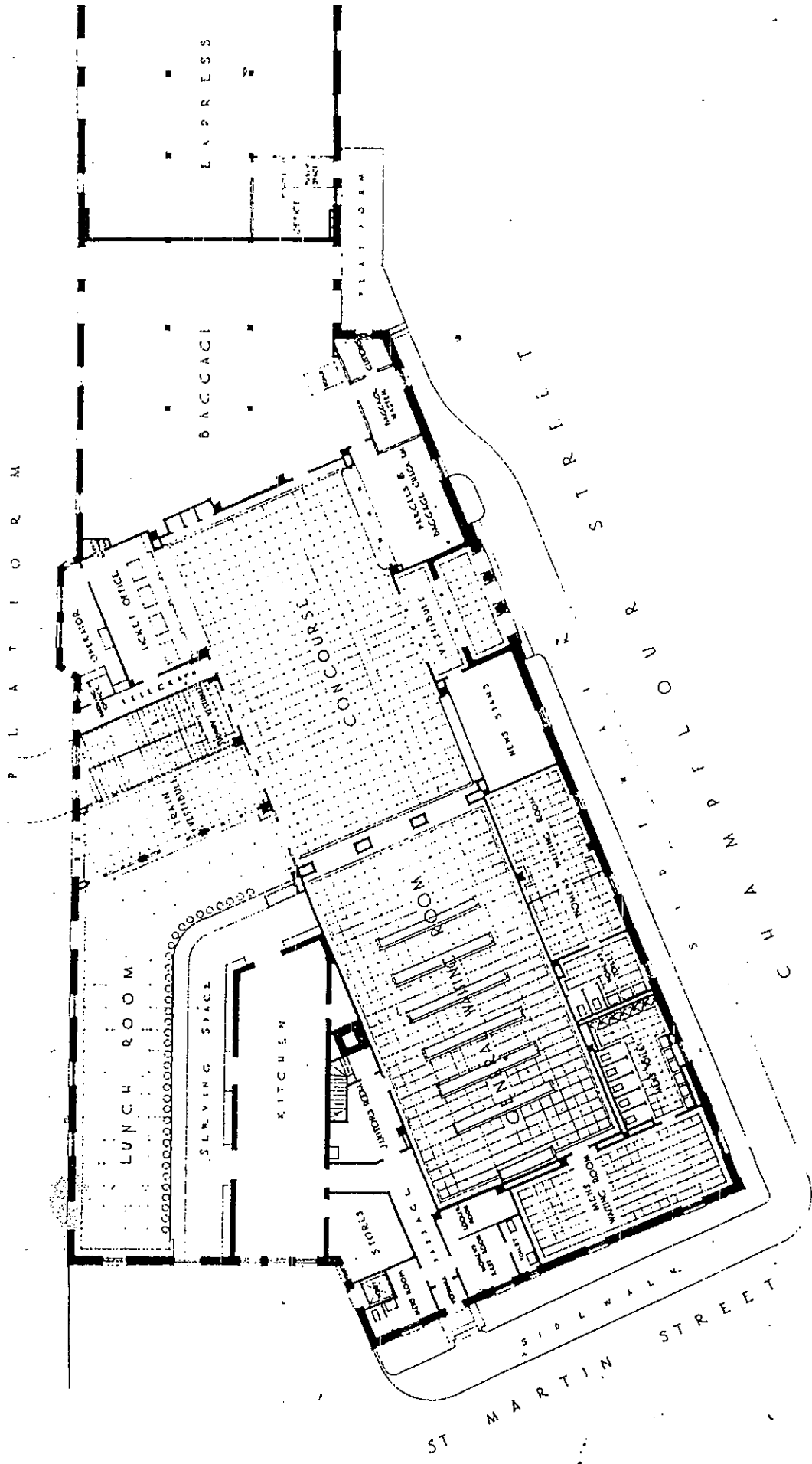


Street Elevation of Station to be built at Three Rivers, Que., by Canadian Pacific Railway.

will be the various facilities for passenger traffic, such as ticket office, parcels and baggage check room, news stand, telephone booths, telegraph, entrance to baggage room, and lunch room; also direct communication to the train subway immediately opposite the main entrance to the station. The subway will pass under the tracks, with stair communication from subway to the various platforms. From the same concourse the large general waiting room will be entered by passengers awaiting trains, from which communication is obtained to the men's smoking room, women's waiting room and lavatory facilities. The service entrance to the building to meet the requirements of kitchen and lunch room, will be separately approached from St. Martin St., and the baggage and express rooms will provide openings and communication both to railway platforms and Champflour St. In the baggage room provision will be made for customs inspection and baggage master's office. The plans were prepared by Ross and Macdonald, architects, Montreal, who also have the supervision of the work. (March, pg. 108.)

Windsor St. Station, Montreal.—The new ticket offices were opened for business on June 3. They are situated along the east wall of the main waiting room, taking up the entire length, and about

passenger can purchase tickets for any point or points on these lines, including sleeping and parlor car tickets, without leaving the wicket, no matter how complicated the routing he desires. The ticket racks are so arranged that two clerks can use the same wicket during the day, the one going off duty being able to turn the rack round so that he can make up his accounts at a desk at the rear while his relief uses the reverse side. Each man has a complete set of tickets to himself as well as separate drawers for his equipment, etc., which greatly simplifies his duties and avoids confusion. The equipment at each wicket is designed to enable the clerks to calculate fares and perform other labors with the maximum speed and efficiency. The tables of tariffs are no longer kept in a cumbersome book, but in racks so arranged that to work out rates is much simplified.



Ground Floor Plan of Station to be built at Three Rivers, Que., by Canadian Pacific Railway.

Canadian Railway and Marine World

December, 1931

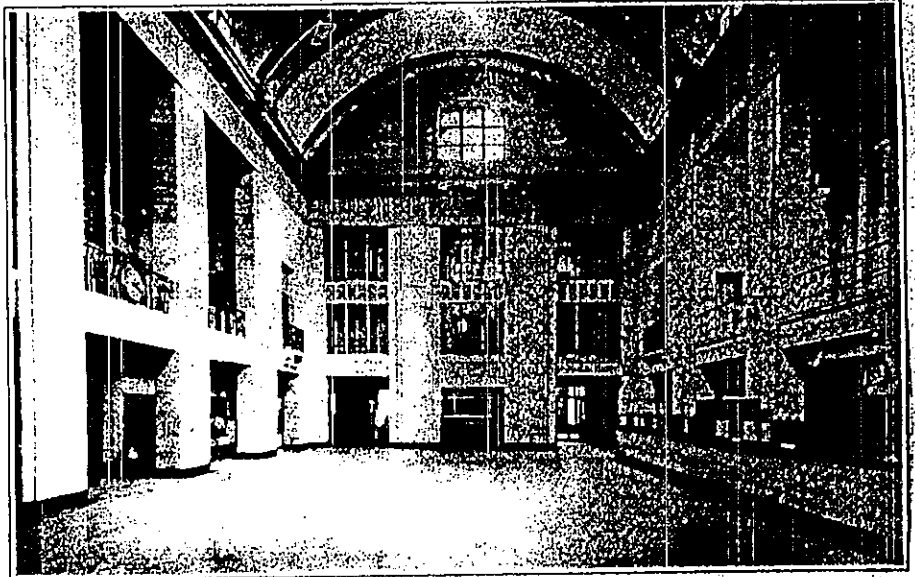
Station built at Park Avenue, Montreal, by Canadian Pacific Railway.

The Canadian Pacific Railway Co.'s new station in the north end of Montreal, to be known as Montreal, Park Avenue, has been built as a result of the normal growth and development of that section of the city. The construction of two new subways under the railway lines at Jean Talon Street and at Park Avenue will permit adequate extension of tramway service to the north end of the city, and the new station has been located at the junction of Park Avenue and Jean Talon Street, with a view to general convenience to the public, from the standpoints of accessibility by tramway and taxi. The Mile End station was closed to passenger traffic when the Park Avenue station was opened, as it had for some time been subject to congestion and certain inconvenience of location, and traffic from that point has, as a consequence, been transferred to the new station. The project in its full development includes a station building, with approaching driveways, sidewalks, gardens, etc.; an express building and power house; a subway from the station building to the train platforms; and additional trackage, with covered passenger, baggage and express platforms.

