

RED RIVER.

LOMBARD AVE.
MILL STREET

NOTRE DAME AVENUE EAST
WATER STREET EAST

VICTORIA STREET
NOTRE DAME AVE.
WATER STREET
YORK STREET

EMPIRE HOTEL

HUDSON BAY RESERVE

MAIN STREET

BROADWAY

ASPINWALL ST.

TOP OF BANK
CAP 30 CARS
CAP 25 CARS
4 TEAM TRACKS
TOTAL CAPACITY 105 CARS
MAIN FREIGHT TRACK
TRANSFER RAILWAY TRACK

SUPPORTING YARD
11 TRACKS TO 20 CARS
TOTAL CAPACITY 225 CARS

TEAM YARD
38 TRACKS TO 20 CARS
TOTAL CAPACITY 760 CARS

CARRIAGE CO. WAREHOUSE
STABLES

R.R. PROPERTY
RESERVED FOR FUTURE BUILDINGS

PRIVATE PROPERTY

PRIVATE PROPERTY

WINDING TRAILER RAILWAY
FUTURE DOUBLE TRACK
PRESENT R.O. OF RAIL
ET 743.5

WINDING GENERAL POWER CO.

7 STORY BRICK BUILDING

PLATFORM 15 FT. x 150 FT.
BAGGAGE ROOM
EXPRESS SHED
MAIL ROOM

PROPOSED HIGH LEVEL DRIVE
PROPOSED DRIVE

PROPOSED TEAM DRIVE

WAGON YARD
WAGON STORAGE

WINDING 5 FT.

NEW PASSENGER

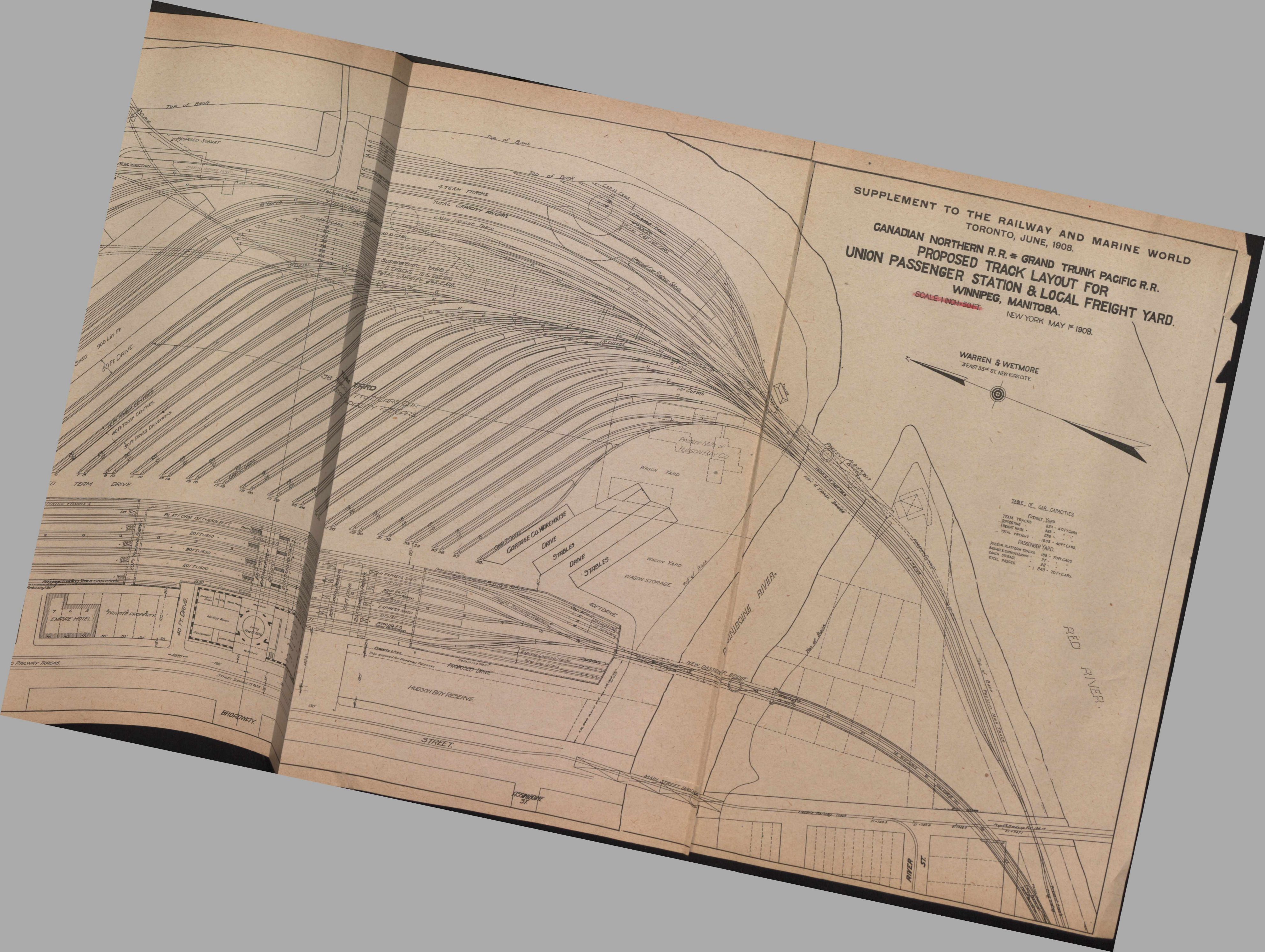
MAIN STREET BRIDGE

SUPPLEMENT TO THE RAILWAY AND MARINE WORLD
 TORONTO, JUNE, 1908.
CANADIAN NORTHERN R.R. & GRAND TRUNK PACIFIC R.R.
PROPOSED TRACK LAYOUT FOR
UNION PASSENGER STATION & LOCAL FREIGHT YARD.
 WINNIPEG, MANITOBA.
 SCALE 1 INCH = 50 FT.
 NEW YORK MAY 1st 1908.

WARREN & WETMORE
 3 EAST 33rd ST. NEW YORK CITY.

TABLE OF CAR CAPACITIES

FREIGHT YARD	
TEAM TRACKS	430 - 40 FT. CARS
SUPPORTING	388 - " "
FREIGHT HOUSE	288 - " "
TOTAL FREIGHT	1106 - " "
PASSENGER YARD	
PASSENGER PLATFORM TRACKS	188 - 70 FT. CARS
BAGGAGE EXPRESS TRACKS	27 - " "
CATCH STORAGE	28 - " "
TOTAL PASSENGER	243 - 70 FT. CARS



THE Railway and Marine World

With which are incorporated The Western World and
The Railway and Shipping World, Established 1890

Devoted to Steam and Electric Railway, Marine, Grain Elevator, Express, Telegraph,
Telephone and Contractors' interests

Old Series, No. 206.
New Series, No. 124.

TORONTO, CANADA, JUNE, 1908.

For Subscription Rates,
See page 419.

Entered as second-class matter, March 5, 1908, at the Post Office at Buffalo, N.Y., under the act of Congress of March 3, 1879.

Winnipeg Union Station.

The union station and terminal yards which are to be constructed by the Canadian Northern Ry., for the joint use of itself and the G.T. Pacific Ry., at Winnipeg, will occupy about 70 acres of ground, located very close to the centre of the city, and bounded by Water St. on the north, Main St. on the west, the Assiniboine River on the south, and the Red River on the east. On this site was originally located old Fort Garry, built in 1812 to protect the trading post previously established by the Hudson's Bay Company, and which was the original settlement of the city.

THE PASSENGER STATION BUILDING will, as shown on the accompanying plan, be located on Main St., directly opposite Broadway, and will be an imposing structure, built entirely of stone, having a length of 350 ft. along Main St., and a width of 140 ft. The height of the larger portion of the building will be four stories and basement, with an elaborate central portion, having great arched windows on all four sides, and surmounted by a massive dome 100 ft. high above street level. The centre of this dome will be directly opposite the centre of Broadway. The main entrance will be off Main St., at centre of building, beneath a great stone arch, having massive stone columns on either side projecting 10 ft. beyond the building walls. The main floor will be at the street level, and will be devoted entirely to station facilities.

The main floor plan, as finally adopted, for convenience to passengers, and facility of operation, represents the highest type of modern passenger station design. Passengers going through the main entrance will pass through a vestibule and arrive directly into the ticket lobby, which will be a clear circular space 90 ft. in diameter, entirely unobstructed by columns, seats or booths of any kind. This lobby will be directly beneath the great dome and will be exceptionally well lighted by the great arched windows, one on each of the four sides. On the east and west sides these windows will open through to the front and rear walls of the building, and on the north and south sides will open directly out on the large open courts. The lobby will be surrounded on the first story by balconies overlooking the main floor. These balconies will run between the great arched ribs, which, rising from the main floor, will taper away to the summit of the dome. The ticket booths will be arranged on south side of lobby, and passengers after purchasing tickets will go directly to baggage checking counter at rear of booths. They may then pass out from lobby through rear vestibule direct to subway under tracks, from which ample stairways will lead up to the train shed platforms overhead. On the north

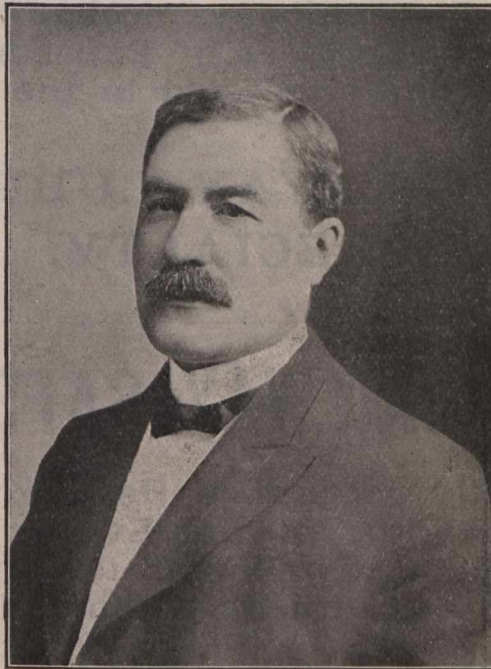
side of ticket lobby space will be provided in each corner for telephone and telegraph booths and newspaper and book stands. Passengers who must wait for trains may pass through north side of ticket lobby into waiting room, which has an area of 9,000 sq. ft. By this arrangement of having the waiting room adjoining and separate from ticket lobby, a quiet and orderly waiting room will be assured, as all passengers going to and from trains may pass directly through the unobstructed ticket lobby without entering waiting room. The confusion in-

waiting room will be covered over by an arched skylight 40 ft. wide by 100 ft. long, above which will be an open court, thus providing the waiting room with excellent light. A special feature has been made of the construction of these skylights. They will be composed of vault light in panels and made absolutely watertight, which, in a region of heavy snowfalls and extremes of temperature will prevent the annoying leaks and draughts incident to large skylights of ordinary construction in this climate.

The walls of waiting room will be embellished with the coat of arms of each of the various provinces of the Dominion, executed in gold leaf and colors. The seats in this room will be heavy oak benches of the movable type, these being generally considered as the most desirable for station purposes. Arranged around the waiting room there will be the usual concessionary booths for the sale of cigars, candy, souvenirs, etc. The interior of waiting room and ticket lobby will have the effect of stone construction throughout, the wainscoting being of marble 6 ft. high, and the floors of terrazzo. This construction will give not only a very attractive appearance to the rooms, but will have the advantage of being sanitary and readily cleaned. All stairways will be of iron with marble treads.

The entire south wing of the main floor will be occupied by the baggage room, area 8,000 sq. ft., and the express room, area 8,000 sq. ft. In the future, when more space is required, both the baggage and express will occupy space beneath the tracks and platforms adjoining rear of building, as shown by the track layout plans, and as described further on. The space at first occupied by them in the building may then be used for additional waiting room space, if considered desirable at that time, or for other station purposes. The central portion of this wing will be covered by an arched skylight similar to that over the waiting room in the north wing, there being an open court in the interior of this wing also. A driveway for baggage and express waggons will be provided at the south end of building. The level of this driveway will be 3 ft. 6 in. below the level of main floor, and will be reached by a short 5% grade down from Main St. The waggons will be loaded and unloaded on an 8 ft. platform outside of building wall, which will span the basement area away below. The baggage and express will be handled by hand trucks between the building and the train platforms, through trucking subways beneath train sheds, and by electric elevators from subways to each platform at either end of train shed.

The basement floor will be 15 ft. below the level of Main St. The entire north wing



JAMES PITT MABEE
Chief Railway Commissioner for Canada

cident to having both moving and waiting passengers together will be effectually prevented by this arrangement.

Adjoining the waiting room on the west side and facing on Main St. will be the lunch room, area 1,300 sq. ft., also the restaurant, area 2,200 sq. ft. Both of these rooms will have a separate entrance off Main St., so that they will be capable of handling local business direct. Adjoining the waiting room on the east side will be the men's waiting room, area 1,800 sq. ft., and the women's waiting room, area 1,800 sq. ft., each provided with toilets and wash stands. On the north side of waiting room an exit will be provided to a 50 ft. street on private property, which may be used exclusively for carriages. The central portion of the

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GUARANTEE COST per thousand miles for from one to five years, when conditions warrant it.

Maintain EXPERT DEPARTMENT, which is an organization of skilled railway mechanics of wide and varied experience. Services of Experts furnished free of charge to patrons interested in the economical use of oils.

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Is pure water white in color; high fire test; low cold test, and splendid gravity.

Please write to home office for further particulars.

CHARLES MILLER,
PRESIDENT.

of this floor will be devoted to immigrants. There will be a waiting room, area 10,000 sq. ft., having a lunch counter on the north side, and a laundry and separate men's and women's bathrooms on the east side. Adjoining the waiting room on the south side will be a separate men's smoking room, with toilets, area 3,000 sq. ft., also a women's waiting room with toilets, area 3,000 sq. ft. The immigrants will be conducted to and from waiting room and trains by means of a stairway at rear of building, leading direct from basement to passenger subway. A separate immigrants' entrance off Main St. will be provided leading down from street to basement, partly by a stairway and partly by ramp. It will therefore be seen that immigrants will be well provided for, and will be handled to and from both trains and the street without coming into contact with other passengers.

In the north wing of basement floor, at the south-west corner, a barber shop will be provided, area 1,300 sq. ft., which can be reached by stairways from both Main St. and the main vestibule of building. The remainder of the west side of wing will be occupied by the kitchen, area 6,000 sq. ft., which will supply the restaurant and luncheon rooms directly overhead. The remainder of this wing will be occupied by the boiler and engine rooms, also heating and ventilating apparatus. There will be four boilers of 130 h.p. each, provided for heating purposes. Under the central portion of building, the basement floor will be used for storage of sleeping and dining car supplies, and miscellaneous storage purposes. The basement will be surrounded on all four sides by an open areaway 10 ft. wide, which will supply light and air to the basement rooms.

The second, third and fourth floors will be occupied entirely by the local and general Western Offices of the Canadian Northern, the G.T. Pacific, and the National Transcontinental Railways. These offices will be on either side of a corridor, the interior row of offices in each wing facing on the open court. Each floor will provide an available office space of 25,000 sq. ft., exclusive of corridors, stairways, elevators and toilets. Provision has been made in the design of foundations and steel structure for the future addition of five office floors, so that the building will then be capable of providing 200,000 sq. ft. of available office space.

The building is so designed that there will be no necessity for artificial lighting in any portion during the day. The electric lighting of the main floor has been artistically arranged. In the ticket lobby the lamps for the greater part will be concealed, the interior of the vast dome being illuminated by the brilliant reflected light from these invisible lamps. In addition, there will be a large chandelier containing 150 lights, suspended above the centre of lobby. A special feature has been made of the heating and ventilating layout. The heat will be supplied by hot water system, using the indirect method on the main floor, and the direct method on the office floors.

The structure of the building will be of the steel skeleton type. The column loads will be supported at the foundations by concrete piles, each pile designed to carry a load of 40 tons. The character of the soil at the site is the blue clay common to Winnipeg, the supporting power of which cannot be relied upon to sustain a greater load than 3,000 lbs. to the square foot. The use of concrete piles will be necessary, owing to the fact that they will lie between the high and low water lines of the Assiniboine River, which is about 1,000 ft. from the building site. The stone used in the construction of the façades will be either Indiana limestone or the native Tyn-dall Manitoba stone.

In the space allowed for the various rooms of the station, and also in the design of

passenger track layout, ample provision has been made for the probable rapid growth of Winnipeg, and the consequent increase of requisite station facilities and traffic. The architects believe that the station as designed will meet all demands that will be made upon it for many years. In this they have profited by the experience of the C.P.R. station at Winnipeg, which, though completed less than three years, has already been outgrown by the city, being now hardly adequate to handle the traffic presented during the busy periods.

PASSENGER YARD AND TRAIN SHED.—The track layout for both the passenger and freight yards, as shown on the accompanying plan, was developed after much study by the engineers and other officials of both railway companies in co-operation with

A Much Appreciated Tribute.

Toronto, May 8, 1908

To the Editor of The Railway and Marine World.

Dear Sir,—It has often been on my mind, when the regular issue of your journal has come to hand, that I should write you to express my appreciation of a publication containing such an amount of most interesting information in respect to the matters which naturally come under the scope of your journal. Not only the amount, but also the accuracy of the information, so far as I can judge, is equally remarkable.

No one, directly or indirectly interested in such matters, who is at all desirous of being up-to-date, can afford to be without your journal. I should soon be out of touch with many matters of interest but for the information I get from this source.

Yours truly,

H. P. DWIGHT,

President Great Northwestern Telegraph Co.

the architects. Several preliminary layout plans showing the various types of passenger terminals were made and studied. It was finally decided that a layout of the through station type, with approach tracks elevated over the intersecting streets, and with tracks raised sufficiently above main floor of station to allow a passenger entrance subway beneath, was the most desirable, giving the greatest operating efficiency for the present and prospective traffic to be handled at Winnipeg, as well as providing the greatest convenience to passengers.

The accompanying plan shows the maximum development of the passenger terminal layout, which will consist of eight through passenger tracks, with adjacent platforms, and two separate open running tracks at rear for through freight trains. The platforms will be 20 ft. wide, and can be made 1,650 ft. long. By means of this great length, and by the use of the double cross-overs, each track will be capable of handling two trains of 11 cars each during periods of heavy traffic. The total capacity of platforms will be 200 70 ft. cars. The platforms will be of reinforced concrete construction raised 12 ins. above base of rail. Between each pair of tracks there will be three lines of pipe for water, steam and gas. Passengers going to trains will pass from rear of ticket lobby into a 50 ft. wide sub-

way, with head room of 10 ft., having 7 ft. wide stairways on each side, leading up to each platform. This subway will be so arranged by means of railings and gates that there will be no interference between passengers going to trains with those coming from trains. The subway will be heated in winter from the building. The elevation of tracks over the subway will be 10 ft. above level of main floor of station. A slight ramp down from rear of ticket lobby to floor of subway will allow a clear head room of 10 ft.

As already described, the baggage and express business will be handled for the present in the south wing of station building. In the future, however, these facilities will occupy space beneath the tracks, as shown on the plan, the tracks being carried overhead by steel viaduct construction. The south wing of station need then contain only a baggage checking counter for the convenience of passengers, with pneumatic tube connection with baggage room. The remainder of this wing will be used for any other station purpose desired. All the sheds beneath tracks will have a clear head room of 10 ft. They will be approached from a 50 ft. driveway, 3 ft. 6 in. below floor of sheds, with a 4% grade down from Main St., south of station building. On the south side of this driveway will be the express sheds, one for each road, with an available floor space of 15,000 sq. ft. in each shed. On the north side will be the baggage room, with an available floor space of 20,000 sq. ft., also the mail room, with 10,000 sq. ft. On both the express and baggage sides of drive there will be a row of electric elevators, one to each platform. These lifts will supply all trains departing for the west and south, and arriving from the east. The fact that the largest portion of all express business handled at Winnipeg arrives from the east and departs to the west, determined the location of sheds on this side of train shed. To supply the east-bound departing trains and the west-bound arriving trains, the baggage and express will be handled through a 15 ft. trucking subway at rear of train shed to a row of elevators on north side of train shed. By these arrangements there will be no necessity for trucking of any kind being done on the train platforms, thereby affording the passengers the unobstructed use of the platforms, and avoiding all interference and confusion. This system of handling baggage, express and mail beneath tracks, with elevators to each platform, is in successful operation at some of the largest and most modern passenger terminals in the U.S., notably the union station at St. Louis, the Rock Island station at Chicago, the union station at Washington, D.C., and the Pennsylvania Ry. station at Pittsburgh. Similar systems of baggage and express handling are also successfully used in many of the large railway terminals in Europe.

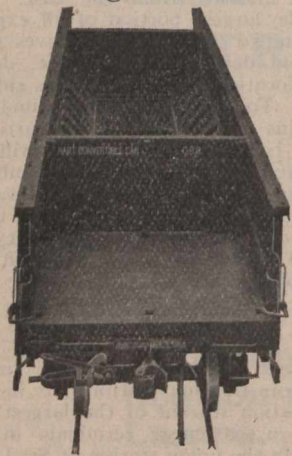
APPROACHES TO PASSENGER TERMINAL.—The west approach will start from the present main track on the north bank of the Red River about 2,000 ft. west of Main St., and descending on an earth embankment at a maximum ruling gradient of 0.4%, will pass over Main St. on a double track plate girder bridge, allowing an underclearance of 14 ft. for the street roadway. It will then cross the Assiniboine River on a new double track steel truss bridge 400 ft. long, one span of which will be a swing bridge, as required by the Dominion Government. The east approach will start from the present main line, near St. Boniface station, and rising on an earth embankment, with the ruling 0.4% gradient, to the Red River, which it will cross on a new double track steel truss bridge 900 ft. long, containing one draw span, as required by the Government. It will then cross, on steel plate

The New Hart Convertible Cars for the Canadian Pacific Railway



50 Ton Car with Steel Underframe, Steel Stakes, Steel Side Plates and Steel Hopper.

The Hart-Otis Car Company have recently designed and are having built for the Canadian Pacific Railway, 400 of their latest Hart Convertible Cars, which are without a doubt the strongest and most efficient cars that have ever been built for ballast and construction work. Realizing the advantage of having this class of equipment strong enough to



withstand the severe strain that construction or ballast work places upon cars, it was decided to spare no expense in getting up this design, and that they have succeeded will no doubt be admitted by any impartial critic who will carefully examine these cars.

The cars have a cubic capacity of 40 yards, when loaded as a centre dump hopper car for ballasting, and of 58 yards when used as a level floor side dump gondola car.

The cars have a cubic capacity of 40 yards, when loaded as a centre dump

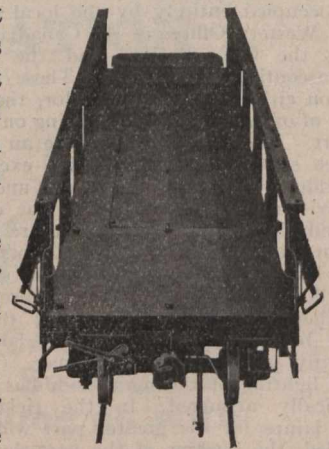
- The length of the car is { 36' 10" between end sills and 38' 4" over buffers.
- The length inside is { 35' 0" as a gondola. 21' 6" as a hopper ballast car.
- Width inside..... 8' 8"
- Height inside..... 4' 2 1/2"
- Height from top of rail to top of car { 8' 6 1/2"

The centre hopper door is made of steel built-up sections and has a full opening of 24 inches, by the length of the bottom of the hopper which is 18'1".

When working these cars in centre ballast service the man operating the car absolutely controls the opening of the hopper door, by means of an escapement lever which allows the door to open

about one inch at a time. This controls the flow of ballast from the car into the centre of the track, so that the operator can dump as little or as much in the track as desired.

When the car is used as a side dump, with convertible floor doors turned down and arranged for pulling a top plow over the car, the side doors have an opening of about 6'6" x 3'8". It will thus be seen that the largest possible stone that could be loaded with a steam shovel can be put through these door openings. While we do not advocate loading boulders into a car of this type, accidents will happen and the car was designed with this in view.



The floor of the car is composed of 2 1/4" tongue and grooved pine flooring. The convertible doors are composed of 2 1/2" long leaf southern pine planking shiplapped. The side doors and end gates are made of 2" Norway pine planking. All other parts of the car are steel construction.

This car also embodies our latest improved hand brake arrangement, which is especially designed for cars of this type, the object being to bring all parts of the hand brake below the top of the side of the car, so as to keep the top of car cleared from all obstruction for steam shovel loading.

There are many minor improvements that have been made on this car, which will be appreciated by those using the cars.

THE HART-OTIS CAR CO., LIMITED, MONTREAL
 Successors to Dominion DUMP CAR Company, Limited

girder bridges, the Winnipeg Transfer Ry., Mill St., Notre Dame Ave., and Water St. Each of the street roadways will have at least 14 ft. clear head room. The proposed base of rail will be practically level from the Red River bridge to the Assiniboine River bridge, at elevation 766.0, which is approximately 10 ft. above the level of Main St. At each end of the passenger layout there will be a signal tower located as shown on the plan, from which all signals, switches and crossovers will be controlled. The electro-pneumatic system of interlocking will be used. All track work will be of first-class construction, with 80 lb. rails and gravel ballast. While the Government requires all bridges across either the Red or Assiniboine Rivers to contain draw spans, these rivers are not navigable at the present time for any but small boats, and the draw spans are open only a very few times in the course of a year, but on the completion of the St. Andrew's locks below Winnipeg, there will doubtless be a considerable increase in the navigation of the Red River.

LOCAL FREIGHT YARDS AND FREIGHT SHEDS.—The problem of obtaining a layout for local freight delivery yards and freight sheds to give sufficiently large team track capacity, long freight sheds, and equal facilities for each road, and allowing greatest accessibility for teaming, as well as one that could be properly worked by switching, was complicated by the peculiar shape and conditions of the ground layout, and by the fact that the throat of the yard had to be located on a bridge across the Assiniboine River. The final layout of freight sheds, team tracks and supporting tracks, gives the greatest car capacity, as well as the greatest facility of operation and access to team hauling, of several tentative layouts which were drawn and studied.

THE TEAM YARD will contain 42 tracks, with a total capacity of 830 40-ft. freight cars. The switching leads to team yard will be divided by cross-overs into three separate portions, each controlling 13 tracks, so that three switching locomotives may be worked at the same time. The usual length of team tracks will be 800 lineal ft., with a capacity of 20 cars each. The team driveways will be of stone block construction on a 6 in. concrete base. This construction is made necessary by the treacherous character of the clay soil, which, when wet, will heave and swell, causing an ordinary light pavement to break and disintegrate. The driveways will be 30 ft. wide between curbs, the opposite tracks being 40 ft. centres across the driveways. Adjacent pairs of team tracks will be on 12 ft. centres. Tapping the ends of these driveways will be a paved avenue from 60 to 70 ft. wide, running the full length of the yard. This avenue will be accessible from Water St. on the north, passing beneath the bridge carrying the east approach overhead, and from Main St. near the Norwood bridge on the south, passing beneath the south approach.

The surface drainage from all the driveways will be by means of gutters along each side of each driveway, ending at catch basins located at ends of driveways on each side of the wide avenue. These catch basins will discharge into a line of vitrified tile pipe running beneath the wide drive, and discharging into the Assiniboine River.

THE FREIGHT SHED LAYOUT will consist of two equal sets of inbound and outbound sheds, one set for each road. The outbound sheds will be 40 by 1,000 ft., each served by four tracks. The inbound sheds will be 60 by 900 ft., each served by two tracks. Between these inbound and outbound tracks will be a 10 ft. transfer trucking platform. Each road will therefore have a freight shed track capacity of 144 40-ft. cars. The freight sheds will be one storey high, having

steel columns and roof trusses, with sliding doors on both the track and team sides, so that any portion of the shed may be opened. Above the doors will be a transom of wire glass. The roofs will be of tin. Floors will be of concrete laid on a compacted cinder fill.

At the ends of the freight sheds, adjacent to the wide avenue, ample provision has been made for the freight offices. These will contain 15,000 sq. ft. of available office space for each road, and will be in the second storey above main floor of shed. A bridge 40 ft. wide at the level of these office floors will span the six intermediate tracks, and connect the outbound and inbound sheds. The freight agent's office will be located in this bridge, where he can view the loading and unloading of cars. The switching leads to freight sheds will be of such length that the tracks may be switched without the switch engine having to cross the bridge at throat of yard. The supporting yard will have a total capacity of 385 cars. This yard will be for the reception and storage of arriving trains of loaded cars to be switched into team yard and for departing trains of empty cars which have been switched out from team tracks. This layout of team and supporting tracks and freight houses will be one of the largest local freight delivery yards in existence. A connection will be maintained with the present Winnipeg Transfer Ry. track, along which are located numerous industrial sidings, and over which cars for transfer with the C.P.R. are handled. This connection will pass beneath the east approach near Lombard Ave.

The present main track crosses the Assiniboine River on a wooden drawbridge, which will be replaced in the new scheme by a steel four-track rolling lift bridge having two separately operated leaves. The Red River is crossed by the present main track on a comparatively new steel truss bridge, the shore span of which is shown at the span near the foot of Water St. This bridge will be maintained for the proposed new layout, and used mostly by the G.T. Pacific Ry. trains, for local freight running between this terminal and that company's general freight yard located about three miles east, as noted further on. The adjacent shore span will need to be reconstructed to meet the change in alignment of running track as shown. This track will pass over the east end of Water St. on a plate girder bridge, the street being somewhat depressed to pass under. The driveway across the Broadway bridge over Red River will be maintained as at present. The west approach to freight yard will use the same line and be at the same level as the present main track. The length of all switching leads for each part of the freight yards is such that no switching whatever will be done across Main St. The only traffic across this street will be that of trains of local freight between this terminal and the Canadian Northern Ry. general freight yards, one mile west, as noted further on. All the through freight trains for both roads will be run on the proposed new overhead line, passing around rear of train shed on the two open running tracks provided for that purpose.

At the north end of the new Assiniboine River bridge there will be located a signal tower, from which will be controlled, by electro-pneumatic system of interlocking, all the signals, switches and cross-overs of the tracks entering the bridge. The sharpest curves used in the layout are 14° radius 410 ft. The frogs used are mostly no. 7, with no. 10 for main track connections and main cross-overs. The track construction in freight yards will have 60 lb. rails and gravel ballast.

As the railway companies will each have their own cartage company to handle all

trucking from freight sheds, as well as a large amount from the team yard, there will be provided, adjacent to the team yard, two stable buildings, each to accommodate 200 horses. The buildings will be of brick construction two stories high, the upper floor being used for feed and harness storage. A cartage company warehouse of brick construction will also be provided for the storage of freight not claimed by consignee within a reasonable length of time.

Each of the joint railways will use its own passenger coach yards, locomotive houses and shops, in conjunction with these terminals. Those for the Canadian Northern Ry. have recently been constructed about a mile west of the new station, and those for the G.T. Pacific Ry. are now being constructed about three miles east of this station. The general receiving, distribution and forwarding freight yards of each road are also located at the above points.

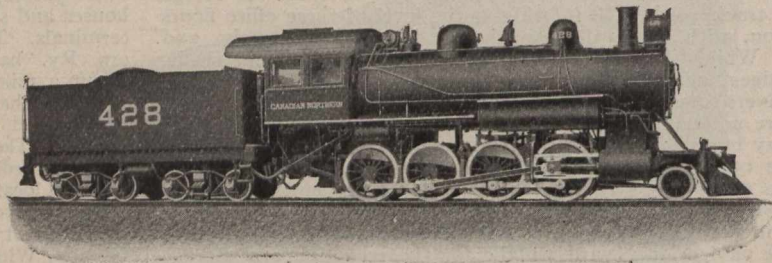
Due to the inevitable future development of the great fertile northwestern portion of Canada, Winnipeg will undoubtedly in time occupy the same important position as the railway centre of Canada, that Chicago now occupies as the railway centre of the United States. The officials of the joint railways and the architects have made this fact the leading consideration in the layout and design of both passenger and freight terminals. The plans have been so drawn that the above described grand scheme of operation may be realized in the ultimate development, but necessitating the initial construction of only that portion necessary to handle the traffic presented by the requirements of the present and immediate future. The railway officials who co-operated for the construction of these joint terminals, and who personally rendered valuable assistance to the architects in their work of designing the terminals, are: Wm. Mackenzie, President; D. D. Mann, Vice-President; and M. H. McLeod, General Manager, of the Canadian Northern Ry.; C. M. Hays, President; F. W. Morse, Vice-President and General Manager; and B. B. Kelliher, Chief Engineer, G. T. Pacific Ry. Warren and Wetmore, of New York City, are the architects who have had charge of the design, and who will supervise the construction of both the station building and the track layout of passenger and freight yards. This firm are specialists in railway terminal design, and have recently completed plans for the new Grand Central station in New York City for the New York Central and Hudson River Rd.

The agreement with respect to the construction of the terminals, which was ratified by the Dominion Parliament April, 1907, is made between the Canadian Northern Ry., the G.T. Pacific Ry., the King, by the Minister of Railways, and the Commissioners of the Transcontinental Railway. Under the agreement the Canadian Northern Ry. is to construct the buildings, tracks, telegraph lines, structures and facilities, necessary for the purposes of the carrying on of the traffic of the three railways having terminals in the station; and is also to keep the terminals equipped with all furniture, locomotives, plant tools, etc., required for its operation. The value of the lands, including yards, tracks, etc., but excluding buildings, is fixed at \$2,625,000, and upon this amount the G.T. Pacific and the Government jointly will pay an amount equal to one-half of 4% per annum, and subject to certain provisions a sum equal to one-half of 4½% upon the expenditures made by the C.N.R., including the cost of the temporary additional tracks and facilities required during construction, prior to the G.T. Pacific Ry. becoming lessee and during the running of the lease of the Eastern Division of the Transcontinental Railway, and when the G.T. Pacific Ry. ceases to

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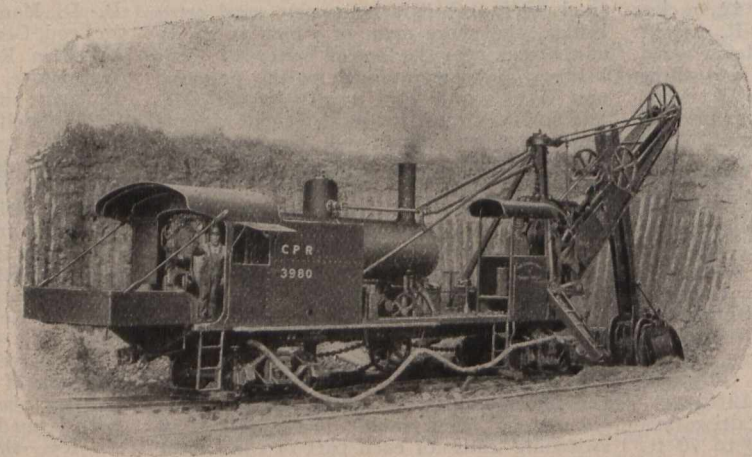
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operate the Eastern Division the G.T. Pacific Ry. and the Government shall each pay a sum equal to one-third of 4% upon the sum of \$2,625,000 and one-third of 4½% upon the expenditures made on capital account. Provided always that before the construction of the building for the hotel and restaurant on the joint terminals has been commenced the Government may, by written notice, elect not to become interested in the said buildings or in the hotel and restaurant, and separate accounts of the expenditures thereon shall be kept, and these amounts shall not be included in the capital account as against the Government. The compensation shall be payable in monthly amounts as to the fixed value of the land, beginning Jan. 1, 1907, and the other percentages shall become payable as the progress payments are made. The terminals are to be in charge of a Terminal Board, consisting of one representative appointed by the G.T. Pacific Ry., during the continuance of the lease of the Eastern Division, and one representative appointed by the C.N.Ry., such board to be appointed as soon as the terminals are substantially ready for joint use and control. If the G.T. Pacific Ry. ceases to operate the Eastern Division of the line at the expiration of the lease the Terminals Board shall consist of two members appointed by the Canadian Northern Ry., and one each by the G.T. Pacific Ry. and the Government. The agreement fully defines the duties and responsibilities of the Board, and prescribes general rules for its guidance, and for the settlement of differences between the different interests involved. It is also provided that other companies may be granted terminal facilities upon such terms as may be arranged, and the Canadian Northern Ry. shall be entitled to receive one-half of such rentals and other consideration received.