The station building has been designed along modified Italian Renaissance lines, with the elimination of all unnecessary embellishments, modern motifs being applied in stone carving and metal ornamentation, the effort being to provide a simple, but dignified and monumental, building. It consists of a large

easy ramp is a passage way connected to the passenger platforms, enabling passengers to move to and from trains under

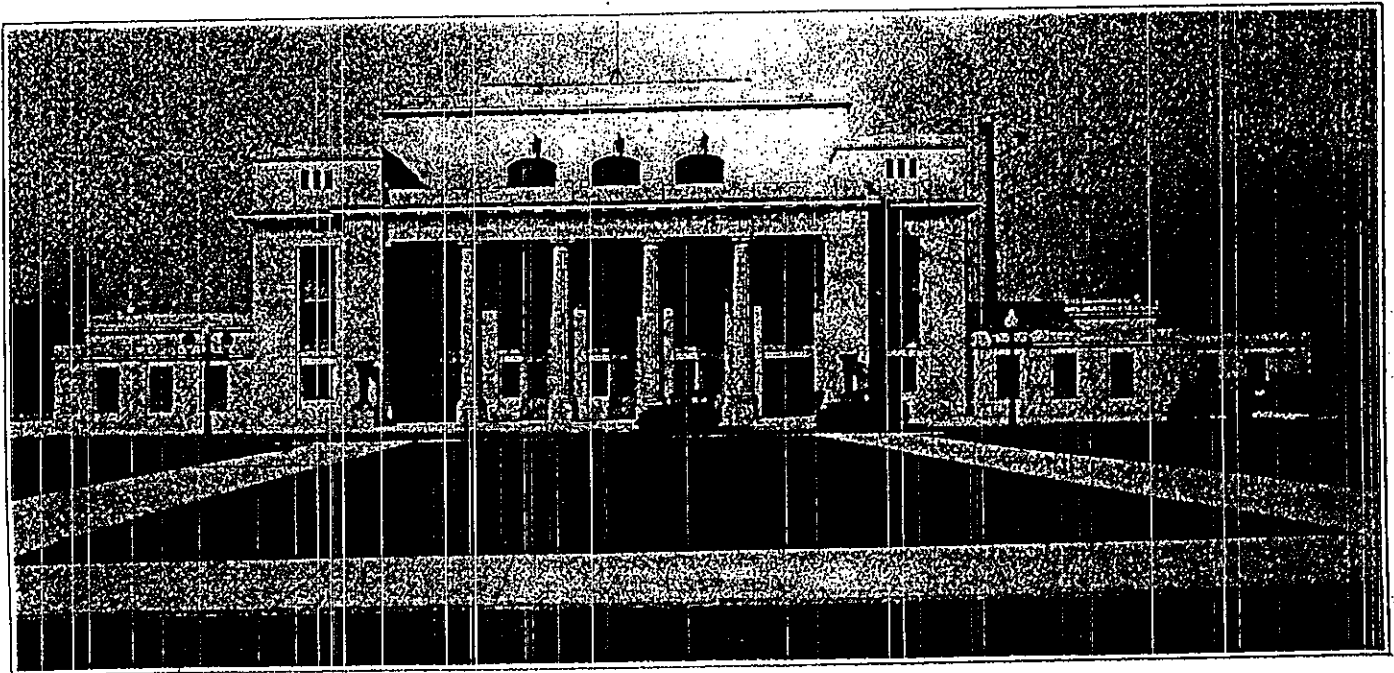
walls, which is also used for the finish of the walls of the lobbies around the central space. The floors are of Ter-



Concourse, Park Avenue Station, Montreal, Canadian Pacific Railway.

cover. There are two floors of offices above the ground floor level, arranged around the central concourse space. They will be occupied by the company's own forces. The main building is fireproof,

razzo in a pleasing 2-tone buff effect, with black marble bases and borders. The ceilings of the large public spaces are treated with acoustical material to soften the echoes and tone down the gen-



Park Avenue Station, Montreal, Canadian Pacific Railway.

central concourse, around which are the waiting rooms, with men's and women's rooms adjacent, ticket office lobby, baggage and parcel rooms, telegraph, travelers' aid, public telephones, news stand, a complete lunch room and a barber shop. Leading from the concourse by an

being constructed of steel frame with reinforced concrete floors. The exterior walls are of stone, backed up with brick and furred on the inside with Haydite blocks.

The interior finish in the concourse consists of Travertine marble on the side

eral noise level in those spaces. The main concourse has concealed cove lighting, housed in the cornice around the room. The lighting of the other portions of the building is by conventional drop light fixtures hung from the ceilings.

The main entrances, of which there

are two on the front of the building, two for exit to the tramways off the waiting rooms, and a single entrance at the rear for exit to taxis, have bronze frames

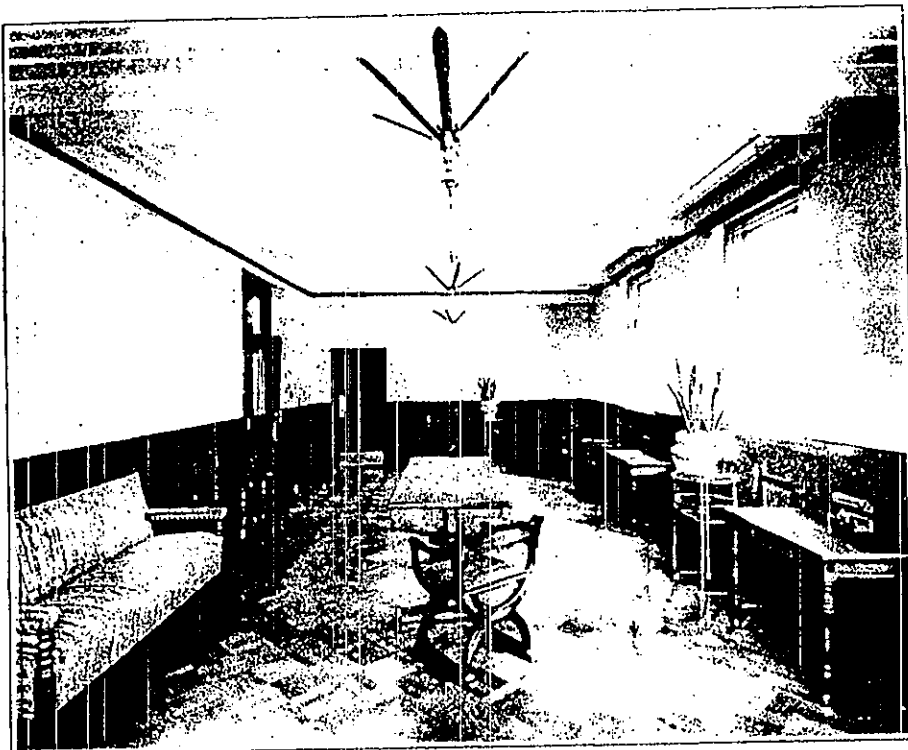
marble counter in a double J form. This counter is of the low type, with chair height stools with backs. The kitchen, in conjunction with the lunch room, is

der, and a dark green Terrazzo floor. It will be equipped with the latest conveniences in the way of cabinets, basins, chairs, etc. The general offices on the first and second floors are finished in conventional form, with plastered walls and ceilings, cement floors covered with linoleum with a painted wood base and picture mould, pressed steel door frames, wood doors, with glazed panels and transoms. Corridors to the offices have plastered walls and ceilings, with Terrazzo floors, black marble bases and borders.

The Canadian Pacific Express Co.'s building is at the rear and somewhat back of the station building, and is connected to it by platforms. It is a low one-story building, consisting of a large express room with customary sliding doors, and a general office at one end for the accommodation of the staff and the public. The building has a 10 ft. platform extending around all 4 sides and protected with a marquee or platform shelter for the full width. The building is faced with dark brown textured brick and trimmed with concrete.

The basement floor is excavated to a depth of 27 ft., to provide space for boilers and power plant serving all facilities in connection with the terminal. Considerable ground water was encountered in the excavation, which was 60% in rock. The drainage is provided by footing drains, carried around the outside walls and turned into a sump pit inside the building, the water being pumped from the pit into the sewer by electrically driven automatic sump pumps.

Space has been provided for 4 horizontal return tubular high pressure steam boilers, 2 of which have been installed for the present. They are fired by automatic stokers of the underfeed type. The coal supply is contained in coal bunkers



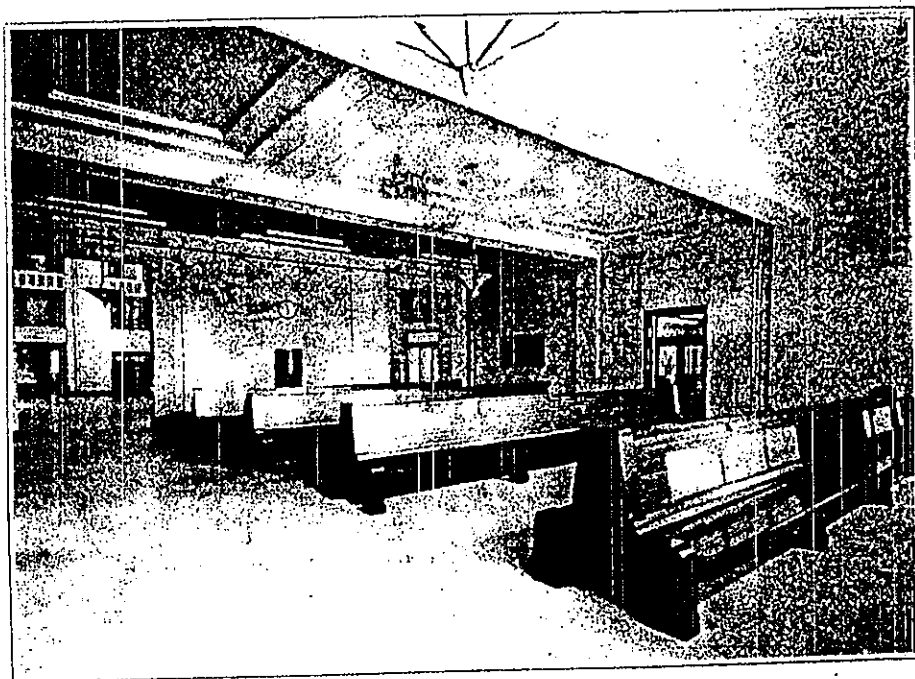
Women's Waiting Room, Park Avenue Station, Montreal, Canadian Pacific Railway.

and doors. Other openings around the central public spaces have Monel metal doors and frames. In the passage way from the concourse to the trains several store front display show cases have been installed, which are also trimmed with Monel metal.