Since the foregoing matter was put in type a contract has been let for the passenger station building, the location of which is shown on the accompanying plan, and an illustration of the Main St. elevator of which was given in our last issue. It has been decided to erect a building of basement and three stories instead of four as shown in our last month's illustration, but as previously stated provision has been made for adding up to six additional stories whenever they may be required. The contractors are Peter Lyall & Sons, Montreal, who were the lowest tenderers, the contract price being \$886,000. This figure does not include furnishing, restaurant fixtures, etc., which will bring it up to about \$925,000, nor does it include the interior furnishing of the two upper stories, which will probably cost \$200,000 more. It is intended to start work at once, the contract calling for its completion by Oct. 1, 1909.

Telephone Dispatching on the C.P.R.—A press report stated recently that the C.P.R., as the result of investigations made into the system of train dispatching on the Chicago, Burlington and Quincy Rd., was about to install an experimental system on similar lines between Montreal, Outremont and Farnham, about 49 miles, and it was said that the work will be in working order in June, and should it prove successful, the system might be gradually extended to the whole of the company's lines. We are officially advised that the company is building a telephone dispatching line between Montreal and Farnham, but that there will be no change in the system of moving trains, except that orders will be handled by telephone instead of telegraph. On the Port Burwell branch, Ontario Division, train orders have been handled by telephone for over three years.

G.T.R. Half-Yearly Meeting.

At the half-yearly meeting held in London, Eng., April 9, the President, Sir C. Rivers Wilson, after the presentation of the report published in our May issue, said although the report was not as satisfactory as usual, due to the financial depression in the U.S., the unsatisfactory harvest and the severe weather, shareholders should be satisfied with the result of the operations for the half-year. This was merely, he thought, a temporary check. He hoped that about 1,000 miles of the G.T. Pacific Ry. would be completed by the end of 1908. It was proposed to acquire land in certain districts along the line, and bonds would be issued to shareholders on preferential terms in order to raise the necessary money. Much criticism had been hurled at the board and its management, but, in comparison with other railway corporations on the American continent, the G.T.R. system stood on the highest pinnacle, as far as economical expenditure, combined with efficiency, was concerned. There was absolutely no real reason for discouragement. Every year the company enjoyed an increase of income and traffic, and the present check was, he thought, but temporary. The G.T.R. shareholders had a very valuable asset in the new transcontinental railway, the G.T. Pacific, and in the very near future this would prove a source of great profit. He then proceeded to analyze the accounts for the half-year ended Dec. 31, 1907. These accounts showed that the last half-year was the richest half-year in the history of the company, both as regards gross revenue and net profits. The result of the half-year's working had been that the net traffic receipts had increased from £1,023,000 in the Dec. half of 1906 to £1,052,000 in the past half-year. The balance of the net revenue account for the half-year was £527,200, and, adding the sum brought forward, they arrived at the amount of £541,800 available for the payment of dividends. This was sufficient to pay the dividends for the half-year on the 4% guaranteed stock and on the first and second preference stocks, and a dividend of 3% for the year on the third preference stock. At the meeting in Oct. last, he ventured, very cautiously, to hold out some expectation that, in the event of their traffic receipts keeping up, the directors might be able, possibly, to improve upon a dividend of 3% on the third preference stock; but, as he had explained, the circumstances of the close of the half-year were very adverse, and it had consequently been impossible to realize the expectation referred to. Having referred to the successful completion of the electric installation at the St. Clair Tunnel, and the work being done on the G.T. Pacific Ry., and the Eastern Division of the National Transcontinental Ry., the President concluded by moving the adoption of the report, and authorizing the payment of the dividends recommended. A. W. Smithers, Vice-President, seconded the motion.

The report was adversely criticized by Messrs. Castello, Seal and Fairbairn, the last urging the importance of having some committee or representatives of the Board in Montreal, maintaining that no business could be effectively or properly managed 3,000 miles away. Mr. Boshier expressed himself as satisfied and hopeful of the future, and said the adoption of Mr. Fairbairn's suggestion would set up a rival board, it would lead to friction and be injurious to the real interests of the company.

The President, in reply, referred to the resignation of Hon. C. Rothschild from the directorate. This was necessary owing to Mr. Rothschild's personal business engagements preventing him giving the necessary time to attend Board meetings. The vacancy had been filled by the election of Mr. Glyn, of the banking house of Glyn, Mills, Currie & Co.

In regard to the suggestion that there should be a Canadian board, the President said: I am sorry I did not distinctly hear the gentleman who raised the question; but of all the insane proposals ever made by a set of responsible shareholders, I do not suppose that anything more insane than that was ever made. He does not know the history of the company. This company was managed, or rather mismanaged, in 1861 by a board in Canada, and in consequence of the mismanagement of that board we were brought into financial difficulties.

Mr. SEAL: Pardon me, it did not exist then.

The PRESIDENT: I beg your ten thousand pardons. You do not know the history of your company. Prior to 1862 there was a board in Canada with a small committee in this country, and in consequence of the mismanagement of the Board in Canada, which brought disaster to this company, from which you are suffering even at the present day, and which had as a result the existence of the first preference, the second preference, and the third preference stocks. Under the conduct of those two eminent authorities, G. Glyn and T. Baring, who were the representatives in this country of the G.T.R., a committee was appointed, having as chairman Mr. Crawford, M.P. for London, and as Vice-Chairman, the well-known political economist, Mr. Newmarch. Upon their recommendation, an Act of Parliament was passed by which it was made possible to remove the board over here, and the board was so removed; and I venture to say it was a successful measure. Therefore, I say, according to all precedents, you fared very badly by having a board over there. I do not know whether Mr. Castello and Mr. Seal have ever been to America or know what American boards or meetings are?

Mr. FAIRBAIRN: What about the C.P.R.?

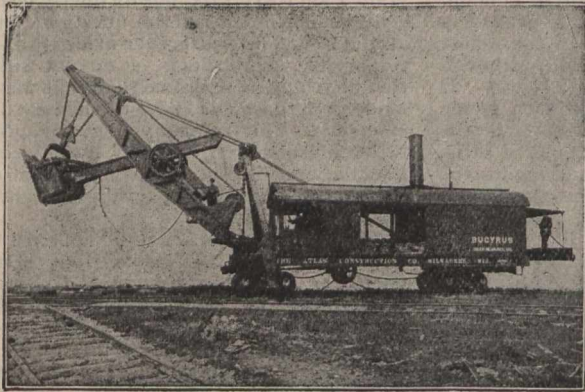
The PRESIDENT: I do not think that Mr. Castello spoke in favor of the establishment of a board in Canada, but I would ask what would be the result? You would have certainly your half-yearly meetings in Montreal, and Mr. Castello, no doubt, for the protection of his interests, and in order to air his grievances, would twice a year make a journey to Montreal, to attend these general meetings—general meetings consisting of a handful of paid officials and himself—because that is what it comes to. That would be one effect of our moving the board to the other side. I say that anyone who knows what the administration of boards is in America would know that you would have a mere bogus board, a phantom board. The company would pass out of the hands of the shareholders, and the control would pass into the hands of goodness knows who. I will go further than that, and say that if you were to announce to-morrow that by the decision of the shareholders the board was to be removed to Canada, it would be the most deadly blow to your credit. I say it would, and I am supported by a much higher authority than Mr. Seal or Mr. Castello.

Mr. Fairbairn remarked that what he intended to suggest was an advisory board in Canada, subsidiary to the Board in London.

The resolution was carried, Sir C. Rivers Wilson and J. A. Clutton-Brock were re-elected directors; F. Whinney, London, Eng., and C. Percy, Montreal, were re-elected auditors.

R. Newton, a C.P.R. brakeman, was sentenced to nine months' imprisonment, at the Milton, Ont., Assizes, for criminal negligence at Guelph Junction, Mar. 11, 1907, which resulted in the death of a locomotive engineer.

The Canadian Railway Club has offered a free scholarship, covering four years' tuition in the Faculty of Applied Science at McGill University, subject to competitive examination, open to sons of members of the Club under 21 years.



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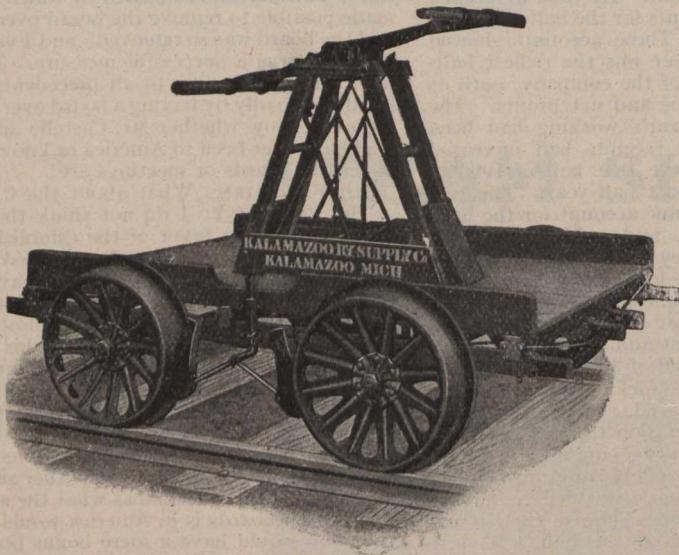
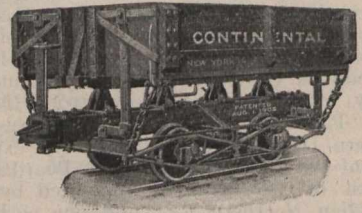
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Orders by the Railway Commissioners.

Beginning with June, 1904, we have published in each issue summaries of orders passed by the Board of Railway Commissioners, so that subscribers who have filed our paper have a continuous record of the Board's proceedings.

Complete copies of any of the orders summarized below, or of others previously passed by the Commission, will be furnished for 25 cents, cash to accompany requests for copies in all cases.

4635. Mar. 27.—Amending order 4165, of Dec. 26, 1907, re location of Niagara, St. Catharines & Toronto Ry. in Brantford, Ont., from mileage 56.25 to 58.82.

4636. April 21.—Approving Canadian Northern Ontario Ry. location through McKellar and Hagerman tps., Ont., mileage 0 to 18, from Waubamik, northeasterly, to Whitestone Lake.

4637. April 22.—Approving G.T. Pacific Ry. revised location, from Surprise Lake, mileage 150, to junction with the National Transcontinental Ry., at Pelican Lake, mileage 199.56, Ont.

4638. April 22.—Authorizing Welland County Telephone Co. to place wires across G.T.R. at Rosehill station, Ont.

4639. April 22.—Authorizing Bell Telephone Co. to carry wires across G.T.R. at public crossing, 300 yards east of Waubashene station, Ont.

4640 to 4643. April 22.—Authorizing C.P.R. to reconstruct bridges 84.1, Toronto section, Ont.; 79.4 over Quartz Creek, Mountain section, B.C.; 93.9, Shuswap section, B.C., and 1.2, over Illecillewaet River, Arrow Lake branch, B.C.

4644. April 23.—Authorizing Canadian Copper Co. to place wires across North Shore Ry. Co., at Creighton Mine, Copper Cliff, Ont.

4645. April 24.—Authorizing C.P.R. to reconstruct bridges at 14 points in Alberta, British Columbia and Quebec.

4646. April 24.—Authorizing C.P.R. to build spur to the Maple Leaf Flour Mills, Kenora, Ont.

4647. April 24.—Authorizing C.P.R. to divert the highway in lot 33, concession 1.S, Bentick tp., Ont.

4648. April 24.—Authorizing Town of Sudbury to place electric light wires across C.P.R.

4649 to 4651. April 24.—Authorizing Canadian Northern Ontario Ry. to open for the carriage of traffic the portions of its line from Sudbury Jct., north, to Moose Mountain, Ont., 27.74 miles; the portion of the Garson spur of its line from the Hutton branch to the Mond nickel mines, 3.6 miles; and the portion of its main line from the C.P.R. crossing near Romford, to Sudbury, Ont., 10.05 miles.

4652. April 24.—Amending order 4580, April 14, authorizing Brantford and Hamilton Electric Ry. Co. to erect electric power, trolley, and feeder wires over the C.P.R. Tillsonburg branch in Brantford, Ont.

4653. April 24.—Authorizing C.P.R. to construct and operate a spur line to J. Taylor's premises, Lethbridge, Alta.

4654. April 24.—Authorizing Dominion Natural Gas Co. to lay mains under G.T.R. tracks in Dunnville, Ont.

4655. April 9.—Authorizing C.P.R. to construct spur to Standard Brick and Tile Co.'s premises, Kildonan, Man.

4657. April 27.—Authorizing Bell Telephone Co. to erect wires across G.T.R. tracks at Orillia, Ont.

4658. April 28.—Authorizing British Columbia Copper Co. to construct pipe line under C.P.R. Motherlode branch at Greenwood B.C.

4659. Mar. 12.—Authorizing Windsor, Essex and Lake Shore Rapid Ry. to construct its railway along Pitt St., Windsor Ave., Strachan and Arthur Sts., Aylmer and Howard Aves., Windsor; along and across highways in tps. of Sandwich East and West;

along the Talbot Road, Essex, and along Division and Main Sts., Kingsville, Ont.

4660. April 24.—Authorizing C.P.R. to construct a spur to J. Wilson's premises, Como, Que.

4661. April 24.—Authorizing C.P.R. to construct a spur to Lake of the Woods Milling Co.'s premises, Keewatin, Ont.

4662. April 30.—Authorizing Wiechman and McIvor to erect an electric light line over the C.P.R. at Treherne, Man.

4663. April 24.—Ordering that the time within which the Canadian Freight Association will be permitted to file an answer to the application of the Morang Educational Co., Ltd., re fixing proper freight classification throughout Canada, be limited to four days from the date of the service upon it of the said application, and set down for hearing at the Board's sittings in Ottawa on May 5, 1908.

4664. April 14.—Authorizing Chatham, Wallaceburg and Lake Erie Ry. Co. to temporarily operate crossing at grade with the G.T.R. on William St., Chatham, Ont., pending installation of interlocking plant and details.

4665. April 7.—Recommending to Governor-in-Council for approval Quebec Harbor Commissioners' by-law 105.

4666. April 29.—Authorizing C.P.R. to cross with its track the Canadian Northern Ry.'s spur to Bird's Hill gravel pit, sec. 16, tp. 11, range 4, Man.

4667. April 16.—Authorizing C.P.R. to construct its railway across road allowances at 126 points on its Pheasant Hills' branch, Sask.

4668, 4669. April 30.—Authorizing Toronto and Niagara Power Co. to erect its transmission wires across C.P.R. north of Toronto Jct. and at Lambton Park, Ont.

4670. April 30.—Authorizing Madame P. H. Roy, for St. John's Water Works Co., to lay water pipe under G.T.R. at Allen St., St. John's, Que.

4671. April 30.—Approving deviation in the location of C.P.R. main line and double-track at Scovil, Ont., mileage 130 to 132.

4672. April 30.—Authorizing G.T. Pacific Ry. to cross with its tracks the Edmonton and Slave Lake Ry., sec. 15, tp. 53, range 25, west 4th mer., Edmonton district, Alberta.

4673. April 30.—Authorizing Norfolk and Tillsonburg Telephone Association to erect its wires across the C.P.R. near Eden, Ont.

4674 to 4676. April 30.—Approving deviation of C.P.R. main line and double track between Busted and Deception, mileage 16 to 19.5 from Kenora, Ont.; between Snell and Hodge, mileage 113.2 to 114.90, new line, and mileage 113.2 to 114.83, old line, from Ignace, Ont.; and between Edison pine, mileage 99.4 to 109.9, old line, and mileage 99.4 to 110.4, new line, from Ignace, Ont.

4677, 4678. April 30.—Authorizing New Brunswick Telephone Co. to erect its wires across C.P.R. at Raymond's house, near Woodstock, N.B., and at Moore's Mills, N.B.

4679. April 30.—Authorizing Consumers' Gas Co., Toronto, to lay a pipe under C.P.R. on Dovercourt Road, Toronto.

4680. May 7.—Ordering that Canadian Classification 13 be amended by the addition of a carload rating of third class on books in boxes or cases, item 30, pg. 12, and that the amendment become effective not later than May 20, 1908.

4681. May 7.—Authorizing Southwestern Traction Co. to erect transmission wires across G.T.R. about a mile north of St. Thomas, at Lynhurst Rd., Ont.

4682. May 5.—Ordering that the I.C.R.

and G.T.R. be absolved from agreement with the C.P.R. re rates to Fredericton, N.B., on traffic from points west of Montreal, which were raised from 2½c. to 8c. per 100 lbs.

4683. May 1.—Authorizing Corporation of Aylmer, Ont., to lay water main under Canada Southern Ry. in Aylmer, Ont.

4684. May 7.—Approving maximum freight tariff of Klondike Mines Ry. submitted for approval of Governor-in-Council April 21, 1902.

4685. May 5.—Varying order 3238 of July 3, 1907, so as to permit railway companies, subject to the Board's jurisdiction, to equip passenger coaches with one fire extinguisher instead of two.

4686. May 7.—Authorizing G.T.R. to construct a spur to the People's Specialty Co.'s premises, Grand Ligne, Que.

4687. May 7.—Authorizing People's Telephone Co. to make telephonic connection with C.P.R. ticket office and freight office, Sherbrooke, Que.

4688. May 7.—Ordering People's Telephone Co. to substitute copper wires for iron wires where they cross the C.P.R. on College St., Lennoxville, Que.

4689. May 6.—Granting leave to Toronto and Niagara Power Co. to erect transmission wires across the G.T.R. near Allanburgh, Ont.

4690. May 5.—Authorizing the G.T. Ry. to reconstruct and strengthen subway where C.P.R. tracks cross the G.T.R. main line east of the G.T.R. station at Brockville, Ont.

4691. April 30.—Authorizing North American Telegraph Co. to erect telegraph and telephone wires across Bay of Quinte Ry. west of Marlbank, Ont.

4692. May 5.—Dismissing application of E. S. Brennan, of Hamilton, Ont., for a writ of sequestration to sequester the goods, chattels, and personal estate and the rents, issues and profits of the real estate of the G.T.R. Co.

4693. May 5.—Ordering Vancouver, Victoria and Eastern Ry. to pay costs incurred by Municipality of Delta in connection with application for leave to carry its railway along the river road in that municipality.

4694. May 5.—Dismissing application of G.T.R. for order to vary or amend par. 5 of order of April 5, 1904, re wages of watchman at crossing with N., St. C. and T. Ry. at Merritt, Ont.

4695. May 7.—Authorizing C.P.R. to reconstruct bridge 86.4 over Maple Creek, Sask.

4696 and 4697. May 4.—Authorizing Bell Telephone Co. to erect wires across C.P.R. near Linwood and Guelph stations, Ont.

4698. May 7.—Authorizing C.P.R. to construct a spur line to Oliver & Webster's premises, Owen Sound, Ontario.

4699. May 7.—Authorizing C.P.R. to operate its trains over crossing with C.N.R. to Bird's Hill gravel pit, Man.

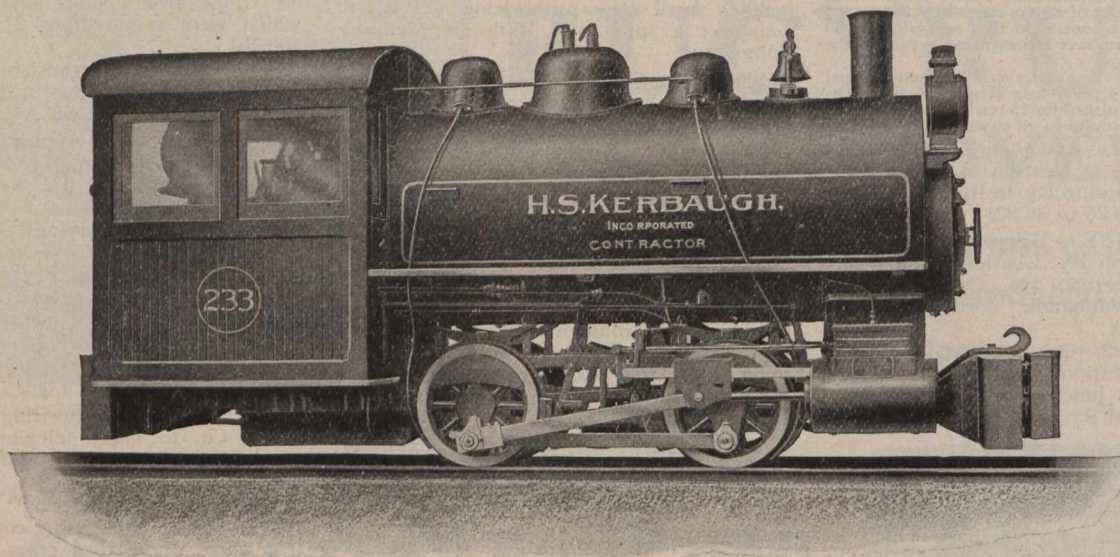
4700. May 6.—Approving Esquimalt and Nanaimo Ry. location from mileage 87.5 to 89, B.C.

4701. May 6.—Approving revised location of G.T.P. Ry., mileage 103.00 to 119.58, sec. 16, and mileage 0 to 10.238 west of 5th meridian.

4702. May 6.—Approving C.P.R. location from Wellington to Alberni, mileage 97.9 to 135.34, through the districts of Nanoose, Cameron, and Alberni, Vancouver Island, B.C.

4703. May 6.—Authorizing Niagara, St. Catharines and Toronto Ry. to open for traffic the portion of its line from Fonthill to the Welland River, near Welland, Ont., a distance of five miles.

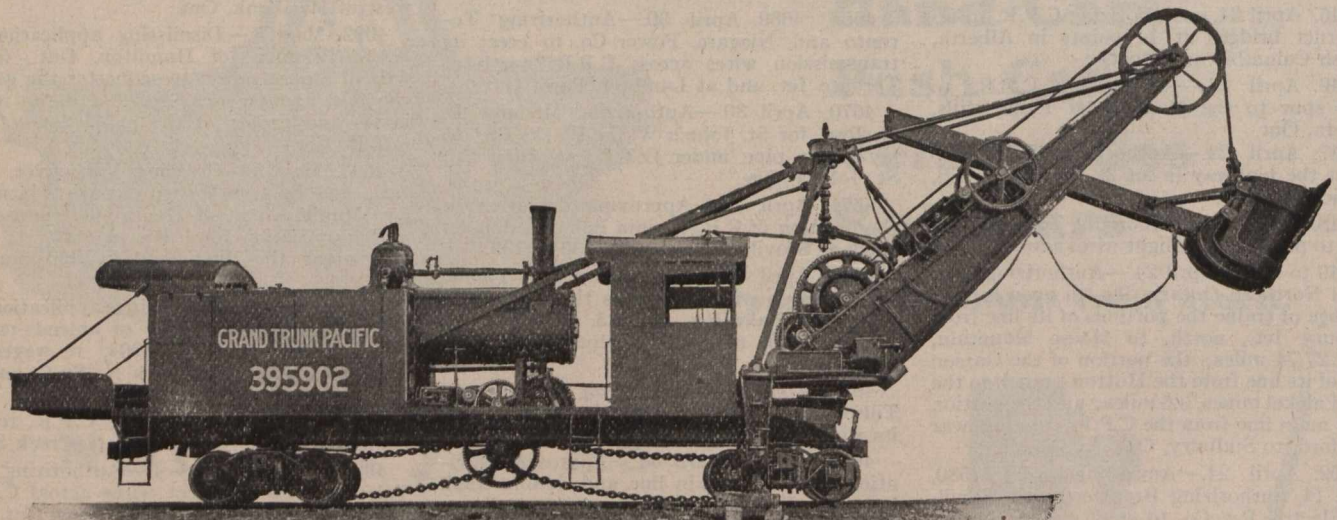
4704. May 6.—Approving deviation in location of C.P.R. at the crossing of the



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4705. May 6.—Authorizing London Township Telephone Co. to erect wires over G.T.R. near Denfield station, Ont.

4706. May 6.—Authorizing C.P.R. to construct a spur line to the Hastings Shingle Manufacturing Co.'s premises, New Westminster, B.C.

4707. May 6.—Authorizing Canadian Northern Quebec Ry. to construct a pile trestle over St. Charles River, St. Sauveur parish, Que.

4708. May 7.—Authorizing C.P.R. to construct a bridge over the highway, near Highlands, Que., on its Lachine Canal south bank branch.

4709. May 7.—Authorizing C.P.R. to reconstruct bridge 118.0, over McKay Creek, on its Medicine Hat section, Alta.

4710. May 13.—Granting leave to Saraguay Electric Light and Power Co. to erect wires across the G.T.R. at Cote St. Paul Road, Turcot Village, Que.

4711. May 13.—Directing C.P.R. to remove barbed wire or any other obstruction placed across or in the vicinity of the crossing over its Atlantic and North-Western Division connecting Crescent Ave. and Fenwick Ave., Montreal West, Que.

4712. April 30.—Granting application of M.C. Rd. for authority to amend plan filed in connection with siding to the Essex Canning and Preserving Co.'s premises, Essex, Ont.

4713 and 4714. May 11.—Authorizing Yarmouth Rural Telephone Co. to erect wires across G.T.R. in Yarmouth tp., Ont.

4715. May 6.—Authorizing C.P.R. to construct branch line to the Estevan Milling Co.'s premises, Estevan, Sask.

4716. May 11.—Authorizing C.P.R. to construct its railway across Sixth St., and Ninth and Tenth Aves., Estevan, Sask.

4717. May 11.—Authorizing Yarmouth Rural Telephone Co. to erect wires across M.C. Rd. in Yarmouth tp., Ont.

4718. April 30.—Approving character of work proposed to be constructed by Harwich township, Ont., on Pere Marquette Ry. lands in connection with the McGregor drain.

4719 to 4723. May 11.—Authorizing Central Ontario Ry. to construct its railway across various highways in McClure tp., Ont.

4724. May 13.—Granting leave to City of Ottawa, Ont., to lay sewer under G.T.R. at Richmond Rd.

4725 to 4727. May 13.—Authorizing Windsor, Essex and Lake Shore Rapid Ry. to erect wires across the Pere Marquette Ry. at Main St. east of Kingsville, at Pelton, and at Lansdowne Ave., Kingsville, Ont.

4728. May 13.—Authorizing the National Transcontinental Ry. Commissioners to expropriate and use a portion of the New Brunswick Ry.'s right-of-way and lands near Theriault, N.B.

4729. May 13.—Authorizing the G.T.R. to cross with its second track the United Counties Ry. (operated by the Q.M. and S.R.), at St. Hyacinthe Jct., Que.

4730. May 13.—Authorizing C.P.R. to construct spur lines from its Lachine Canal south bank branch to the Consumers' Cordage Co., and the Dominion Bag Co.'s premises, Montreal, Que.

4731 and 4732. May 11.—Authorizing Provincial Light, Heat & Power Co. to carry its transmission lines across the G.T.R. at Dorval, and near Rockfield station, Que.

4733. May 19.—Recommending to the Governor-in-Council for sanction an agreement between the Vancouver, Westminster & Yukon Ry. Co., and the Vancouver, Victoria & Eastern Ry. and Navigation Co., dated March 26, 1908, for the sale of certain portion of the undertaking and property.

Quebec Bridge and Railway Company.

Four appendices additional to those published with the report of the commission which investigated the collapse of the Quebec Bridge, were presented to Parliament, April 1. One of these is an examination of the various full-sized column tests that have been made in the U.S. The commissioners point out that no evidence was forthcoming to show that either Mr. Cooper or Mr. Szlapka ordered any investigation to be made of the tests, data that were available, and when the comparative magnitude of the undertaking is remembered it is difficult to explain their failure to check their conclusions on the Phoenix testing machine, which was at their disposal.

Another appendix compares the stresses in the several members of the main trusses, computed from the bridge as finally designed, with the stresses authorized by the specifications. It says that the error of stress in the main chords near the centre post, due to an error of assumed dead load was fully 10%. No satisfactory explanation of the occurrence of this error had been offered. Messrs. Deans, Szlapka and Cooper permitted the shops and rolling mills to commence work without taking any steps to test the correctness of the assumed load, and the probable dead load did not appear to have been estimated from the plans until at least 18 months after the work of fabrication was commenced. The commissioners are of opinion that no manufacturing should have been done until the designers had so advanced with their work as to be able to make a proper estimate of the weight of the bridge. Manufacturing was commenced in July, 1904, without any checking, although the specification called for it, and the contract practically demanded it.

Replying to a question in the House of Commons, recently, the Minister gave some details as to the cost of the bridge to the country. In 1899 he said a subsidy of \$1,000,000 was appropriated, of which \$374,353 was paid, and the balance was cancelled under the agreement of 1903. In 1907 the Government advanced by way of loan to the company, \$2,000,000, and received as security £478,700 of guaranteed bonds, being part of the securities guaranteed by the Government under chap. 54 of the Statutes of 1903. This act authorized the Government to guarantee the company's bonds to the amount of \$6,678,200. The bonds, after being guaranteed, were delivered to a trust company to be applied to the purposes of the company; they are not being issued to the public, but were being used as collateral in the raising of loans from the bank to the amount, including interest, to June 30, 1907, of \$5,561,507.23. The advance of \$2,000,000 from the Government was applied in reduction of this indebtedness. The Bridge Co. advised that the cost of the bridge, including the Chaudiere bridge and the railway approaches to Mar. 1, 1908, was \$6,899,033.03, to which is to be added interest from June 30, 1907, on the advances for which the bonds of the company were pledged. The amount mentioned includes the customs duties, harbor dues and fees, amounting to \$510,288.73. No estimates had been made of the cost of reconstruction.

The Minister of Finance, in further reply to the question as to the cost of the Quebec Bridge said in addition to the bank's claim of \$5,016,453, against which the company's bonds had been deposited, there was \$155,000 due for an advance which went into the construction account. The rate of interest was 5%.

The Secretary of State replying to a question in the Senate, recently, said the old company, formed in 1887, did not pay any fees to its directors; and the new company took over the undertaking in 1897. Since Hon. S. N. Parent became President the directors had been paid as follows: R. Audette, Vice-President, \$5,656; V. Boswell, \$3,201; P. B.

Dumoulin, \$2,000; Hon. N. Garneau, \$2,720; J. B. Laliberte, \$2,915; G. Lemoine, \$3,280; Hon. S. N. Parent, for services as President for over 10 years, \$24,250; H. M. Price, \$3,595; Hon. J. Sharples, \$2,000. The services for which payment was made was attendance for and general services as members of the board, the President and Vice-President receiving a special fee for their services. The Secretary has been paid \$16,890, and \$425 travelling expenses from March, 1897, to date. The Chief Engineer had been paid \$45,150.

The Premier announced in the House of Commons May 14, that the committee of the House to investigate the affairs of the company would be composed of A. K. Maclean, Chairman; W. Chisholm, Col. O. E. Talbot, W. A. Galliher, F. D. Monk, S. Barker, and R. N. Walsh.

Press reports stated recently that the Government had under consideration the question of changing the site of the bridge to Batiscan. Replying to a question in the House of Commons May 6, the Premier said there was not the slightest foundation for the report. The width of the river at Batiscan he said must be twice its width at Cap Rouge. It is pointed out in connection with the report that the Government has already made large expenditures in connection with the bridge, in the way of connections and approaches, and it is hardly likely that these will be abandoned. On the other hand it is said that while the river is wider at Batiscan, the channel is narrower, and would obviate the necessity of the construction of a long span.

Fusible Plugs for Locomotive Boilers.

The Secretary of the Board of Railway Commissioners issued the following circular May 9:

"The Board has under consideration the issuance of a regulation requiring railways subject to its jurisdiction, to fit all locomotive engines with fusible plugs. I attach a copy of the proposed regulation and am directed to ask that your company file with the Board as early as possible, an expression of its views in connection therewith.

"Every railway company subject to the legislative authority of the Parliament of Canada operating any railway by steam power shall cause every locomotive engine used on the railway, or portion of the railway operated by it, to be fitted and kept fitted with fusible plugs in the crown sheet of the fire boxes as follows, namely:

"(a) All engines with fire boxes—x to be fitted with two fusible plugs in the crown sheet.

"(b) All engines with fire boxes—x to be fitted with one fusible plug in the crown sheet.

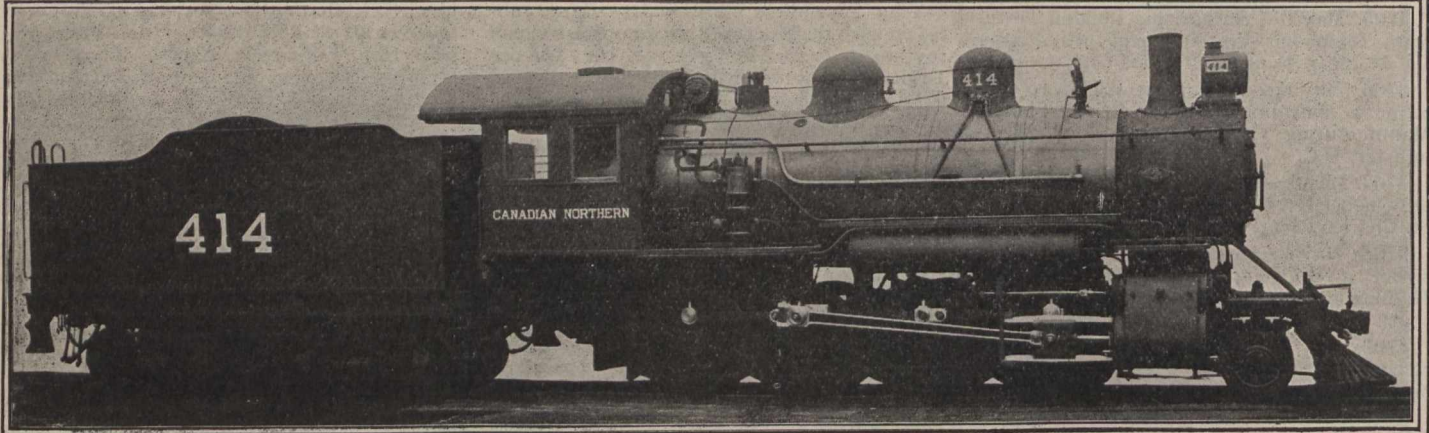
"(c) Said fusible plugs to be located in crown sheet as the railway officials in charge of the motor power may think best for the protecting of the crown sheet.