The waiting room is finished in much the same material as the main concourse, but with simple ornamental plastered ceiling with no acoustical treatment. It will be fitted with black marble drinking fountain and comfortable seats of the conventional type. The men's smoking room and women's rest room, with lavatories adjoining, are connected directly with the waiting room on either side. The men's smoking room is finished with a heather brown quarry tile floor and dado to window sill height. The walls and ceiling are plastered down in a soft buff tone decoration. The women's room has an oak floor and oak dado to window sill height, with plastered walls and a simply ornamented plastered ceiling. The walls are finished in a light texture Craftex treatment. The lavatories in these rooms are finished with white marble dado and stalls and white Ceramic tile floor. The ticket office on one side of the main concourse is of the open counter type, with a low Monel metal screen on top, with individual wickets. The counter has a Travertine marble front and a Belgian black marble top. Counters for the telegraph and travellers' aid are both similar. A completely equipped news stand, with customary fittings and show cases, is located at one end of the concourse, adjacent to the entrance to the subway, where it is convenient for passengers moving to and from trains.

The lunch room has plastered walls and ceilings, with Terrazzo floor, and is

finished with red quarry tile floor, with white glazed tile walls from floor to ceiling, and is fitted up with all modern conveniences, including electric refrigeration and gas ranges. There will be a



Men's Waiting Room, Park Avenue Station, Montreal, Canadian Pacific Railway.

completely equipped soda fountain in conjunction with the lunch room. The barber shop, at the easterly end of the concourse, and adjacent to the lunch room, is finished with a white green-veined marble dado about 7 feet high, with Belgian black marble base and bor-

der, which form a portion of the basement of the building, coal being discharged directly from the cars through manholes in the platform to the coal bunkers. All steam and return mains and other piping from the power house to the station are carried in an underground pipe tun-

nel of full size, which also serves as a connecting passage between the station building and the power house. At the end of the express building an ash disposal tank has been incorporated as a part of the structure, so that ashes may be conveyed from the boiler room floor by a steam jet ash conveying system to the tank above, from which, by means of a chute, the ashes will ultimately be discharged into gondola cars and hauled away. The heating for the building is a 2-pipe low pressure vacuum system, the vacuum pumps being located in the basement of the station and discharging the condensation through the tunnel to the boiler feed pumps in the boiler room. The boilers are equipped with efficiency instruments to indicate, record and integrate steam flow, record air flow and flue gas temperature, and indicate air pressure at various points in the boiler settings.

The exterior work around the building consists of sidewalks, curbing, street paving, garden plots, fencing, etc. The streets and roadways, after having been graded and levelled off to the sub-grade, were rolled, and an 8-in. layer of large broken stone, forming a teleford base, was installed; on top of this a 3-in. layer of dry crushed stone was placed and finally a 6-in. layer of concrete, reinforced with wire mesh, the wearing surface consisting of 3 in. of asphalt. The cement surfaced sidewalks were formed similarly, but no steel reinforcing was used. The curbing consists partly of granite and partly of concrete. The main fence on the front side of the building and the portion connecting the express building is constructed with concrete posts and iron pickets. The fence on the other portions of the property has standard chain link fence and iron pipe posts. The lighting from the outside is provided by City of Montreal type light standards, having 500 watt lamps in each. The front of the building will be further illuminated by 2 special lamp standards equipped with high power floodlights.

The plans, specifications and details were prepared in the office of the Chief Engineer, C.P.R., J. M. R. Fairbairn, D.Sc. Construction was started about Jan. 1, last, and was completed by Oct. 1.

The offices on the first floor are occupied by O. M. Lavoie, Superintendent, Laurentian Division, and T. Collins, Superintendent, Montreal Terminals, with their assistants, division master mechanics, and staff. The second floor is occupied by P. D. Gant, Accountant, and George Trepanier, Assistant Accountant, and staff.

The station was opened officially, Oct. 31, at 9.30 p.m., when R. S. White, M.P. for Mount Royal, Montreal, unlocked the front door, among those present being Mayor Houde, of Montreal, J. K. Savage, Superintendent, Quebec District, T. Collins, Superintendent, Montreal Terminals, O. M. Lavoie, Superintendent, Laurentian Division, and a number of other C.P.R. officials. On the following day, Nov. 1, Sunday, the station went into active operation, the first inbound train being one from Quebec, arriving at 6.23 a.m., and the first outbound one leaving at 9.45 a.m. for Quebec. All the services previously at Mile End station have been transferred to Park Avenue station.

CANADIAN
PACIFIC
RAILWAY
NORTH SHORE
DERAILMENTS &
COLLISIONS

C. H. RIFF

COLLISIONS AND DERAILMENTS

September 13, 1905	Labelle
July 20, 1906	Trois Rivieres
July 30, 1906	St Rose
June 21, 1907	Lachute
June 9, 1909	St Maurice Bridge
October 17, 1909	Jacques Cartier Junction
January 8, 1912	St Vincent de Paul
February 8, 1913	Hocheloga
November 1, 1912	Lanoraie
October 12, 1920	Desales
November 19, 1920	Outremont
April 14, 1921	Trois Rivieres
August 17, 1922	Outremont
June 4, 1923	Staynerville
December 3, 1924	Joliette
July 10, 1926	Trois Rivieres
September 20, 1929	St Vincent de Paul
January 8, 1933	Calumet
February 16, 1934	Lachute
February 8, 1934	Ste Therese
June 11, 1936	Waltham
September 1, 1938	Portneuf

COLLISIONS AND DERAILMENTS

September 13, 1905	Labelle
July 20, 1906	Trois Rivieres
July 30, 1906	St Rose
June 21, 1907	Lachute
June 9, 1909	St Maurice Bridge
October 17, 1909	Jacques Cartier Junction
January 8, 1912	St Vincent de Paul
February 8, 1913	Hocheloga
November 1, 1912	Lanoraie
November 23, 1919	Terrebonne
October 12, 1920	Desales
November 19, 1920	Outremont
April 14, 1921	Trois Rivieres
August 17, 1922	Outremont
June 4, 1923	Staynerville
December 3, 1924	Joliette
July 10, 1926	Trois Rivieres
September 20, 1929	St Vincent de Paul
January 8, 1933	Calumet
February 16, 1934	Lachute
February 8, 1934	Ste Therese
June 11, 1936	Waltham

In a Railroad Accident.

OTTAWA; Sept. 7—(Special)—There was a smash on the C. P. R. at Papineauville this afternoon. The Imperial limited, going west, ran into a stock train. Seven cattle cars were badly wrecked and a number of cattle killed. The engine on the passenger train was also crippled and the fireman slightly hurt. It is said that the cattle train had not properly cleared a switch when the limited dashed into it. None of the passengers were injured. Among the passengers were Hon. L. J. Tweedie, premier of New Brunswick; Hon. Wm. Pugsley, attorney general of New Brunswick, and Hon. Judge Barker of St. John, on their way to Ottawa.

They were taken back to Montreal and reached Ottawa to-night at 10 o'clock by the Short Line on the C. P. R. from Montreal. They were coming to Ottawa to attend the arbitration on eastern extension railway claims of New Brunswick. The first meeting of the arbitration will be held to-morrow. Other two arbitrators besides Justice Barker, are Justice Langelier, of Quebec, and D. Coulson, Toronto.

Digby-Courier
Digby N.S.

September 14, 1900

DOWN A 60 FT. GULLY.

Remarkable Accident to C. P. R. Train— Passengers Narrow Escape.

Montreal, March 21.—News was received here to-day of a remarkable accident that took place yesterday on the C. P. R. line, about two miles and a half from St. Felix de Valois. The passenger train from St. Gabriel de Brandon, due at Montreal at 9 a.m., was going at a rate of about fifteen or twenty miles an hour, when it ran off the track, about eighty feet from a bridge. The train was composed of a locomotive and three cars, and the first-class car ran down into the gully, sixty feet deep. Fortunately it ran down the slope instead of rolling over, the twenty passengers thus escaping certain death. The wonderful feature is that none of the passengers were hurt.

Superintendent Spencer said that the accident was caused by the accumulation of ice on the track. Three cars were derailed but no one was injured. There was no obstruction to the track of the road and the damage was insignificant.

MARCH 22

1901

8/17/1911



ACCIDENT AU SAINT-LOUIS. — Les deux locomotives qui
ont causé la mort de trois hommes. — Cliché de M. J.-P. Chateau-
d'Artois, rue St-Laurent, témoin de l'accident.

August 17, 1911

SENSATIONAL CHARGES MADE

By Mrs. Ed. Ruddick,
Widow of Dead C.P.R.
Engineer

AT CORONER'S INQUEST LAST NIGHT.

Stated Deceased Had Complained Engine Was Not in Proper Condition. Contradiction from Officials.

A startling story was told at the inquiry into the death of Engineer Ed. Ruddick, who died as a result of injuries received in a collision on the C. P. R. at Lachute, by his widow, who clearly stated that her husband had repeatedly complained to her that it was an extremely difficult task to brake the engine in question and also that C. P. R. Engineer White had told her it was not fit to leave the shops. Further she stated that her husband had told her that his repeated requests to Foreman A. J. Holtby to have the defects remedied had been refused; even just before the fatal trip. His statements were contradicted by Mr. Holtby and Engineer White on being recalled.

The jury brought in the following verdict after half an hour's deliberation: "We find that Edward Ruddick came to his death on June 21 in the Protestant Hospital, Ottawa, and that his death was caused by scalding occasioned in a collision at Lachute, where he was in charge of engine No. 53 of the C. P. R., but what was the direct cause of the said collision the evidence does not show."

Mr. J. A. Ritchie appeared for the crown, Mr. W. H. Curie for the C. P. R. and Gordon Henderson for Mrs. Ruddick.

The first witness was J. Church, of Hintonburg, the C.P.R. conductor who had charge of the train, No. 53, on the night of June 20th, when Engineer Ruddick was killed. Witness said that on the night of the accident he had left eighteen cars under the regulation signals on the main line, and with one or two cars went into Wilson's siding to bring out some fourteen others. When coming out about thirteen cars from the main train, a quarter of a mile away, crashed into the out-coming cars, coming down the grade. Witness went back to where he had left his train on the main line. He met Conductor Gosselin, who told him his train had crashed into the stationary cars. The line at this point is without curve. In answer to a question he said he could see no reason why a collision should have occurred.

Three lights were burning brightly on the rear of his train. He learned that Engineer Ruddick and Fireman Rowe had been hurt and saw them.

FIREMAN'S EVIDENCE.

Fireman Joseph Rowe, 150 Rochester street, Ottawa, with Engineer Ruddick on extra 53 train when the latter met his death, said their running orders were a clear line to Hull and, meet engine No. 1213 at Buckingham Junction. They were supposed to keep out of the way of the regular trains. He said he was sweeping out the cab at the time of the collision. The first he knew of the accident was when the deceased said: "Goodbye, this is the last I see of you." He jumped up on to his seat and then the crash came. He remembered nothing then until an hour afterwards. His back was towards the engine when the collision happened.

Brakeman Fred J. Jamieson, of 1 Duke street, was working with extra 1229 when the accident took place. He corroborated the statements of Conductor Church that the proper signals for their train were all in position and the red lamps burning brightly on the night of the collision. The semaphore light was showing bright red immediately after the accident. The external post-mortem examination report read by Dr. J. L. Chabot showed that deceased died from scald wounds. Raoul Monette, 118 Berri street, Montreal, rear brakeman on extra 1229 on the night of June 20, swore he had his signals on the rear of the train burning brightly on that night. When they got to the semaphore it showed

When coming out about thirteen cars from the main train, a quarter of a mile away, crashed into the out-coming cars, coming down the grade. Witness went back to where he had left his train on the main line. He met Conductor Gosselin, who told him his train had crashed into the stationary cars. The line at this point is without curve. In answer to a question he said he could see no reason why a collision should have occurred.

Three lights were burning brightly on the rear of his train. He learned that Engineer Ruddick and Fireman Rowe had been hurt and saw them.

FIREMAN'S EVIDENCE.

Fireman Joseph Rowe, 150 Rochester street, Ottawa, with Engineer Ruddick on extra 53 train when the latter met his death, said their running orders were a clear line to Hull and, meet engine No. 1213 at Buckingham Junction. They were supposed to keep out of the way of the regular trains. He said he was sweeping out the cab at the time of the collision. The first he knew of the accident was when the deceased said: "Goodbye, this is the last I see of you." He jumped up on to his seat and then the crash came. He remembered nothing then until an hour afterwards. His back was towards the engine when the collision happened.

Brakeman Fred J. Jamieson, of 3 Duke street, was working with extra 1229 when the accident took place. He corroborated the statements of Conductor Church that the proper signals for their train were all in position and the red lamps burning brightly on the night of the collision. The semaphore light was showing bright red immediately after the accident.

The external post-mortem examination report read by Dr. J. L. Chabot, showed that deceased died from scald wounds.

Raoul Monette, 118 Berri street, Montreal, rear brakeman on extra 1229, on the night of June 20, swore he had his signals on the rear of the train burning brightly on that night. When they got to the semaphore it showed green; Jamieson changed this to red.

William Thom, 116 McLaren, the C.P.R. engineer in charge of No. 1229, said he saw brakeman Jamieson "throw" the semaphore. He knew the light showed red towards the west.

REAR LIGHTS BURNING.

John Forde, brakeman on No. 53 on the night of the accident, told of seeing the rear lights of No. 1229 before the accident from the van of the moving train.

Geo. H. Hibbard, of Montreal, another brakeman who was on No. 53, told of seeing the semaphore set against them before the accident. Engineer Ruddick made two applications of the air brakes before the collision. Witness mentioned the fact that the semaphore was against them to the engineer, when on the engine, and the latter said probably the way freight was ahead. Witness was surprised then when the train did not come to a stop.

A. J. Holtby, locomotive foreman in the Ottawa C.P.R. shops, swore engine No. 53, on which the deceased met his death, was in good condition when he went out. To his knowledge there had been no complaints made as to her condition.

H. Edward White, of 112 Rochester street, city, ran engine No. 53 a couple of years ago. He said she was then in good condition. She had been repaired since that time.

Mrs. Jennie Ruddick, widow of the dead engineer, told the startling story that Engineer Ruddick had complained of engine No. 53, saying it was unfit for duty. Her husband had said that someone would be killed on this locomotive, and that he would complain to the master mechanic of its bad condition when he next went to Montreal. He complained that he could not get the brakes on No. 53 to work. She said the deceased had complained that the foreman in the Ottawa shops would do nothing for him. She swore H. E. White had told her on Saturday morning, June 22, that engine No. 53 was unfit for the road.

H. E. White, being called again, swore he could not recollect saying anything to Mrs. Ruddick as to the condition of engine No. 53. A. J. Holtby, the foreman, and E. Neumann, who looks after the air brakes at the city C.P.R. shops, both again swore engine No. 53 was in good condition on the night she left the shops for the road. The latter said the air brakes were in first-class shape.

Ottawa Evening Journal

July 3 1907

car
and
led be-
he was
knee-
in dan-
jured.
plain-

s Ogil-
a writ
works
com-
oved at
ago,
ed that
endant
me in-

RAILWAY FATALITY

Two Trainmen and Four Passengers Reported to Have Been Killed

By Spectator Lensed Wire.

Ottawa, March 8.—Two trainmen and four passengers are reported to have been killed and eight other passengers injured, of whom seven are very seriously hurt, in a head-on collision between a passenger and a freight train on the Canadian Pacific railway at Tetreauville, a suburb of Quebec, to-day.

MARCH 8

~~1915~~

1912

FIVE DIE IN WRECK

Operator's Error Blame For Disaster at Ottawa.

O.P.R. Passenger Train From Pontiac, Que., Crashes Into a Work Train on Its Way From Capital to Hull—Thirteen Are Injured and of These Two May Die—Hull Operator Is Wanted.

Ottawa, March 9.—The official statement issued last night by the Canadian Pacific Railway officials of the wreck on the line yesterday morning between Ottawa and Hull, shows five killed, eleven injured, two of whom are in a serious condition, and a property damage of \$3,000.

The casualties are:

Dead.

John C. Anderson, conductor of the passenger train, Ottawa.
Peter Moyle, a retired farmer, Quyon, Que.
E. J. Tabor, contractor, Hull.
Walton McAllister, Hardley, Que.
Miss Agnes Putnam, 28 years old, Ottawa.

Injured.

Fred Cole, engineer, Ottawa, fractured skull.
C. A. Roy, Ottawa, spine injured.
Alex. Quinn, Quyon, formerly of Ottawa police force, serious internal injuries.
Clayton, Shoon, Ottawa, slightly injured.
Charles Steele, Steele Line, Que., face cut.
William J. Kennedy, Ottawa.
John Edwards, Hudson Bay Post, north of Maniwaki, legs broken.
E. A. Lamb, Ottawa, head cut.
J. Hanson, leg broken.
G. Gohey, leg broken.
Joseph Dowe, Muldoon, Que., leg broken.
J. R. Maxwell, Ottawa, seriously hurt.
Mrs. (Rev.) Gagnon, Pontiac, Que., slightly injured.

Investigation shows that the accident was due to the telegraph operator at Hull station, Harvey Roal by name, allowing the passenger train from Pontiac to back in toward Ottawa at the same time as a work train was going over to Hull. A couple of minutes more would have cleared the track as the run between Hull and the Union Station, Ottawa, is a short one. Immediately after the accident, young Roal, who is only 21 years of age, disappeared, and though the police of both Ottawa and Hull have been searching for him, they have been unable as yet to locate him.

Of those in the hospital here, the most seriously injured are Alexander Quinn, a former Ottawa policeman, and once police champion of Canada in athletics, and W. Kennedy of Ottawa, traveler for the International Harvester Co. Both are in a serious condition. Several of the others have broken legs and other injuries, but their condition is not considered critical.