"(d) Plugs to be removed from the crown sheet every 14 days, for the purpose of inspection and cleaning.

"(e) The inspection of these plugs must be done by capable and responsible employes, who shall be assigned to this work, and whose duty it shall be to report to the locomotive foreman, on a printed form provided for the purpose, the date of the inspection, the number of the engine, and the conditions of the plugs.

"(f) These reports to be forwarded by the locomotive foreman to the master mechanic, who shall keep a record of the inspections in a book provided for the purpose, said book to be open to inspection at any time when called upon by inspectors or those interested.

NOTE—We are advised that it is the intention to insert dimensions in clauses a and b where x is marked, should it be finally decided to issue the regulation referred to.



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This Company has secured thirteen square miles of valuable mining rights, etc., in the northern portion of the Province of Quebec, in the Abittibi and Chibogomo districts, organized and managed in the interests of Railroaders.

If a prospectus has not been mailed you send for one to the Secretary. Read carefully and you will at once fill in an application for the greatest number of shares you can pay for in four payments.

The Directors and Executive of this Company are closely identified with railroad and telegraph interests as follows:

ARTHUR WALSH - *President and Treasurer*
 Local Manager C.P.R. Telegraphs

JAMES POWELL - - - *Vice-President*
 Mechanical Engineer Motive Power Dept. G.T.R.
 and Secretary Canadian Railway Club

G. E. BURNS, Freight Claims Agent C.P.R. A. E. ROSEVEAR, Assistant General Freight Agent G.T.R.

L. A. GLOBENSKY, Ex-Secretary Baie des Chaleurs Railway. THOS. WILLIAMS, Superintendent C.P.R.

General Counsel—J. C. WALSH, Esq., M.P. (of Walsh & Walsh)

Bankers—THE MERCHANTS BANK OF CANADA

Railway Finance, Meetings, etc.

Atlantic, Quebec and Western Ry.—The Dominion Parliament at its current session has passed an act confirming the right of the company to purchase the Atlantic and Lake Superior Ry. (the old Baie des Chaleurs Ry.), and authorizing it to issue bonds to the extent of \$45,000 a mile. It is provided that the present legislation will not affect the creditors of the Baie des Chaleurs Ry., and further that municipalities shall not be held liable for subsidies which were voted to that railway, and which have since lapsed.

Canadian Northern Ry.—Recent cables from London, Eng., stated that an issue of \$10,000,000 of Canadian Northern Ry. 4% bonds had been underwritten. It was reported that the bonds were being offered at 92%. It was reported, April 30, that the underwriters were obliged to take up 87% of the bonds. The issue referred to is £2,000,000 4% perpetual consolidated debenture stock, which is perpetual and irredeemable, ranking *pari passu* in all respects with the 4% perpetual consolidated debenture stock officially quoted on the London Stock Exchange. The trust deed provides that the total amount of debenture stock shall not exceed £2,000 per mile of line for the time being open and operated, and an amount not exceeding the cost price of securities of independent corporations from time to time deposited with the trustees, but the company cannot issue any debenture stock against such securities without the consent of the trustees. The debenture stock is secured by a general charge upon the undertaking, property and assets (other than land and money subsidies) of the company, subject to the £1,180,600 of bonds primarily charged on the Ontario Division of the railway (287 miles), and to charges created, or to be created, not exceeding \$10,000 per mile of line, other than the above-mentioned 287 miles of line in Ontario, or \$15,000 per mile if guaranteed by the Dominion Parliament or any of the Provinces of Canada, and is a specific first mortgage upon certain securities deposited with the trustees.

Central Ontario Ry.—There has been deposited with the Secretary of State at Ottawa, a discharge of a bond mortgage dated April 1, 1882, made by the company to the Toronto General Trusts Corporation to secure an issue of bonds to the amount of \$2,200,000. The annual meeting was held at Toronto, Ont., May 20. Following are the officers and directors for the current year: President, S. J. Ritchie; Vice-President, C. E. Ritchie; Manager, G. Collins; other directors, T. M. Kirkwood, W. S. Jaques, J. H. Stewart, R. Fraser, S. S. Lazier; Treasurer, J. D. Rowe.

Central Ry. of Canada.—It is reported that arrangements are being made in London, Eng., for placing an issue of £2,350,000 of 5% bonds at 96. This is a first issue, and if made would enable the company to start construction.

Chignecto Marine Transport Ry. Co.—A. D. Provand, who represents the trustees of the bondholders of this company, has again been in Ottawa for some time with a view of interesting members of Parliament in a proposal to secure some compensation to the shareholders and bondholders for the money sunk in this enterprise. It is claimed that the company expended \$4,000,000 upon the work, \$3,000,000 of which was spent in Canada up to the time Parliament refused in 1899 to grant any further extension of time for construction. The company proposed to construct a railway for the transhipment of vessels across the isthmus dividing the Bay of Fundy, from Northumberland Strait.

Crow's Nest Pass Coal Co.—Supplementary letters patent were issued under the Dominion Companies Act, April 27, increasing the company's capital stock from \$4,000,000 to \$10,000,000. The company owns the Morrissey, Fernie and Michel Ry.

Delaware and Hudson Co.—The shareholders have authorized the issue of a first and refunding mortgage of \$50,000,000, of which \$6,500,000 is to be reserved for refunding underlying mortgages. An issue of \$20,000,000 will be made shortly, and the remaining \$23,500,000 will be reserved for future requirements. At the annual meeting May 12, the retiring board of managers was re-elected as follows: R. M. Oliphant, C. M. Depew, J. J. Astor, R. S. Grant, C. A. Peabody, L. F. Loree, J. R. Maxwell, C. Vanderbilt, New York City; G. I. Wilber, Oneonta, N.Y.; E. H. Harriman, Arden, N.Y.; D. Clarke, Dumont, N.J.; J. A. Linen, Scranton, Pa.; W. S. Opdyke, Alpine, N.J.

Dominion Atlantic Ry.—At the annual meeting held recently in London, Eng., a vote of sympathy with the family of the late T. Fitch Kemp was passed. Mr. Kemp had been connected with the D.A.R. or its predecessors, as director or President, for over 30 years. Vice-President Denny reported the rolling stock, permanent way and steamships of the company to be in good condition, and General Manager Gifkins spoke in an encouraging manner of the past year's business and of the future prospects of the company. T. R. Ronald has succeeded to the Presidency, Mr. Denny is now Vice-President, and J. H. Robinson, C.E., has been elected to the vacancy on the directorate.

Duluth, South Shore and Atlantic Ry.—Press reports from Bay City, Mich., state that the D., S.S. and A.R. is negotiating for a perpetual lease of the Detroit and Mackinac Ry., and for the lease or purchase of the Pontiac, Oxford and Northern Rd. The Detroit and Mackinac Ry. extends from Bay City to Cheboygan, and with its several branches has a total mileage of 334 miles; while the Pontiac, Oxford and Northern Ry. extends from Pontiac to Caseville, Mich., 100 miles. The object is said to be the securing of a direct connection with Detroit, but this would involve the construction of a connection between the two lines named, some mileage into Detroit, and ferry communication with Fort St. Ignace, Mich., which is the terminal of a D., S.S. and A. branch. J. D. Hawkes, Detroit, President and General Manager, Detroit and Mackinac Ry., says there is nothing whatever in the story.

Grand Trunk Pacific Ry.—C. M. Hays, President, on his recent return to Montreal, from London, Eng., where he had been in connection with a bond issue, said in an interview that the G.T. Pacific Ry. was now, with the large balance in hand in its treasury, and the two issues made this year—one for \$5,000,000 and the other for \$10,000,000—exceedingly well provided with funds. They had sufficient for all their requirements for the next two years. The company sold the bonds outright to a banking firm, which firm subsequently put them on the market. The first day's sale was slow, but the issue was subsequently fully sold at profitable prices.

Hon W. S. Fielding, Dominion Finance Minister, went to New York, May 7, to discuss matters in connection with the placing of the company's bonds. It is stated that difficulty is being met with in placing the bonds by the financial houses, largely owing to the fact that the company will have to pay interest upon the cost of the Eastern Division, which is being constructed by the Transcontinental Railway Commission. The estimated cost of this

division is \$115,000,000 and the interest on this at 3½% is \$3,450,000 a year. It is stated that owing to the nature of the country through which the line is being constructed the prospects of traffic are small, and that the western section of the line will be unfairly burdened. A suggestion was reported to have been made that the route be changed somewhat so as to run through Montreal and other populous centres, but it is officially stated that there is no intention to change the route, on a considerable portion of which construction is already in progress.

Replying to a question in the House of Commons, May 14, the Minister of Finance said bonds to the amount of £3,200,000 par value have been guaranteed by the Government and issued to date in respect of the Western Division of the G.T. Pacific Ry. These bonds have been delivered to purchasers. The proceeds of these bonds remitted to Canada amounted to \$14,559,673.68, which sum included interim interest accretions on instalment, payments up to date of remittances.

Great Northern Ry.—The following controlled companies are now directly owned by the G.N.R. Co.: St. Paul, Minneapolis and Manitoba Ry.; Eastern Ry. of Minnesota; Willmar and Sioux Falls Ry.; Park Rapids and Leech Lake Ry.; Minnesota and Great Northern Ry.; Duluth, Watertown and Pacific Ry.; Dakota and Great Northern Ry.; Montana Central Ry.; Montana and Great Northern Ry.; Billings and Northern Ry.; Spokane Falls and Northern Ry.; Columbia and Red Mountain Ry.; Washington and Great Northern Ry.; Seattle and Montana Ry., and Minneapolis Union Ry.

Halifax and Southwestern Ry.—The total amount of the subsidies, etc., paid by the Nova Scotia Government in connection with the construction of the H. and S.W.R. to the end of the fiscal year, Sept. 30, 1907, was reported at the recent session of the Legislature to have been \$3,021,080.66, of which there was paid during that year \$288,174.99 under the general act, and \$11,500 under chap. 26 of the statutes of 1903.

Intercolonial Ry.—The Dominion Parliament at its current session voted \$2,525,000 chargeable to collection of revenue on account of the I.C.R., and \$4,375 on account of the Windsor Branch, which is operated under arrangement by the Dominion Atlantic Ry.

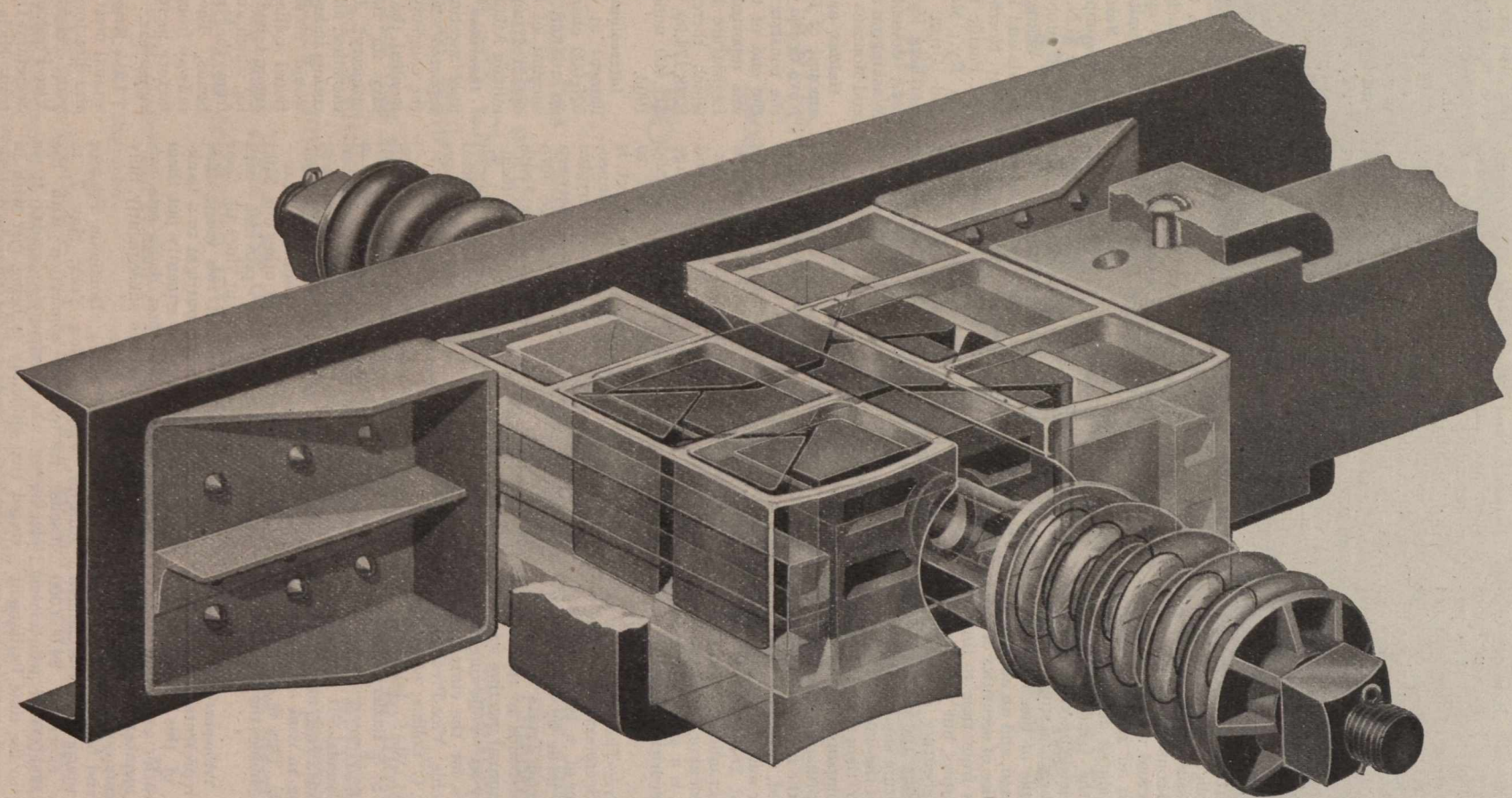
Inverness Ry. and Coal Co.—At the annual meeting held recently, the directors reported with respect to the development of the company's mining property, and recommended the provision of the capital necessary for the further development of the property. The increase in the output of the mine, and the opening up of a manufacturing industry on the line of the railway, would necessitate the purchase of additional rolling stock. For this purpose an amount had been included in the \$250,000, for which amount authority would be asked from the bondholders to issue prior lien bonds. The earnings of the company's railway from outside sources showed a satisfactory increase as compared with the previous year.

Lake Erie and Detroit River Ry.—At the annual meeting May 5, the following officers and directors were re-elected for the current year: President, W. Cotter, Detroit, Mich.; Vice-President, A. Leslie, Walkerville, Ont.; Secretary-Treasurer, J. E. Howard, Detroit, Mich.; other director, A. H. Skirring, Chatham, Ont.

Lake Superior Corporation.—The annual meeting, which had been adjourned from time to time since Oct., 1907, owing to litigation, was held at Jersey City, N.J.,

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The reason it furnishes greatest protection to cars and locomotives is that it absorbs the greatest number of foot pounds of energy upon impact.



Cardwell Manufacturing Company, Chicago, Ill.
Manufacturers of **CARDWELL ROCKER SIDE BEARINGS**

in April. Following are the officers and directors for the current year: President, C. D. Warren, Toronto; First Vice-President, F. R. Reeves, Philadelphia, Pa.; Second Vice-President, T. J. Drummond, Montreal; Secretary and Treasurer, J. T. Terry, Jr., New York; other directors: Jas. Hay, H. G. Lloyd, C. S. Hinchman, J. T. Lea, Philadelphia; L. N. Lowell, Jersey City; R. W. Smith, Montreal; C. Pattison, M.P.P., Preston, Ont.; W. J. Sheppard, Wauhashene, Ont.

London and Port Stanley Ry.—The question of the renewal of the lease of the line to the Lake Erie and Detroit River Ry. (Pere Marquette Rd. lessees) was under discussion at a recent meeting of the directors, in London, Ont., but nothing in the way of a decision was reached. A lease of a site for an elevator at Port Stanley, Ont., was granted to R. W. Price, subject to his securing the approval of the Government for the same.

Minneapolis, St. Paul and Sault Ste. Marie Ry.—There have been listed on the New York Stock Exchange various additional amounts of common and preferred stock, making the total amount listed \$7,002,300 of preferred and \$14,004,500 common stock. Authority has also been issued to list from time to time to July 1, various other amounts, making the total amounts authorized to be listed \$16,800,000 of common stock, and \$8,400,000 of preferred stock.

During the six months ended Dec. 31, 1907, according to U.S. papers, the M., St. P. and S.S.M.R. Co. purchased stocks and bonds of other corporations to the extent of \$1,601,600, nearly the whole of which consisted of securities of the Spokane International Rd., over which the company, through the C.P.R., gets an entrance into Spokane, Wash. This is a small line, which Sir Thos. G. Shaughnessy, President C.P.R., is quoted as saying earned in the first year of its operation sufficient to pay expenses and fixed charges.

Montreal and Vermont Jet. Ry.—The annual meeting was held at Stanbridge, Que., May 13. Following are the officers for the current year: President, C. M. Hays; Vice-President, E. H. Fitzhugh; Secretary-Treasurer, A. H. Gilmour; Assistant Secretary-Treasurer, W. H. Chaffee; Auditor, W. G. Crabbe; Managing Directors, C. M. Hays, E. H. Fitzhugh and G. C. Jones.

Morrissey, Fernie and Michel Ry.—Following are the officers and directors for the current year: President, G. G. S. Lindsey, K.C.; Vice-Presidents, Hon. R. Jaffray, Sir Henry M. Pellatt; Treasurer, E. R. Wood; other director, E. Rogers; Secretary, R. M. Young. The company, which is a subsidiary of the Crow's Nest Coal Co., does not issue any separate report.

New Brunswick Coal and Ry. Co., Central Ry. of New Brunswick.—The New Brunswick Legislature has under consideration an act authorizing an inquiry into certain matters connected with the construction, etc., of these railways. The bill directs that the Commission shall consist of three persons, one of whom shall be a Judge of the High Court, or County Court, or a barrister of ten years' standing, and shall investigate the expenditure of all moneys granted since Jan., 1901, either as subsidies or otherwise in connection with the railway from Norton to Chipman, and from Chipman to Minto and the branches; the issue and sale or dealing with bonds and debentures guaranteed by the Government, the expenditure of all moneys made by the company upon or in connection with the Central Ry. previous to the purchase of the same by the company; the purchase of the Central Ry. by the N.B. Coal and Ry. Co.; the receipts and revenues of the company from the time they were taken over;

and various other matters connected with the transactions of the company.

The Commissioners recently appointed reported that they found the expenses of operating the line were out of all proportion to other lines. There was a standing interest against the line of \$32,000 and the surplus claimed during the past few years had only been obtained by charging to the Province considerable sums for engineering expenses which should have been charged against the line.

New Brunswick Ry. and Coal Co.—A St. John, N.B., report states that the late Government of New Brunswick prior to resigning office voted \$2,500 to G. McAvity, as one of the Commissioners having charge of the operation of the railway for the Government, and that \$2,500 had been paid to Mr. McAvity in Nov., 1905. It is understood that Senator King, who acted as the second Commissioner, made no charge for his services. Both Commissioners resigned with the Government.

Pere Marquette Rd.—W. W. Crapo, and J. Harmon, the arbitrators appointed to settle claims existing between the P.M.R. and the Cincinnati, Hamilton and Dayton Rd., arising out of the disbanding of the Great Central System, in which the two were united during 1905, have filed a report in the federal court at Grand Rapids, Mich., awarding the P.M.R. \$1,364,387. The Cincinnati, Hamilton and Dayton Rd. had denied all claims and the P.M.R. had asked about three times the amount of the award. The principal claim was based upon a lease under which the C.H. and D. Rd. took over the P.M.R. for 999 years, and which the arbitrators decided was in effect from March, 1905, until Dec. 4, 1905. Other items figuring in the claims were the purchase of equipment and the payment by the P.M.R. Co. of joint terminal charges in Toledo.

Prince Edward Island Ry.—The Dominion Parliament at its current session voted the following sums, chargeable to collection of revenue on account of the P.E.I.R. generally, \$100,000; and to pay the widow of the late H. Houle, trackmaster, a gratuity equal to two months' salary, \$176.66.

Qu'Appelle, Long Lake and Saskatchewan Rd. and Steamship Co.—Replying to a question in the House of Commons recently, the Minister of Finance said the excess paid by the Government over the amount earned by the company for the year ended April 30, 1907, under the terms of the agreement of Aug. 5, 1889, was \$67,315.35; the amount due by the company on account of deficits, according to the last annual adjustment of accounts to April 30, 1907, was \$1,630,408.09. The cash payments required under the agreement after April 30, 1907, were seven of \$40,000 each, or \$280,000 in all. Of these amounts two payments of \$40,000 each had been made, leaving five instalments yet due; the Government retains 493,269.34 acres of land from the land granted to the company in respect of the construction of the railway, as security against indebtedness by the company to the Government.

Quebec Central Ry.—Gross earnings for Feb., \$70,376.89; expenses, \$58,220.33; net earnings, \$12,156.56, against, \$50,831.00 gross earnings; \$43,813.54 expenses; \$7,017.46 net earnings for Feb., 1907. Gross earnings for March, \$99,109.96; expenses, \$66,074.40; net earnings, \$33,035.56; against \$71,531.33 gross earnings; \$48,556.56 expenses; \$22,974.77 net earnings for March, 1907. Gross earnings for 3 months ended March 31, \$238,269.01; expenses, \$180,947.79; net earnings, \$57,321.22; against \$177,146.49 gross earnings; \$136,728.20 expenses; \$40,418.29 net earnings for same period 1907.

Temiscouata Ry.—A meeting of shareholders was held at Quebec April 21, for the purpose of approving and sanctioning an agreement respecting the purchase of the company's lands, right-of-way, etc., by the Transcontinental Railway Commission, and also for the purpose of approving and sanctioning the action of the directors in adopting and authorizing the publication of amended statements and accounts for the year ended June 30, 1907. We are advised that the Transcontinental Railway route as located will parallel the Temiscouata Ry. for a distance of about 18 miles, between Caron Brook and Edmundston, N.B. About half a mile west of Edmundston the location which it was desired to follow came actually on to the Temiscouata Ry. right-of-way, and in some cases would be on its track for a distance of about a couple of miles. By a mutual arrangement the Temiscouata Ry. agreed to sell two miles of right-of-way, and the Transcontinental Ry. Commission agreed to construct two miles of new track, the Transcontinental track being laid on the present site of the Temiscouata track, so that when the work is completed the two railways will be as a double-track line for the distance named.

Traffic receipts for Feb., \$13,955.15; Mar., \$15,831.40; against \$11,198.78 for Feb., and \$14,364.42 for Mar., 1907. Total receipts for 3 months ended Mar. 31, \$46,430.46, against \$37,937.80 for same period 1907.

Temiskaming and Northern Ontario Ry.—In reply to a question in the Ontario Legislature recently, the Provincial Treasurer said the total capital indebtedness of the T. and N.O.R. to Dec. 31, 1907, was \$11,677,783.95, and there had been an additional \$500,000 expended to date. The Commission had not sold any bonds and had no authority to do so; it was not indebted to any bank. During the year ended Dec. 31, 1907, the railway earned \$779,237.32 from the transportation of passengers and freight, and the total revenue from other sources amounted to \$125,184.01; while the expenditures were as follows: Operating expenses, \$645,412.29; capital account, \$2,617,484.70. The interest on the bonds issued was paid by the Government; the amount paid, including sinking fund, being \$339,744.34, of which \$235,090.69 was received on account of net earnings of the railway. On another day the Provincial Treasurer said of a loan of \$4,000,000, which it was proposed to raise in England, \$1,000,000 would be required for the completion of the railway, and the other \$3,000,000 would be returned to the treasury in lieu of cash already advanced to the T. and N.O.R.

Toronto, Hamilton and Buffalo Ry.—At the recent session of the Ontario Legislature application was made for an act vesting in the Bank of Hamilton and the T.H. and B.R. certain lands which belonged originally to an absconding banker, and were pledged to the Bank of Hamilton. The absconding banker was never arrested, and he is supposed to have died some years ago of yellow fever in Rio de Janeiro, South America. The land was expropriated in connection with the construction of the T.H. and B.R., and the application was for the purpose of getting a title to the property. The Legislature refused to pass the act. (April, pg. 247).

Vancouver, Victoria and Eastern Ry. and Navigation Co.—The property and franchises of the Vancouver, Westminster and Yukon Ry. Co., with respect to the line extending between New Westminster and Vancouver, have been handed over to the V.V. and E.R. and N. Co. The formal application to the Board of Railway Commissioners for a recommendation to the Governor-General to sanction the agreements for the purchase was made at Ottawa, May 12. The company has also taken

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LIMITED

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AXLES

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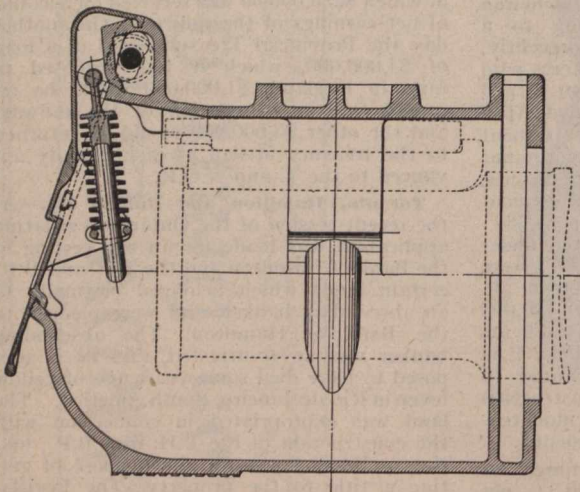
**Railway Angle Bars and
Track Spikes**

FORGINGS MARINE AND RAILROAD

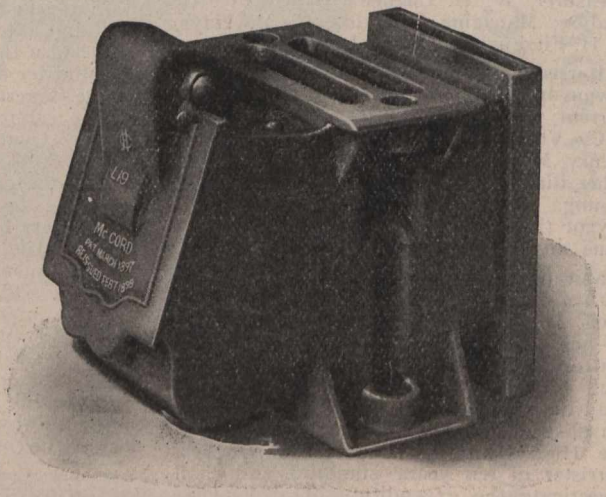
Pig Iron, Iron and Steel Bars

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TIGHTEST
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The McCORD Draft Gear
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over the property and franchises of the Victoria Terminal Ry. and Ferry Co., with respect to lines constructed, under construction and authorized, on the mainland. The lines in question were operated by the Great Northern Ry. through a subsidiary company, and connection was obtained between the two lines over the Fraser River bridge, built by the British Columbia Government, for the use of which tolls are paid. By their amalgamation with the V.V. and E. Ry. and N. Co., the Great Northern Ry. lines in the vicinity of Vancouver have been consolidated under one company.

White Pass and Yukon Route.—A meeting of shareholders of the British Yukon Ry., the subsidiary company owning the Canadian portion of the company's railway, was called to be held at Ottawa, May 27, to authorize the directors to issue debentures or other securities to the extent of £6,000 for every mile, not exceeding 16 of the company's branch line of railway, extending from near mile post 106, as now constructed and operated south of Whitehorse, Yukon Territory, northwesterly towards the Tahkeena River. The issue of bonds is to be secured upon the branch line.

Canadian Northern Ry. Earnings, etc.

Gross earnings, working expenses, net profits, increases or decreases over 1906-07, from July 1, 1907:

Earnings.	Expenses.	Net Earnings.	Increase or Decrease.
July.. \$1,024,300	\$ 662,300	\$ 362,000	\$420,500+
Aug.. 835,600	619,200	216,400	240,700+
Sept.. 758,300	549,200	209,100	133,900+
Oct... 931,200	621,300	309,900	116,100+
Nov.. 957,400	689,100	268,300	215,700+
Dec.. 801,100	558,400	242,700	264,900+
Jan... 578,200	462,500	115,700	226,800+
Feb.. 485,600	401,900	83,700	152,400+
Mar.. 625,300	453,400	171,900	136,500+
\$6,997,000	\$5,017,300	\$1,979,700	\$1,907,500+

Approximate earnings for Apr., \$686,100, against \$569,900 for Apr., 1907.

C.P.R. Earnings, Expenses, etc.

Gross earnings, working expenses, net profits, increases or decreases over 1906-7, from July 1, 1907:—

Earnings.	Expenses.	Net Profits.	Increase or Decrease.
July \$7,008,274.46	\$4,501,421.80	\$2,506,852.66	\$135,041.58+
Aug. 7,010,177.40	4,439,902.25	2,570,275.15	107,695.05+
Sept. 6,423,452.68	4,272,099.33	2,151,353.35	286,578.28-
Oct.. 7,071,047.59	4,390,729.95	2,680,317.64	104,509.87-
Nov. 6,953,967.56	4,508,933.35	2,445,034.21	181,011.27+
Dec. 6,418,576.38	4,347,386.80	2,071,189.58	188,404.70-
Jan.. 4,498,560.80	3,874,569.02	623,991.78	75,664.17+
Feb.. 4,129,044.09	3,771,947.48	357,096.61	264,891.51-
Mar. 5,424,931.26	4,123,901.77	1,301,029.49	944,706.73-

\$54,938,032.22 \$38,224,891.75 \$16,713,140.47 \$1,288,778.18—
Approximate earnings for Apr., \$5,230,000, against \$6,391,000 for Apr., 1907.

DULUTH, SOUTH SHORE AND ATLANTIC RY.—Gross earnings for March, \$230,517.43; expenses, \$157,810.75; net earnings, \$72,706.68, against \$257,495.05, gross earnings; \$182,255.66 expenses; \$75,239.39 net earnings for March, 1907. Total earnings for nine months ended March 31, \$2,405,984.44; expenses, \$1,742,957.10; net earnings, \$663,027.34; against \$2,397,019.89, total earnings; \$1,611,736.38 expenses; \$785,283.51 net earnings for same period, 1906-07. Approximate earnings for April, \$219,410, against \$277,557 for April, 1907.

MINERAL RANGE RD.—Gross earnings for March, \$68,436.80; operating expenses, \$64,747.05; net earnings, \$3,689.75, against \$70,778.52, gross earnings; \$54,014.12 operating expenses; \$16,764.40 net earnings for March, 1907. Total earnings, 9 months ended March 31, \$605,108.34; operating expenses, \$511,278.99; net earnings, \$96,685.71, against \$579,916.62, total earnings; \$434,069.28 operating expenses; \$145,847.34 net earnings for same period, 1906-07. Approximate earnings for April, \$66,053, against \$67,760 for April, 1907.

MINNEAPOLIS, ST. PAUL AND SAULT STE. MARIE RY.—Approximate earnings for April, \$844,111, against \$1,137,171 for April, 1907.

Grand Trunk Ry. Earnings, Expenses, etc.

Approximate earnings for March, \$3,057,944, against \$3,571,270 for March, 1907.

The Alaska Central Ry. Co., to which large advances were made by the Sovereign Bank, has gone into receivers' hands.

G.T.R. Betterments, Construction, Etc.

Ottawa Terminals.—Building operations on the baggage annex at the Central station, which were suspended in the fall of 1907, were resumed May 10. This building, it is stated, will be used as a temporary station during the erection of the new joint building.

The amended plans for the new union station and G.T.R. hotel were submitted to the city council May 15. In a letter, C. M. Hays, Second Vice-President and General Manager, said: "So far as the hotel is concerned, it is substantially in accordance with the plans and model which have heretofore been presented and which, I understand, were satisfactory. As to the station plans, those now presented are, in our opinion, more appropriate in their design and appearance for station purposes than those heretofore produced and fully meet the requirements for many years to come. The estimated cost of the hotel and appurtenances is something in excess of \$1,500,000 and for the station about \$525,000, exclusive of the cost of baggage and express buildings, train sheds, platforms, tracks, etc., while as you will recall, our obligations with the city call for a station costing not less than \$250,000 and a hotel costing not less than \$1,000,000. The plans are presented by our architects, Ross & MacFarlane, of Montreal, who will be prepared to give you any explanations in detail that may be desired."

The new plans for the station show a main central building and two subordinate wings. In the main building on a level with the tracks is located the general waiting room, containing 9,069 sq. ft. Access to the waiting room is obtained directly from Rideau St., by three spacious openings through the main hall and stairs 30 ft. wide. Egress to the trains from the waiting room is obtained by three similar openings leading to the general concourse, which is 60 ft. wide. Tickets, telegraph and telephone booths, information bureau, news stands, ample parcel room, and other conveniences are provided along the four sides of the waiting room where they are easily accessible and visible. A broad covered passage at the easterly end of the large concourse leads directly to the baggage room, which is located in the baggage building with the express offices, power plant, immigrant rooms, etc. A broad, well-lighted subway will lead through to the hotel. A special waiting room has been made for governmental use and a large carriage course to the east of the main concourse is available. The building is to be of Indiana limestone and the architectural treatment of the exterior has been designed with a view of obtaining a monumental effect and of expressing clearly on the exterior the function of each part of the building.

The plans submitted for the hotel embody some of the suggestions made in the plan of ground floor previously prepared, but in the basement and all floors above ground floor there is a different arrangement. On the first floor there are 33 chambers, three state apartments and two parlors. On the second, third, fourth and fifth floors there are 58 chambers on each floor, two of which are suggested for use as parlors. The total number of sleeping apartments for guests is 302; of this number 155 will have private baths. There will be a palm room, general dining room, private dining rooms, restaurant, banquet hall, ballroom and reception rooms. The main dining room has been well placed with regard to light and aspect, as it has a commanding view of the park and the Parliament buildings. A stairway from the rotunda of the ground floor leads directly to the subway into the station.

Kingston, Smith's Falls and Ottawa Ry.—At the annual meeting of the Kingston Board of Trade, May 6, a communication was received from C. M. Hays, Second Vice-Presi-

dent and General Manager, to the effect that just as soon as money was available this line would be pushed through. In connection with the construction of this line the G.T.R. will undertake extensive and important improvements at Kingston.

The annual meeting of the shareholders of the K., S.F. and O. Ry. Co. is announced to be held at Kingston, June 1.

Port Hope-Midland Second Track.—We are advised that while the surveys in connection with the proposed construction of a second track between Port Hope and Midland, Ont., are being made, there is nothing definite to report as to prospects of construction.

Second Track Work.—In his report on railway work in Ontario during 1907, the Engineer of the Department of Public Works for the Province says, while no new branches were opened for traffic during the year, the following double-track mileage was completed and opened for traffic: Between Brantford and Alford, 3.4 miles; and between Henry St. subway and Brantford, 0.65 mile. On Dec. 31, there was under construction, second track mileage as follows: Between North Parkdale and Toronto Junction, 2.67 miles; and between Merritton and Thorold, 0.52 mile.