Doctors and ambulances from both Hull and Ottawa were rushed to the scene, and as soon as possible the dead were removed and the injured cared for.

The passenger train was in charge of Conductor John Anderson of Ottawa, who was instantly killed, apparently from a blow on the head. His engineer was Joseph Murphy, and his fireman Camille Lemieux.

The freight engine was in charge of Engineer Fred Cole and Wm. Short, fireman. All are of Ottawa.

The passenger train had come from Waltham, Que., and as is the custom at the Hull station, was reversed to back into the Union station. It left the Hull station at 9.22, and the accident happened a few minutes later. Both trains were traveling at a good rate of speed, and, as there is a sharp curve and a deep cut just where the accident happened, it was impossible for the crew of one train to see the other train till too late.

The passenger train was composed of an engine, baggage car, second-class passenger, and first-class passenger, in the order named.

In backing up the first-class car was first, and it was the car struck by the on-coming engine of the freight. The impact caused the first-class passenger to completely telescope the second-class car, over one-half of the latter being completely demolished. It was in this car that the five were killed. The first-class car was practically intact with the exception of the seats, which were nearly all torn from their fastenings. The vestibule was demolished. The baggage car was also considerably damaged, but was used to convey the injured to the Hull station, from where they were taken to the hospitals.

Hamilton Spectator

MARCH 9 1912

COLLISIONS AND DERAILMENTS

September 12, 1905 Labelle, Quebec

An open switch at Labelle, Quebec caused a Canadian Pacific train to derail. Four persons were injured

July 30, 1906 Ste Rose

John Broome of Ottawa, an engineer, was killed in a collision between two freight trains at Ste rose. The accident was caused by a misplaced switch. One train was standing on the siding waiting for a fast freight to pass but instead of keeping to the mainline the fast freight quickly turned into a siding and crashed into the standing freight. The engines were 452 and 488.

June 21, 1907 Lachute

Engineer Edward Ruddick was killed as a result of a collision involving locomotives 1229 and 1213.

June 9, 1909 St Maurice River Bridge

The passenger train going to Grand Piles collided with a freight train in the middle of St Maurice River bridge at Trois Rivières. Engineer Caron was killed in the collision.

January 8, 1912

St Vincent de Paul

Four men were killed, one probably fatally injured and ten others badly hurt in a head-on collision on the Canadian Pacific Railway at St Vincent de Paul. The collision occurred at 2:16 on the afternoon of January 8th, 1912 when the 1:30 train from Montreal ran into the 8:30 out of Quebec City. It was very cold day. The train from Quebec was a double-header and it did not stop at the switch where it should have taken the siding but instead charged right along the iron and hit the train out of Montreal.

November 1, 1912

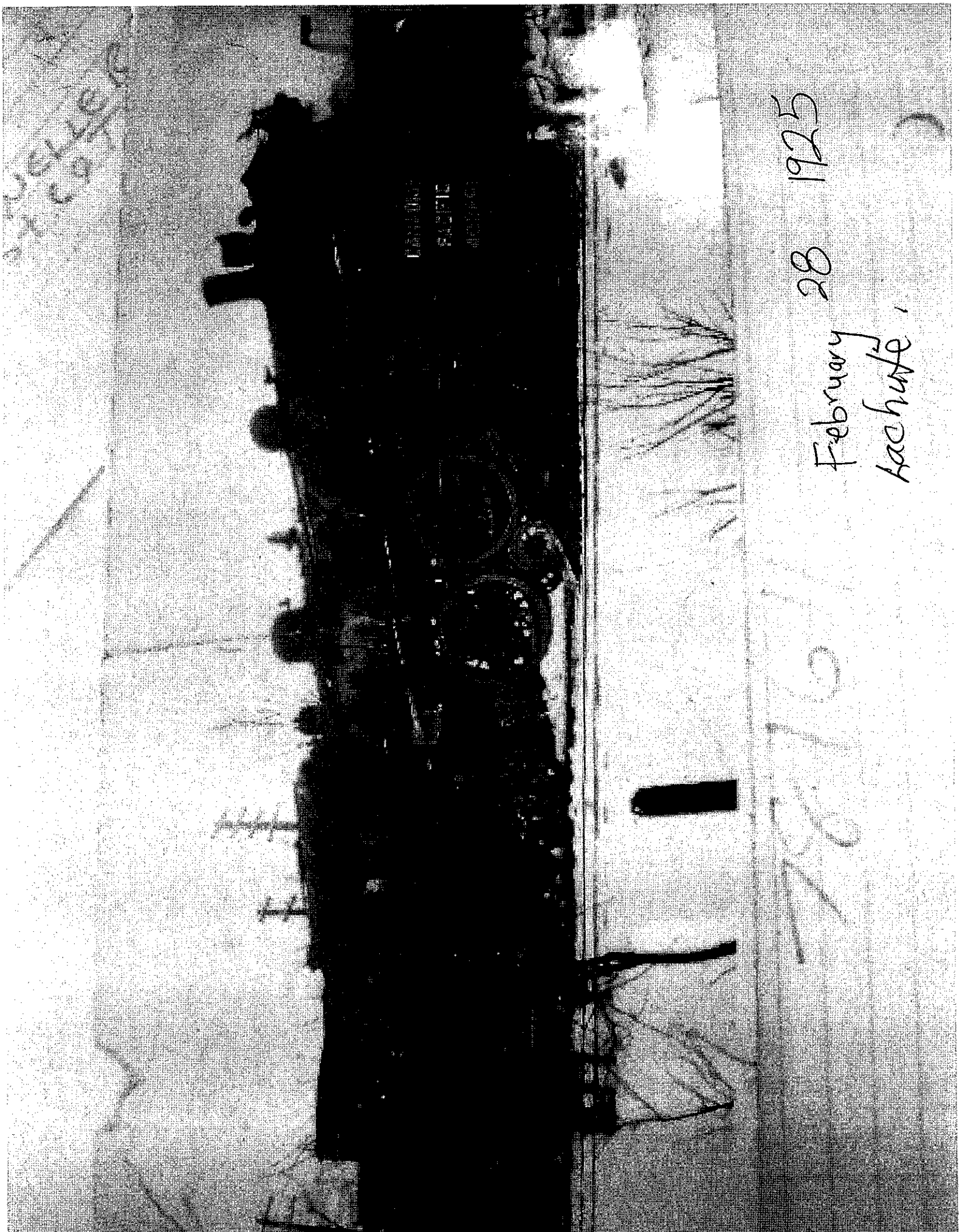
Lanoraie

On the afternoon of November 1st, 1912 the 1:30 passenger train out of Montreal derailed at Lanoraie at three o'clock that afternoon. A misplaced switch which was not observed by the locomotive engineer. The switch diverted the fast passenger train onto the Joliette branch. After the switch there was a sharp curve, The engine and a baggage car toppled over onto their sides. Engineer Juneau and Fireman Ruelland were crushed under the locomotive.

November 23, 1919

Terrebonne

A head-on collision occurred on the Saturday night when the Montreal to Quebec Express smashed into a Boat Special train running to Toronto after the landing of the Empress of France. Fireman A Sanche and Express-Messenger A. Miller were killed.



February 28 1925
Kachurte,

30000

120

Blenheim

November 23

1919

EXPRESS TRAIN AND BOAT SPECIAL COLLIDE NEAR THREEBONNE

Two Trainmen on Montreal-Quebec Express Killed and Six Injured—All the Boat Special Passengers Escape.

Montreal, Nov. 23.—Two men are known to have been killed and six were injured on Saturday night, when a head-on collision took place near Threebonne, on the C.P.R., between a special carrying passengers from the express of France, which docked yesterday at Quebec, for Toronto, and the Montreal-Quebec express. The men killed were members of the train crew, while the injured were, with exception, the engineer on the Boat Special, in the Montreal-Quebec express. The passengers on the Boat Special escaped with nothing more serious than bruises. The dead are: J. Sanche, Quebec, fireman on the Boat Special. A Milner, Montreal, an express messenger on the Montreal to Quebec express.

Those injured are: Alphonse Leclerc, Champfleury Street, Montreal; Ed. Gauthier, Charlemagne Street, Quebec; John Marchedon, 187 St. James Street, Montreal; N. Frechette, 73 North Street, Limoulou, Quebec; George Premont, 217 Prince Edward Street, Quebec (fireman), all on the Montreal to Quebec express, and Leon Leclerc, Quebec, engineer on the Boat Special.

The two trains were traveling at a fair rate of speed when the collision took place. The Boat Special remained on the track, but two baggage cars and the second-class coach of the express were derailed and subsequently caught fire. The passengers in the express were knocked about by the impact, people in the dining-car being pitched across the tables. The accident happened about 6.30 in the evening, and within an hour the C.P.R. had despatched an auxiliary train with wrecking outfit, and hospital car, the latter manned with doctors and nurses, to the scene of the collision. The body of Sanche was found in a ditch. Milner was alive when recovered from the wreckage, but died soon afterwards. The injured were brought into Montreal and lodged in the Royal Victoria Hospital. The Boat Special, which was carrying about 300 passengers, was consolidated with a second special following and was sent on to Toronto this morning. The passengers on the Quebec express were brought back to Montreal and those for Quebec were sent home on the train leaving at midnight Saturday.

October 13, 1920

DeSales, Quebec

An engine and six cars derailed when the CPR Quebec train left the track at DeSales. Two cars overturned. The CPR train that leaves Quebec city at 4:00 in the afternoon arriving at Place Viger station after nine o'clock derailed at DeSales which is between St Vincent de Paul and Terrebonne. The cause was reported to be the breakin of a driving rod on the engine.

February 28, 1925

Lachute Mills

A snow-plough extra had taken the siding half mile from Lachute, known as Lachute Mills. The switch was left open. Canadian Pacific Railway train No. 426, a local, running from Calumet to Montreal ran up the siding and hit the snow-plough head on. Three men in the cab of the snow-plough were killed.

September 21, 1929

St Vincent de Paul

A freight train derailed right in front of the St Vincent de Paul station at 8:30 P.M. on the night of September 21st, 1929. This was the full "regular paper train" out of Trois Rivieres bound for Montreal. On a siding near the station sat three uncoupled cars loaded with stone. The uncoupled cars and ran down a incline onto the main track just as the paper train was coming into the station. The paper train hit the freight cars and was immediately derailed. The fireman, Albert Binette was killed. One car of paper derailed and hit part of the station.

January 9, 1933

Calumet, Quebec

Three passenger cars of Canadian Pacific train No. 430 rolled down a seventy-five foot embankment between Calumet and Pointe aux Chenes. The Montebello to Montreal train ran onto a broken rail just before it reached the bridge over the Rouge River. Seventeen people were shaken up when three of the passenger cars rolled two or three times down the embankment.

February 16, 1933

Saint Hermas

A freight train had stopped at Saint Hermas at the Wilson Milk Station, when it was hit by an incoming freight train. J.E. Latour was found dead in the cab of the freight train

February 16, 1934

Lachute

A collision occurred between a passenger train and an Ottawa bound freight train. The collision occurred three miles east of Lachute at the Wilson's Milk Siding. The passenger train was bound for Calumet while the freight train was a through train bound for Ottawa. Both trains were heading west. The passenger had stopped at the Milk station siding when it was hit in the rear. Killed were trainman George Guitard and fireman Rene Latour.

September 1, 1938

Portneuf, Quebec

A large rain storm hit Quebec on Labour Day 1938. Major flooding caused eleven deaths in the Province. The bridge over the Portneuf River had had its embankment weakened by the rain. The early morning Montreal to Quebec City Express was pulled by CPR No, 2813, a Hudson type. In the cab of this big locomotive was Engineer Ovide Carrier and his Fireman Donat Jobidon. At Portneuf River the passenger train hit the bridge and it just collapsed, the big locomotive was thrown down the fifty foot embankment. Two baggage cars followed the locomotive into the gully. One passenger car was derailed but three other cars stayed on the track. The engine crew were killed.

March 17, 1947

Mont Laurier

A locomotive and two cars jumped off the track near Mont Laurier. About fifty passengers were slightly injured.

September 3, 1938 PORTNEUF, QUEBEC

Engineer Ovide Carrier and fireman Donat Jobidon died when engine No. 2813 on train No. 358 the night train derailed at Portneuf, Quebec, early in the morning when the train crashed through the bridge over the floodswollen Portneuf River after the trestle had been weakened by a series of unprecedented rainstorms. The engine and tender were smashed at the bottom of the fifty foot gully, two baggage cars turned end over end in the same gorge, a first class day coach left the tracks and fell on it's side, but the other three cars stayed on the tracks

May 15, 1947

Grenville, Quebec

Seven persons were injured when a Canadian Pacific Railway train from Montreal to Ottawa derailed half a mile east of the Grenville station. Several boxes of explosive rail flares carried in the baggage car failed to explode.

September 8, 1947

Labelle, Quebec

Two Canadian Pacific trains ran into each other at Labelle. E. Carle and R. Lamonthe; engineer and fireman received superficial injuries in the crash early Saturday morning. Both engines were derailed.

December 28, 1968

Deschambault, Quebec

The Saturday night the Quebec to Montreal passenger train smashed into a standing freight train during a raging snow storm at Deschambault at 8:45 P.M., thirty-five miles east of Quebec City. The passenger train was proceeding at less than ten miles per hour through the blizzard. The storm was so severe all roads in the Province were closed this night. The passenger train hit stalled freight train, engine 8027 leading as it was trying to get into a siding. The passenger locomotive was CPR 1801, one of only three of the large CPR's E-8 type passenger diesels. Thirteen people were injured.

COLLISIONS AND DERAILMENTS

September 1, 1938	Portneuf
February 28, 1939	St Martin
March 24, 1940	Park Avenue
January 1, 1945	Berthierville
September 6, 1947	St Agathe
May 15, 1947	Grenville

Source: Annual Reports of the Board of Railway Commissioners

Publicity Squad Just Yawns As Rampage of C.P.R. Train Ends in Soft Quebec Mud

By KENNETH C. CRAIG

Montreal, Sept. 17 (Staff) — Five crowded coaches of a 14-car C.P.R. train today left the rails five miles east of Three Rivers and did not even hurt a passenger's feelings.

Two hours after the coaches plowed off the rails at 3:15, one burying its nose in soft swamp muck 25 yards from the rail line, passengers were moved off in a relief train backed to the nose of the disabled engine.

Conductors and trainmen, pitifully happy that no one was injured, declared it was probably the most spectacular wreck in Canadian rail history, taking into consideration the complete absence of injury, even perhaps of bruises.

It promised to be adequately publicized by a corps of newspaper and newsmen and women returning from the Quebec conference. Harry Smith, C.P.R. chief of publicity, with the party, said it was his first wreck in 25 years of rail travel. Mr. Smith denied indignantly that the wreck had been arranged as part of post-conference C.P.R. publicity.

The story of the all-but miraculous absence of death and injury is told best by the case of Mrs. F. R. McTigue, Montreal, and her daughter, Caroline, 8 months. They were in the chair car, which ran down a 10-foot embankment into a field.

Child Sleeps Quietly

Caroline slept in mother's lap in the early part of the wreck. Afterward they remained in the coach, the forward vestibule of which was filled with the muck scooped up in its dive.

Mrs. McTigue and Caroline sat comfortably under two whirling fans. "Caroline was asleep and didn't wake up," she said. "I felt it coming and braced myself, and that is all there was to it."

Two others in that coach, Margaret Altken, staff writer, the Evening Telegram, and Lt.-Col. Mary Dover, special assistant officer of recruiting, confirmed Mrs. McTigue's impression of the affair.

"The trees suddenly loomed up in front of me. I was looking out the window," said Miss Altken. "It felt as if we were going to turn over. People were balancing themselves, and there we were. There were no screams—just a dead silence. There was no jerk—it all seemed like something in slow motion."

Col. Dover said: "Everybody sat very quietly. One girl let out a little squeak near me, and I would say the motion was a little like an earthquake."