John St., Toronto, Crossing.—An interlocking switch and gates similar to those at the crossing of Queen St. east, are to be placed at the crossing of John St., Toronto.

Toronto City Ticket Office.—A contract has been let for the enlargement and refitting of the company's city ticket office at the corner of Yonge and King Streets.

London Improvements.—U. E. Gillen, Superintendent Middle Division, said, recently, the company was going to completely relay all rails in the London yards shortly. The work will be done gradually so as not to interfere with the traffic. So far as any large works of improvement are concerned, General Transportation Manager Brownlee said the company had expected to do something in the way of a new station during the present summer, but at present it was impossible to do anything. "The London people made a big mistake when they did not get their improvements when they had the chance. The improvements which were carried out west of the city had been of great benefit to the company; I should say that the removal of the grade west of London has meant a saving of at least \$20,000 a year."

London to Sarnia.—It is expected to relay about 38 miles of the track between London and Sarnia during the summer. (May, pg. 339.)

Steam Shovel Work in B.C.

W. J. Colvin wrote from Abbotsford, B.C., recently: "I should like to call your attention to a record for March made by a 1¼ yard traction shovel now working on the Vancouver, Victoria and Eastern Ry. construction between Cloverdale, B.C., and Sumas, Wash. During the 26 working days this shovel loaded a total of 62,000 yards, making an average of nearly 2,400 yards a day. The best day's work totalled 3,340 yards, and the poorest one was 1,536 yards, the day consisting of two 10-hour shifts. During this time the shovel made four cuts, necessitating four 'move backs.' The usual delays were experienced, such as derailments, shooting down the bank, etc. The shovel was served by two 10-car trains, making an average haul of 500 ft. The material handled was fine gravel with some loose rock, but at several points blue clay streaks were encountered, making the dumping of the cars somewhat slow. The work was in charge of J. P. Livingston, of Seattle. I should be glad to know if you have knowledge of any records equalling this for the same sized shovel."—Railroad Gazette.

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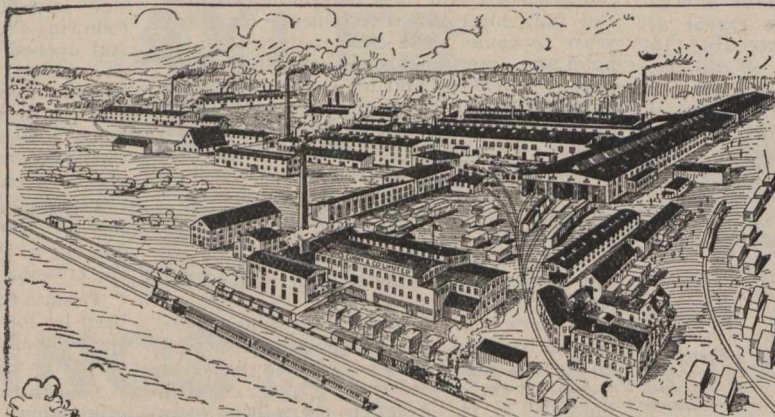
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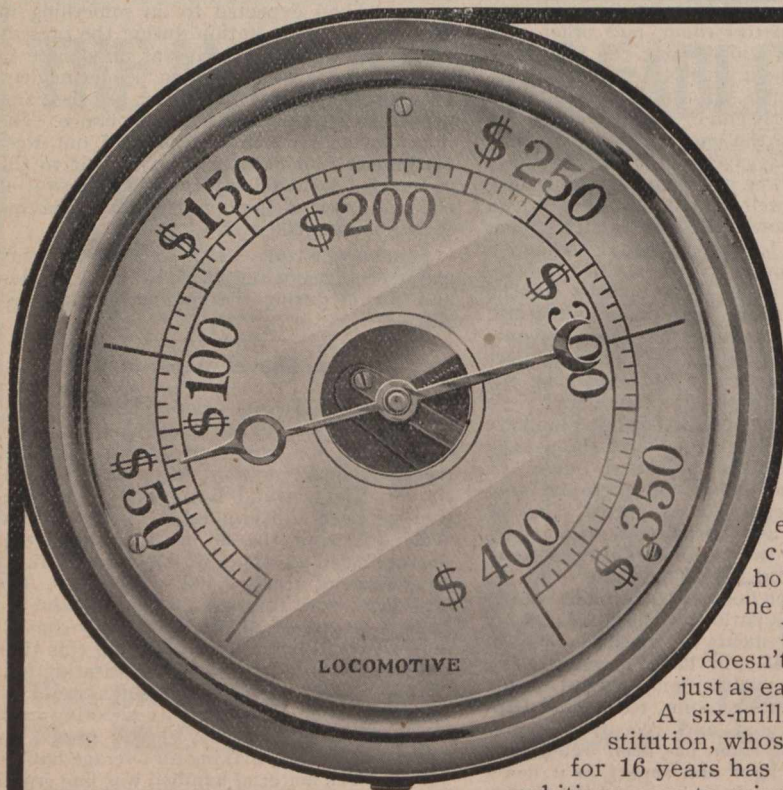
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| Air-Brake Instructor | Architect |
| Air-Brake Inspector | Bookkeeper |
| Air-Brake Repairman | Stenographer |
| Mechanical Engineer | Ad. Writer |
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C. P. R. Betterments, Construction, Etc.

Interprovincial and James Bay Ry.—At the last session of the Quebec Legislature, a subsidy at the rate of 4,000 acres of land per mile, not convertible into money, was voted in aid of the construction of a line, about 50 miles long, from Gordon Creek, the present terminus of the Lake Temiscamingue Colonization Ry. (C.P.R. branch from Mattawa, Ont.) to Ville Marie, on the Quebec shore of Lake Temiscaming, in lieu of the subsidy voted in 1906.

Georgian Bay and Seaboard Ry.—In connection with the construction of this projected line—the portion between Coldwater, on the Toronto-Sudbury Line, and Victoria Harbor, Ont., being under construction—from Victoria Harbor to a junction with the main line between Montreal and Toronto, the Minister of Public Works recently stated in the House of Commons that the Government would dredge the harbor at that point. The company's plans provide, it is reported, for the construction of an elevator of 10,000,000 bush., to be constructed in five units of 2,000,000 bush. each, while the handling plant will have a capacity of 62,000 bush. an hour. The projected line will have a total length of 97 miles, and the surveys provide for a gradient of 0.3%.

Guelph and Goderich Ry.—Tracklaying was completed into Listowel, Ont., on this branch line early in May, and it is expected that a train service will be placed in operation early in June.

Toronto-Sudbury Line.—The new line from Bolton Junction on the Toronto-Owen Sound line to Romford, Ont., on the company's transcontinental line, will be opened for traffic June 15. It was opened as far as Bala, for the Muskoka tourist season, in 1907. The engineer of the Ontario Department of Public Works in his report for 1907 refers to the work in progress, and says some heavy bridge work has been done on the northerly end of the line, notably at Parry Sound, where the valley of the Seguin River has been crossed by an elevated steel viaduct and at French River.

Tillsonburg, Lake Erie and Pacific Ry.—In connection with the construction of the extension of this line from Ingersoll to Embro, Ont., where it will connect with the St. Mary's and Western Ontario Ry., a deputation waited on the Minister of Railways, May 6, to ask that the Government ask Parliament to grant the usual subsidy.

St. Mary's and Western Ontario Ry.—The by-law ratifying and confirming the agreement with the company has been finally passed by the St. Mary's town council. Cheques for the full balance of the loan of \$40,000 authorized were ordered to be drawn at the meeting of the council held May 3.

A deputation waited on the Minister of Railways at Ottawa, May 6, to ask for the granting of a subsidy in aid of the construction of this line at present under construction from St. Mary's to near Embro, Ont.

Walkerton and Lucknow Ry.—Tracklaying on this line between Proton and Walkerton, Ont., about 37 miles, which has been under construction since Aug., 1906, is practically completed, ballasting is in progress, and it is expected that the line will be opened for traffic early in July. A contract has been let for the erection of a station building at Walkerton.

Fort William-Winnipeg Second Track.—It is expected that the second track between Fort William, Ont., and Winnipeg, Man., a distance of 427 miles, will be completed and in operation by fall. The work has been going on for three years, and is now being rushed in all directions. Track is being laid west from Fort William; east and west from Ignace and Kenora, and east from Winnipeg,

and the ballasting is gone on with as fast as possible. The second track has already been laid at a number of points along the line, aggregating 300 miles. A recent article published on the work gives the following summary of the work done and to be done:

Labor and material.....	\$10,000,000.
Track being built, total.....	427 miles.
Through solid rock.....	100 miles.
Largest single fill.....	300,000 cubic yards.
Of above there was 60,000 cubic yards rock borrow to bring base of fill above water level.	
Largest cut contained 40,000 cubic yards, and five of them this size.	
Cuts widened, largest 12,000 cubic yards.	
One granite tunnel 500 ft. long lowered and widened for second track without stopping traffic.	
Granite rock moved.....	2,000,000 cubic yards.
Granite rock to move.....	80,000 "
Earth moved by contractors.....	1,000,000 "
Earth moved by train.....	2,800,000 "
Earth to move by train.....	2,191,000 "
Tunnel driven.....	1,069 ft.
Ballast distributed.....	548,000 cubic yards
To be distributed.....	727,000 "
Track laid.....	235 miles.
To lay.....	190 "
Ties used.....	681,500
Still required.....	551,000
Bridges.....	47 steel.
Spans, 15 to 200 ft. in length. Lattice and through girders, deck and half-deck, 12 erected, 35 to be erected. Concrete and stone arch culverts, 32; all in but 2. 29 muskegs that caused or likely to cause trouble. 10 diversions, 70 miles.	

Filtration Plants on Western Lines.—An inspection of the filtration plants erected at Medicine Hat, Stobart, Arrowfoot, Irvine, Sask., and Calgary, Alta., shows that they are working satisfactorily and are serving the purpose for which they were erected, viz., the supplying of water for the locomotives which will not encrust the boilers. The filtration plants were installed under the charge of H. B. Lake, the company's chemist at Winnipeg.

Winnipeg-Souris Line.—The work of relaying the line between Winnipeg and Souris, Man., 159 miles, is reported to be progressing rapidly. The new rails are of the same type and weight as are used on the main line. The work, it is expected, will soon be completed.

Saskatoon.—We are advised that it is expected that the company's line between Lanigan and Saskatoon, Sask., will be opened for traffic June 15. Ballasting work has been in progress for some time, and arrangements are being made for a public celebration. The bridge over the Saskatchewan River was expected to be completed about May 15, so as to enable the track to be laid right into Saskatoon, where a large and commodious station has been erected to accommodate the traffic expected. A 10-stall roundhouse is nearing completion, and a machine shop building will be erected by the fall. McDiarmid & Co. have the contract.

The taxpayers, by a vote April 30, passed a number of by-laws, including one making a grant of \$20,000 towards the C.P.R. bridge. The first train passed over the new bridge into Saskatoon May 14.

Moose Jaw Northwesterly.—In connection with the reports of the cessation of construction on the branch northwesterly from Moose Jaw, Sask., we are officially advised that grading has been completed for 65 miles and track laid for 18 miles from Moose Jaw.

The question of the construction of this line was brought before the House of Commons, May 1, by W. E. Knowles, who stated that the C.P.R. had held a charter to construct the branch for some years; that 14 miles northwesterly had been constructed two years ago, and that no additional track had been laid since. In the summer of 1907 there was graded a further distance of 50 miles, and the Second Vice-President informed a deputation officially the same year, that track would be laid on that 50 miles, and grading would be done for a further distance of 70 miles. Mr. Knowles stated that from that day not another yard of steel had been laid, or bit of grading done, although the contract for the 70 miles of grading had been let.

Trusting to the promise given settlers had gone into the country, so that there were now small communities from 50 to 150 miles along the route of this projected line without any railway accommodation whatever. He had received a petition signed by 300 settlers in the vicinity of Tullisville, at the elbow of the South Saskatchewan River, asking for the construction of the railway. Mr. Whyte had stated that one reason why the work had not been gone on with was because the company could not get ties. The total length of the line from Moose Jaw to Lacombe was about 500 miles, of which track had been laid on the 14 miles at the Moose Jaw end, and on 100 miles on the Lacombe branch of the Calgary and Edmonton Ry. The Minister of Railways, in reply, expressed regret that any settled portion of the country should be at such a great distance from a railway. It was fair to say that the past year had been a very discouraging one for railways, owing to the fact, among others, that they found it very difficult to finance their present undertakings. The matter would receive the consideration of the Department.

Esquimalt and Nanaimo Ry.—The work of improving the E. & N. R. roadbed between Victoria and Nanaimo, B.C., will be gone on with during the current year. The expenditures authorized will run into \$125,000, and the work to be done will include the replacing of wooden trestles and bridges with permanent steel structures, the more important of the bridges being those across the Chemainus and Cowichan rivers. Most of the work will be done on the stretch of the line between Ladysmith and Nanaimo, where the bridges are older than those nearer Victoria. About 40 miles of new fencing will be put up during the year.

In Victoria, work has been started on the extension of the main line tracks to the site of the new freight shed. Three new tracks will be laid in the new yards. The old Albion works have been removed, and the site cleared for the new yard and freight shed.

R. Marpole, General Executive Assistant at Vancouver, stated, after a recent inspection of the work, that the construction of the new line from Nanaimo to Alberni was proceeding satisfactorily. Work was being gone on with on the first 14 miles, and clearing was in progress for several miles in addition. No further contracts had been let.

Work has been started on the clearing of a considerable acreage in the vicinity of Ladysmith, and a project is under consideration for the reservation of a fish and game preserve on the Nanaimo-Alberni line.

Fire Extinguishers on Passenger Coaches.

The Board of Railway Commissioners passed the following order 4685, May 5: In the matter of the application of the C.P.R. Co., under section 29 of the Railway Act, for an order to amend order 3238, of July 3, 1907, requiring railway companies in Canada, subject to the jurisdiction of the Board, to equip passenger coaches with two fire extinguishers. Upon the hearing of counsel for the company, and what was alleged, and upon the report and recommendation of the Inspector of Railway Equipment and Safety Appliances, it is ordered that the said order be varied to permit the railway companies referred to in the order to equip their passenger coaches with one fire extinguisher instead of two, as required by the said order. That, unless the Board further directs, the equipment of the said passenger coaches with one fire extinguisher shall be taken to be and deemed a compliance with order 3238, that the said order be, and it is hereby amended by striking out the words "framed and," in the sixth line of par. 1, and the words "and recharged," in the second line of par. 2.

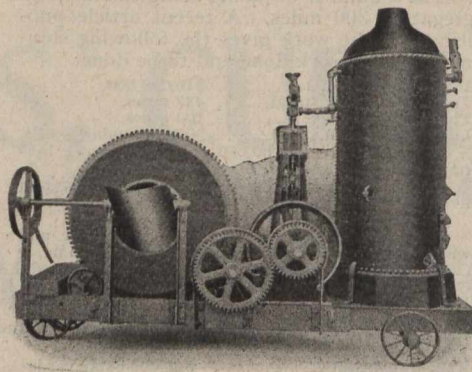
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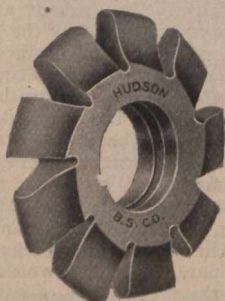
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RAILWAY DEVELOPMENT.

Projected Lines, Surveys, Construction, Betterments, Etc.

Alberta Southwestern Ry.—In connection with the application for the incorporation of a company with this title to construct a line from the International boundary to Calgary, Alta., recent despatches from Cowley state that a survey party under the charge of — Wilkinson has been for some time past running a line eastwards from Cowley towards Macleod, north of the Old Man River, in connection with the preliminary survey of a line from Michel to Calgary. As soon as the line from Michel up the Elk River has been completed, the report states the line from Lethbridge to Calgary will be started. A despatch from Frank, Alta., a few days later, states that Mr. Wilkinson is an engineer in the employ of Kenaston, Robertson, Lynch interests, who are the principal owners of the Canada West Co. at Taber, Alta., and that this company proposes to construct a line north and south, intersecting the Crow's Nest Pass Line at about Cowley, and connecting with the line to be built up the Elk valley on the B.C. side, from Michel to Calgary—a Great Northern Ry., U.S., project. (May, pg. 329.) See also Canada West Coal Companies Rd., Mar., pg. 179, and Nov., 1907, pg. 831.)

Algoma Central and Hudson's Bay Ry.—The report of the Engineer of the Ontario Department of Public Works for 1907, referring to the railway, says an extension of 1,464 ft. was made to the main line, and several sidings and spurs were constructed. At mileage 17, a 270 ft. siding was put in; an extension of 270 ft. was made at Loon Lake spur; a 495 ft. spur was made off Wabos passing track, mileage 35; a 100 ft. connection was made at mileage 38. From this connection the Superior Copper Co. has under construction a line to Superior mine, 4.02 miles, grading of which is about 80% completed; rails, fastenings, etc., are on the ground, and it is the intention to complete the line in the early spring. At mileage 45, a siding 5,280 ft.; at mileage 46, a siding 710 ft.; at mileage 46½, a siding 500 ft.; at mileage 47, a siding 910 ft., and at mileage 48½, a siding 425 ft. have been constructed. At the terminals at Sault Ste. Marie, connections have been made with the dynamo room of the pulp mill building, 1,328 ft.; with the car shops 280 ft., and with the saw mill 340 ft. Permanent steel spans on concrete abutments have been erected at mileages 34.9, 38.5, and 51, to replace wooden trestles. At mileage 24.3 a 12 ft. concrete arch was put in and embankment made up to grade to replace temporary wooden trestle. The main line between mileage 69 and the junction with the Michipicoten branch, a distance of about 101½ miles, is graded and partly bridged. (April, pg. 243.)