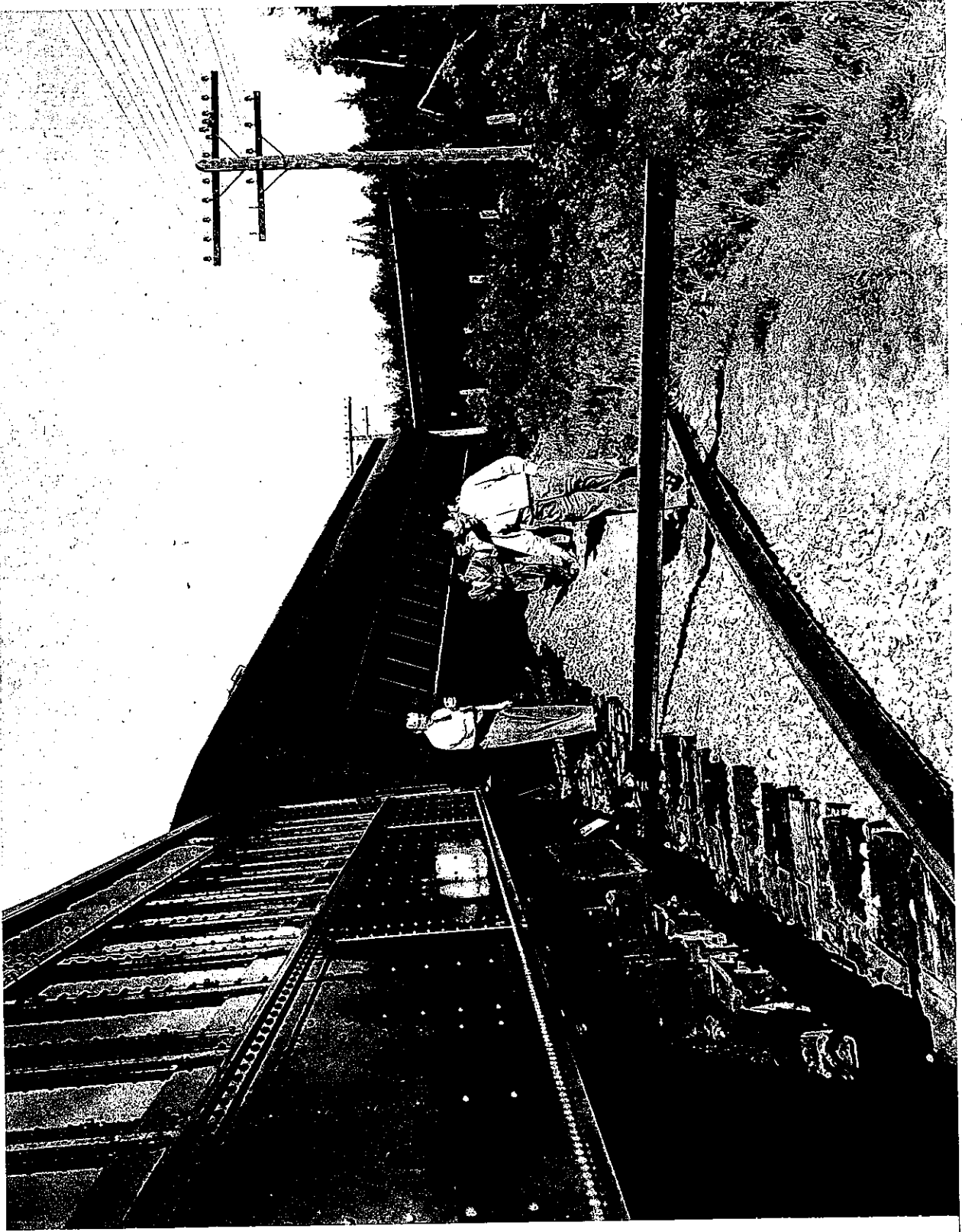
Four Sixes Go to Waste

Saddest passenger was Sammy Shulman, New York photographer. Sammy, at the critical moment, held a nice little hand containing four sixes.

Then there was George Healy Jr., chief of the Domestic Division OWL, Washington, and in ordinary life managing editor of the Times-Picayune, New Orleans. He was riding in a coach of which one end was in the ditch, while the front trucks curled around twisted rails. In his Southern brogue, he described how he was standing in the aisle, getting ready to take a drink. "I felt a bump, braced myself and —(proudly)—never spilled a drop."

Toronto Globe.
September 18
1944

7767 81 September 1944



P1011

NEW YORK JOURNAL
60 NEWSMEN ESCAPE INJURY IN TRAIN DERAILMENT
FRED MILLER, QUIT. SEVERAL HUNDRED PASSENGERS
ON A QUEBEC-MONTREAL TRAIN, INCLUDING SIXTY
NEWSPAPER MEN RETURNING FROM THE QUEBEC
CONFERENCE, NARROWLY ESCAPED INJURY WHEN THE
TRAIN WAS DERAILED HERE. ACME CAMERA MAN
CHARLES LANGER, WHO WAS RIDING IN THE FIRST
CAR (RIGHT) WHICH JUMPED THE RAIL INTO A
MEADOW, CLIMBED OUT OF THE WRECKAGE TO MAKE
THIS PICTURE. THE ACCIDENT IS BELIEVED TO HAVE
BEEN CAUSED BY A BROKEN OR OPEN SWITCH.
CREDIT (A.C.S.) 9/18/44 (MD)

481 EIGHTH AVE.
NEW YORK CITY
Please Credit "ACME Photo"
THIS PICTURE IS LOANED TO YOU FOR
PUBLICATION ONLY AND MUST NOT BE
REPRODUCED OR USED FOR ANY OTHER
PURPOSES WITHOUT PERMISSION FROM US

Canberra P.D.



9-22-44
N.E.

CANADIAN
PACIFIC RAILWAY

ST MAURICE
VALLEY RAILWAY

ST MAURICE VALLEY RAILWAY

The St Maurice Valley Railway Company was incorporated in 1904 to build a railway north from Three Rivers-Trois Rivieres on the Canadian Pacific Railway north along to the new industrial towns of Shawingan Falls and Grand Mere.

In 1905 a contract was let to Ross and McRae for half a million dollars to construct twenty-two miles of railway north from Three Rivers. The line located from a connection with the CPR to the side of LeGres River, where a water-power had been purchased for industrial development by United States investors; and follows the east bank of the river to the falls at Shawenegan, where it crossed over to the west bank over a deep gorge. The line would enter Shawenegan Falls and then north to Grand Mere. It would cross the Great Northern-Canadian Northern Quebec Railway line. The principal structures would be a series of steel bridges; a 112 foot steel deck bridge at Head Race; a 270 foot steel arch at the gorge crossing of the St Maurice river; and a structure of seven 150 foot deck spans at the second crossing of the St Maurice River. The gradient was 1% north-bound and 0.5 % south-bound. The company acquired two old CPR locomotives at this time, Nos. 249 and 350, both veterans of the QMO&O North Shore line.

By the summer of 1906 grading had been completed on the first sixteen miles and that track had been laid on thirteen miles. By the fall of 1906 it was reported that construction trains were in operation from Three Rivers to the Grais River, about 15 miles, held by the construction of the bridge at that point. By December track had been laid for 20.85 miles into Shawenegan Falls.

December 29th, 1906 the railway was placed in operation with two trains a day running in each direction between Three Rivers and Shawegegan Falls.

St Maurice Valley Railway.

Shortly after the completion of the railway, Canadian Pacific Railway took over the operation of the railway. It was reported in the Railway and Shipping World August 1907 that an inspection was made July 3rd, 1907 by the Honourable W. A. Weir, the Minister of Public Works for Quebec, L. A. Vallee, Chief Engineer for the Province of Quebec, and F. P. Gutelis of the Canadian Pacific. It was announced at this time an extension would be made at Three Rivers to the wharves on the St Lawrence River where an connection could be made with ocean going steam-ships. Again it was also announced that the northern extension would be built in the future.

During 1909 work started on the seven mile northern extension to Grand Mere. It was completed and the railway started operation of train service on August 14th 1910.

A meeting of the shareholders of the St Maurice Valley Railway was held at Montreal on September 17th, 1910 in which it was heard a proposal that the Canadian Pacific lease the St Maurice Valley Railway. It was accepted by the shareholders October 6th, 1910..

The Government granted its sanction to the lease and therefore the Canadian Pacific on January 15th, 1911 took in the St Maurice Valley Railway as part of District 3, of the Eastern Division of the Canadian Pacific Railway.

December 16th, 1916, in the middle of World War I, the CPR placed in operation of a standard sleeping car between Grand Mere and Montreal.

It was decided in September 1927 that the bridge at Shawenegan Falls had to be replaced. The bridge on Station Street, Shawenegan Falls, M.P. 20.96, consisted of a 100 foot warren Truss, a fifty foot half deck plate girder span and a thirty foot deck plate girder span all resting on concrete piers.

St Maurice Valley Railway.

Locomotives of the St Maurice Valley Railway.

Ex. CPR 249 4-4-0, Built Manchester Locomotive Works, Aug. 1877

Ex. QMO&O No.18, "Les Deux Montagnes".

Ex. CPR 350 4-4-0, Built Portland Company, Sept. 1877

Ex. North Shore No. 20. "Nicolet".

Both locomotives scrapped November 1909.

Source:

Railway and Shipping World: December , August , November 1906;
January, February, 1907:

Canadian Railway and Marine World: September 1910; January 1911:
July 1917; September 1927.

Canadian Pacific Steam Locomotive: Omer S. Lavallee, Railfare, 1985.

CANADIAN PACIFIC RAILWAY IMPROVEMENTS

Outremont: January 1898 p. 67

The section from Outremont to Montreal Junction was double tracked

Pont Rouge: December 1906 p.725

The Canadian Pacific applied to the Board of Railway Commissionaires to build a spur line from near Pont Rouge station 2800 feet long, with a branch-line of another 450 feet

Staynerville: December 1906 p. 589

The location plans for a spur line four miles in length from Staynerville southerly and westerly to Brunet's Quarry have been approved.

Pont Rouge: January 1907 p. 19

A new station is built.

St Phillipe d'Argenteuil: May 1906 p. 263

A contract was entered for the construction of a line of about three miles extending from St Phillipe d'Argenteuil station or between there and Grenville station northerly.

Buckingham: July 1906 p. 391

A spur line is planned from Buckingham station.

April 1904

p. 113

Ottawa and North and Western Railway: The section from Gracefield to Manawiki was put into operation on February 8th, 1904 and trains were running daily between Ottawa and Manawiki.

Spur Line at Port Rouge.—The C.P.R. is making application to the Board of Railway Commissioners to sanction the construction of a spur line from near the Port Rouge station, Que., 2,800 ft. in length, with a branch therefrom 450 ft. long.

December 1906

New Industrial Siding at Montreal.—The C.P.R., as lessee of the Ontario and Quebec Ry., is applying to the Board of Railway Commissioners for an order authorizing it to construct a siding along the bank of the Lachine Canal, for about 1,400 ft., to the Dominion Car and Foundry Co.'s plant.

July 1907

Mile End: November 1908 p. 781

The Mile End roundhouse was destroyed by fire on October 1, 1908.

Maniwiki: May 1908 p. 337

A spur was built 3385 feet and a wye.

Val Barrette: October 1909 p. 739

A No. 4 standard station was completed at Val Barrette on the extension of the Northern Colonization Railway from Nominique. An inspection was made and the line has been completed as far as Duhamel, about 25 miles.

Duhamel: December 1909 p. 889

The section of 35 miles from Nominique to L'Original Rapid, now renamed Duhamel had been completed.

Ottawa: May 1910 p. 371

A fire destroyed the CPR roundhouse at Ottawa ON April 12th, 1910.

Quebec: September, 1915 p. 335

The foundation stone was laid at Quebec for the new Canadian Pacific station on August 12th, 1915.

Quebec: September, 1916 p. 360

The new Palais Station at Quebec was opened August 10th, 1916.

Ottawa: July 1917

p. 279

Canadian Pacific railway continued to operate Gatineau Valley trains into the Broad Street station in Ottawa.

December, 1924

p.

Canadian Pacific plan new stations at L'Epiphanie, Labelle and St Gabreil; and new roundhouses at Trois Rivieres, St Gabreil and Grand Piles.

April 1926

p.174

Plans for a new station Grand Piles and Waltham.

Gatineau: June 1926

p.298

Plans for a track diversion on the Gatineau Valley Railway.

Mont Laurier: June 1926

p. 310

The Canadian Pacific operates special Hospital Car from Montreal to Mont Laurier on a daily except Sunday in conjunction with the Sanatorium at Ste. Agathe.

Gatineau: June 1926

p. 310

A dam built for the Canadian International Paper company at Chelsea that required that the Gatineau Valley-Maniwaki Sub-Division tracks be diverted near M.P. 8.2 and between M.P. 13.2 and M.P. 17.

Mile End Yard: October 1906

p. 575

The Canadian Pacific had nearly completed laying out a new team delivery yard at Mile End, Montreal. The yard was bounded on the east by Sanquinet Street will expand to St Louis Street and would accommodate about 300 cars. It was laid out on a diagonal plan instead of a long track system. There was 27 tracks for unloading cars and each track would accommodate about seven to eleven cars.

Staynerville: January 1907

p. 19

Track laid in 1906 Staynerville to Brunet's Quarry four miles.

Maniwaki: August 1907

p. 587

Nominique to Maniwaki; Construction was proceeding on a line from the present terminus of the Northern Colonization Railway and Maniwiki, the terminus of the old Ottawa and Gatineau railway now the Ottawa Northern and Westerly. Half of the grading would be completed that summer.

Maniwaki: November 1907

p. 827

Northern Colonization railway, A contract had been let to Orillia Construction Company for the grading of an extension from Nominique toward Maniwaki, a distance of ten miles.

Maniwiki: January 1908

p. 25

Track laid in 1907 was ten miles from Nominique to Maniwiki.

St. Martins Junction Spur.—The Board of
Railway Commissioners is being asked for
an order authorizing the construction of a
branch from mileage 88 88 easterly from St.
Martins Junction station, Que., northerly and
easterly to the Canada Paint Co.'s premises.

JANUARY 1907

Quebec Improvements.—The surveys and preliminary work for a number of improvements at Quebec are being made. The improvements planned include the building of a cribwork wharf from Prince Edward St. to the north embankment of the Louise docks, filling in to make new ground for additional tracks, sidings, etc., the building of a freight shed to take the place of the present one, which will be demolished to give additional yard space, and the erection of a new station. The work of demolishing the buildings on the site of the extensions to the Chateau Frontenac has been commenced.

February 1907

Northern Colonization Ry.—A no. 4 standard passenger station at Val Barrette, on the extension of this line from Nominig, Que., has been completed.

The Chief Engineer of the Board of Railway Commissioners recently made an inspection of the completed portion of the extension of this line from Nominig towards Maniwaki, the present terminus of the Ottawa and North Western Ry. up the Gatineau Valley. The line has been constructed as far as Duhamel, about 25 miles northwest of Nominig. It is expected that the extension to Maniwaki will be completed next summer.

October 1909

Gracefield: October 1926 p. 527

The Gracefield station burnt down on September 3rd, 1926.

Chelsea: January, 1927 p. 3

The Chelsea Dam Diversion was completed between November 9th and December 3rd, 1926.

Aylmer: January 1927 p. 3

Aylmer, Quebec, M.P. 7-4 Waltham Subdivision was almost completely destroyed by fire on November 24th, 1926. The town is asking for a new structure.

July 1927 p. 411

Canadian Pacific has plans in 1927 for new stations at Shawinigan Falls, Gatineau, Aylmer; and extensions planned to the stations at Val David and Mont Laurier; and a new engine house for St Lin.

October, 1928 p. 582

Canadian Pacific announced plans for 1928 that included a new ninety foot turntable for Quebec City; and new stations for Gracefield, Mont Rollant, and Aylmer.

Aylmer: July 1928 p. 394

A new station completed at Aylmer, Quebec.

Hochelaga Yard: November 1928 p. 639

Improvements at Hochelaga Yards include a hundred foot turntable and new flood lights.

Trois Rivieres: December 1928 p. 707

A yard expansion is planned for the Trois Rivieres yard.

Quebec: April 1931 p. 200

The Canadian Pacific announced a direct Quebec City to New York through service train with the Delaware and Hudson and the New York Central railways.

March 1932 p.123

New Canadian Pacific self propelled gas-electric car No. 47 were assigned to Ottawa to Waltham, and Ottawa to Maniwiki runs.

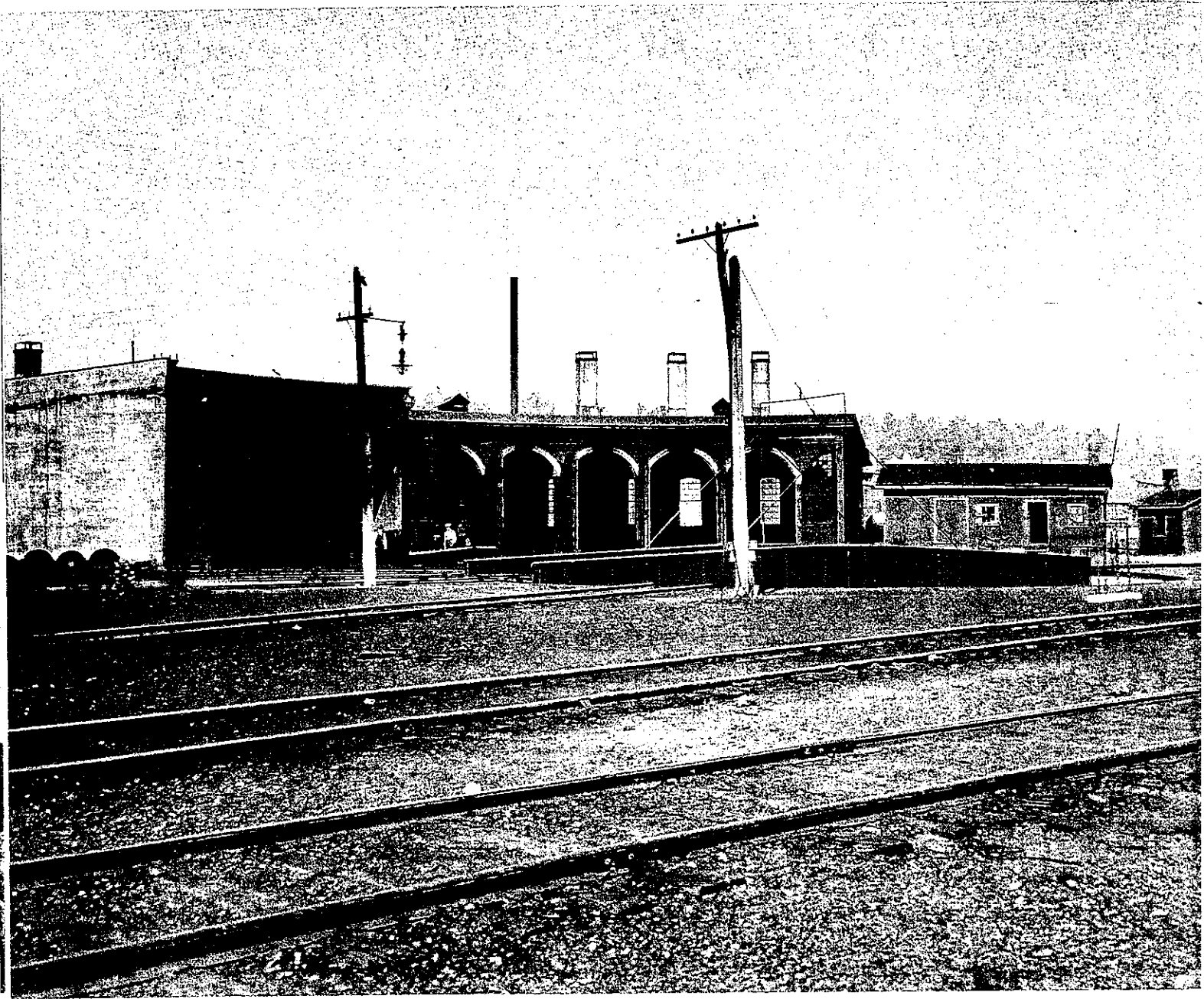
Pool Train Service, May 1933 p.209

Canadian Pacific and Canadian National Railways announce joint pool train service.

Source: Railway and Shipping World,
Canadian Railway and Marine World.



Trois Rivières Québec



*A modern concrete addition has been made to the original 5-stall brick roundhouse on the CPR at
Trois-Rivieres, Quebec, 1918.*

- CP Archives



CPR 64 ex 510
Grand Mere Station 1910