Atlantic, Quebec and Western Ry.—Subsidies at the rate of 4,000 acres of land per mile, not convertible into money, were voted last session of the Quebec Legislature, to aid in the construction of the first 50 miles of the projected railway from Gaspé Basin, passing through the interior of Gaspé peninsula, towards Causapsal, a station on the I.C.R.; and for the construction of 80 miles of line, following the shore as nearly as possible, to Gaspé Basin. These subsidies are in lieu of those voted in 1906. In connection with the latter, the subsidy voted was for a line of 100 miles from Paspebiac to the terminal point of the old Baie des Chaleurs Ry. (Atlantic and Lake Superior Ry.), which has recently been acquired by the A.Q. and W. Ry., to Gaspé Basin, and of which line there has been constructed

20 miles from Paspebiac to Port Daniel. (May, pg. 329.)

Brandon Transfer Ry.—Application is being made at the current session of the Dominion Parliament for an act extending the time for the construction of this projected railway, to connect the stations of the C.P.R., Canadian Northern Ry., Brandon, Saskatchewan and Hudson's Bay Ry. (Great Northern Ry., U.S.), and any other railway having a station in Brandon, Man. (Aug., 1906, pg. 449.)

Brockville, Westport and Northwestern Ry.—The projected extension of this railway beyond Westport, Ont., is again under discussion. The proposal is to construct a line from Athens, 17 miles from Brockville, thence across Bastard tp., bridging the Rideau River at Oliver's Ferry, and through Lanark county to Lanark village. Surveys have been made of this route, and reports show that it will tap a rich country north of Perth, which at present has no railway connection whatever. Not far from Lanark are the Playfair iron mines, which have been shut down for years. It is said that these mines would be reopened if there was railway communication. The new line would also give the country to be opened up direct connection with the C.P.R. to Brockville and the Thousand Islands. (Dec., 1906, pg. 711.) and (June, 1905, pg. 241.)

Canada-Minnesota Bridge Co.—See Duluth, Rainy Lake and Winnipeg Ry.

Cape Breton Ry.—See Cape Breton railways.

Cape Breton Railways.—At the recent session of the Nova Scotia Legislature the necessity of railway extension in Cape Breton Island—the northeastern portion of the Province—was discussed. It was pointed out that through the legislation introduced 15 years ago, when the Whitney interests were brought to the Province, the coal output of the island had increased from 800,000 to nearly 4,000,000 tons a year, and the great steel industry had been brought into existence. Investigations had shown that there were a billion tons of coal as yet untouched, and that the Wabana iron ore deposits were estimated at 250,000,000 tons. This assured the future of the Sydney and Sydney Mines steel plants. Limestone was another important element in the manufacture of iron, and of this there was a large supply of excellent quality in the Bras d'Or district. The population of the island had doubled within the past ten years, and some \$50,000,000 or \$60,000,000 were now invested in industrial enterprises in Cape Breton County alone. Railway construction had been promoted on the mainland so that there were now 1,100 miles of line there, while there were only 270 west on the opposite side of the Strait of Canso. There had been contributed towards railway development on the mainland from the provincial treasury \$6,065,000, and only \$474,000 towards railways on the island. The investment on Cape Breton had been a good one, for the whole amount, principal and interest, had been repaid to the Province, while, with the exception of a few miles in Cumberland and Pictou, the railway system on the mainland, which had been assisted by the Government, remained a burden on the provincial revenues. The Government had voted \$5,000 a mile towards the extension of the Cape Breton Ry. from St. Peter's to Louisburg, and a subsidy for a coal railway of well-determined value from St. Rose to Orangedale. For the development of the island, it was urged that a line should be constructed through the Morien, Lingan and Glace Bay coal fields, and another through the limestone areas on the south side of the Bras d'Or lakes. The petition of the islanders presented to the House asked

that the Government should give the same assistance for railway construction in the island as it had given to the Halifax and South-Western Ry., and had voted for the Halifax North-Eastern Ry. The Premier stated that just as soon as the project assumed concrete form the Government would take steps to deal with it, but at present there was no company seeking a subsidy for a line in the southern part of the island. (See Cape Breton Ry., Mar., pg. 179, and Mabou Ry. and Coal Co., Oct., 1907, pg. 743.)

The Premier subsequently announced that the Government was willing to offer to a bona fide company undertaking to construct and operate a railway in Cape Breton, along the routes indicated, such reasonable terms as should secure the construction of the line, and would recommend that the Dominion Government grant a subsidy on the usual terms. The Sydney, N.S., City Council, May 13, passed a resolution endorsing the construction of the lines referred to, but suggesting that they be built as part of the Intercolonial Ry. system, and that the Cape Breton Ry. be taken over by the Dominion Government.

Central Ontario Ry.—The Engineer of the Department of Public Works for Ontario, in his report for 1907, states that 15 miles of new line from Bancroft to Maynooth had been opened for traffic during the year. An additional distance of 10 miles was under construction. The clearing had been done upon the whole distance. The grading had been done on eight miles and two miles of track had been laid. The construction would be completed during the season of 1908, and a further mileage, it was expected, would be located. (Mar., pg. 179.)

Crow's Nest and Northern Ry.—We are advised that the surveys for this projected line have been completed, and that contracts for cutting the right-of-way were expected to be let early in May, and a contract for the construction about 30 days thereafter. The line will start about a mile west of the Crow's Nest station of the C.P.R. Kootenay Division, and follow up the north fork of Michel Creek to near Grave Creek. The line is for the purpose of serving several coal companies located on the north fork of Michel Creek, among them being the Crown Coal and Coke Co. and the Michel Coal Mines, Ltd. It is proposed to proceed with the construction of 15 miles of the line this summer, and to continue the balance of the work as the development of the properties demands. R. G. Belden, Spokane, Wash., has charge of the letting of the contracts. (May, pg. 329.)

Delaware and Hudson Co.—The Quebec Legislature at its recent session voted a subsidy at the rate of 2,000 acres of land per mile, not convertible into money, to the Quebec, Montreal and Southern Ry., which is one of the company's lines in Canada, for a line of 107 miles from Yamaska in the direction of Levis; and a subsidy at the same rate for a branch from the main line at Becancourt to the St. Lawrence River, a distance of not more than four miles. (See Quebec, Montreal and Southern Ry., Mar., pg. 183.)

Detroit River Tunnel.—An investigation is being made by H. S. Clements, M.P. for West Kent, according to a Detroit press report, into charges that the Butler Bros.-Hoff Co., contractors for the Detroit River tunnel had been permitted to take dutiable material into Canada to the value of over \$200,000, without paying duty. A. B. Drake, Windsor, is said to be assisting Mr. Clements, and Hon. R. F. Sutherland, Speaker of the House of Commons, is attorney for the contractors. Mr. Drake is quoted as saying that the Dominion Customs officials granted the freedom from

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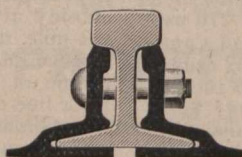
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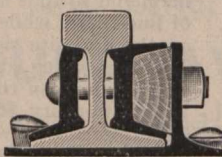
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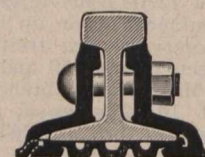
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duty, and that the sum involved would amount to over \$200,000. The contractors started work on the tunnel in Aug., 1906. One of the first steps taken by the contractors was to send an emissary to Ottawa to adjust the matter of customs on supplies, tools and working materials. The upshot of his efforts was a concession from certain members of the Government allowing the contractors to take into Canada, duty free, all material which was to form a permanent part of that section of the tunnel extending from the river's edge to the open cut where the inclosed tunnel ends, a distance of some 3,800 ft. But this agreement, it is stated, was to be a reciprocal one, and was to be made only on condition that the U.S. Government allowed similar concessions for Canadian goods. The U.S. Government allowed not one iota, but in spite of the failure of the reciprocal scheme, not a cent's worth of duty has been paid on the U.S. products that have gone into the Canadian side of the tunnel. (May, pg. 329.)

Duluth, Rainy Lake and Winnipeg Ry.—The first train over this line ran into Fort Frances, Ont., over the Canada-Minnesota Bridge, and the Canadian Northern Ry., April 28. The D., R.L. and W.R. extends from Virginia to Rainer, Minn., 94 miles, and connection is given with Duluth over the Duluth, Missabie and Northern Ry., 74 miles. Surveys have been made for an independent line between Virginia and Duluth, but nothing has been decided as to construction. At Rainer the line connects with the Canada-Minnesota Bridge, constructed jointly by the D., R.L. and W.R., and the Canadian Northern Ry., and on the Ontario side of the bridge the C.N.R. constructed a spur line giving connection with its terminals in Fort Frances. The bridge crosses the Rainy River about three miles east of International Falls, and is a single track structure, composed of eight 40 ft. deck plate girder spans, and a roller lift bridge with one arm about 125 ft. long, across the navigable channel. The principal owners of the D., R.L. and W.R. are Cook and O'Brien, lumbermen, for the development of whose limits the construction of the line was originally started. The arrival of the first train in Fort Frances was celebrated by a public dinner, at which there were present officers and officials of the D., R.L. and W.R., the Canadian Northern Ry., and the Rainy River Navigation Co., as well as merchants and others interested in transportation matters from Duluth, Fort William and other places.

The first train was run through to Winnipeg, May 8, and it is understood that the permanent train service will be put in operation June 1, a through freight and passenger service being arranged between Duluth and Winnipeg. A daily passenger train will be run each way, leaving Winnipeg and Duluth in the evening, and making the 378 miles between the two points during the night. A new route between Fort William and Duluth is also opened up, the distance being about 400 miles, so that when navigation closes, a shorter route will be available than has hitherto been the case. In time a speedier route will be available by the construction of the line from Gunflint, the terminus of a C.N.R. branch, to which reference was made in our May issue, pg. 329. The line will serve a district in Minnesota which is developing rapidly, and it is also expected that it will secure a share of the through east and west traffic, upon the opening of the Wisconsin Central Ry. extension into Duluth, which will give a Chicago connection. (Nov., 1907, pg. 829; see also Canada-Minnesota Bridge Co., May, pg. 329.)

Ha! Ha! Bay Ry. Co.—At the last session of the Quebec Legislature an act was passed

incorporating a company with this title with power to construct a railway to be operated by steam or electric power or both, from a point on the Quebec and Lake St. John Ry., between Jonquieres station or Roberval, and its terminus in the town of Chicoutimi, to Ha! Ha! Bay, in the county of Chicoutimi; also two branch lines not exceeding 10 miles each in length, one northward to the Chicoutimi pulp mills, and another southward to Lake Kenogami; and a third branch from St. Alphonse to St. Alexis, about four miles, "connected with the main line, and to be considered to all intents and purposes as forming part thereof, and enjoying all the rights, powers and privileges connected therewith." Power is also given to construct telegraph and telephone lines along the railway. The provisions of the law now in force with regard to railways in the province, and their amendments, except par. 11 of article 5132 and par. 16 of article 5134 of the Revised Statutes of Quebec are made applicable to the company. The company's capital is fixed at \$600,000; it may issue bonds and other securities; its head office shall be at Bagotville, Que., and the provisional directors are: A. Lepage, W. Levesque, J. A. Tremblay, E. McLean, Rev. H. Cinion, Bagotville, Que.; Lieut.-Col. B. A. Scott, P. A. Choquette, E. F. de Varennes, Quebec; E. A. Dubuc, Chicoutimi, Que.

The Legislature at its recent session voted a subsidy of 4,000 acres of land in aid of the construction of a line 20 miles in length from Jonquieres in the direction of Ha! Ha! Bay, in lieu of a subsidy voted in 1906, which subsidy is available for any company having a charter to construct a line in the same territory. (Jan., pg. 21. See also Chicoutimi and North Eastern Ry., July, 1904, pg. 231.)

Hampton and St. Martin's Ry.—See St. Martin's Ry.

Hebertville to St. Joseph d'Alma.—The Quebec Legislature at its last session voted a subsidy of 4,000 acres of land per mile, not convertible into money, to aid in the construction of a line from Hebertville, in Lake St. John county, towards St. Joseph d'Alma, a distance of about 10 miles.

Indian River Ry.—At the last session of the Quebec Legislature a subsidy of 4,000 acres of land per mile, not convertible into money, was voted for a line from the north end of Lake Megantic towards the south end of the lake to the International boundary, in lieu of the subsidy voted in 1904. (Oct., pg. 741.)

Intercolonial Ry.—Replying to a question in the House of Commons April 27, the Minister of Railways said the length of the branch line from North Sydney to Sydney Mines was 2.7 miles; it had cost to date \$136,479.02, the cost of the right-of-way being \$24,442.69, and the amount paid for land damages was \$4,238. The amount of claims outstanding was \$9,015, and these were in process of settlement.

Replying to another question on the same date, the Minister of Railways said the matter of the construction of a new station at Truro, N.S., was under consideration. Large expenditures have to be made in connection with the new freight yard, etc., there, and the whole question of accommodation was being considered. (May, pg. 231.)

International Ry. of New Brunswick.—The question of the Provincial Government guarantee of the bonds of this railway, which was formerly known as the Restigouche and Western Ry., has been investigated by the Accounts Committee. The first guarantee was on bonds to the extent of \$150,000, but under the act passed in 1906 these bonds, and the mortgage given to secure them, were cancelled, and a new guarantee was provided for. This was a

guarantee at the rate of \$8,000 a mile of the first mortgage bonds of the company, and the usual subsidy of \$2,500 a mile to be secured by a second mortgage, but upon which no interest was to be charged for seven years. In Feb. the Government considered a report on the work performed by the company, which showed that the expenditures on account of construction to Dec. 31, 1907, amounted to \$1,207,019.77, and on this report the Provincial Secretary recommended that the Province guarantee the bonds of the company to the extent of \$400,000, which amount was to include the original guarantee of \$150,000, of which bonds were to be handed over by the assignees of the Restigouche and Western Ry. and cancelled. This arrangement was ratified by order-in-council, and the Provincial Secretary and Attorney-General were given power to carry out the arrangement. The original bonds and mortgage were held by the Eastern Trust Co. The International Trust Co. made arrangements with the Royal Trust Co. to take over the mortgage, and also to take over the new bonds. The exchange and cancellation of bonds having been effected, the Government guarantee was placed upon the bonds to secure the Royal Trust Co. by the Provincial Secretary. The matter is still under investigation.

Joliette and Lake Manuan Colonization Ry.—At the last session of the Quebec Legislature a subsidy at the rate of 4,000 acres of land was voted in aid of the construction of about 60 miles of this projected railway from Joliette in the direction of Lake Manuan, in lieu of the subsidy voted in 1906. (Feb., 1905, pg. 49.)

L'Avenir and Melbourne Ry.—The Quebec Legislature at its last session passed an act incorporating a company with this title for the purpose of constructing a railway or tramway from Richmond or Melbourne, following the banks of the St. Francis River to Drummondville, with the right to build bridges across the river and to construct branch lines wherever necessary to facilitate the working of its main line, such branch lines not to exceed in any one instance 25 miles in length. The act provides that the railway shall be operated by means of trains as on a steam line, or of separate cars as on tramways, and the traction shall be effected by electricity, steam, gasoline or in any other manner that may seem most advantageous to the company. The company may acquire water powers along its line for its use, and may amalgamate with any railway company whose line it may cross or join. The capital is fixed at \$300,000, but power is given to increase to \$1,000,000 and bonds may be issued. The head office of the company is to be at L'Avenir, Que., the provisional directors being: B. E. Reed, G. E. Bogie, Durham tp., Arthabaska county; Jos. Laferte, M.L.A., Grantham tp., Arthabaska county; P. S. G. Mackenzie, K.C., M.L.A., Melbourne, Que.

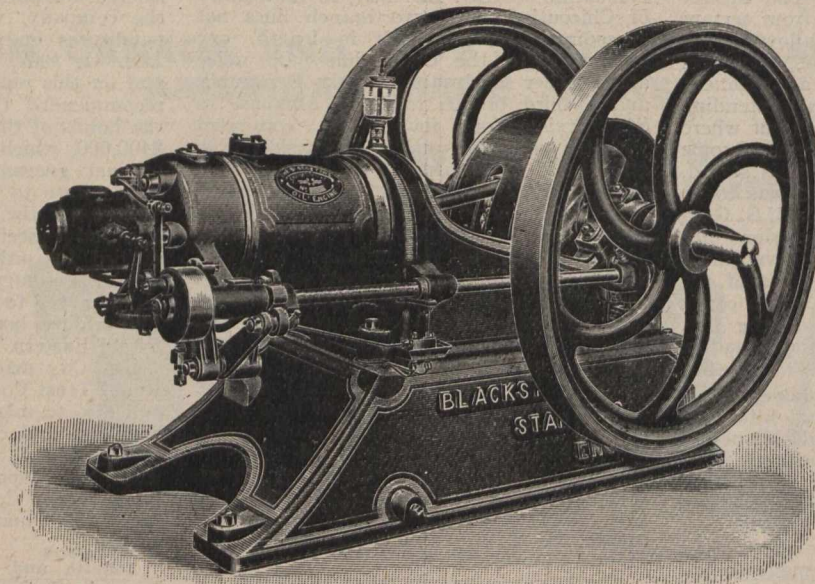
Little Nation River Ry.—At the last session of the Quebec Legislature a subsidy at the rate of 3,000 acres of land per mile, not convertible into money, was voted in aid of the construction of a line from between Thurso and Montebello, on the left bank of the Ottawa River, thence to Cheneville, and northwards to Lake Nominique, near the C.P.R., not exceeding 30 miles. (May, pg. 331.)

Lotbiniere and Megantic Ry.—At the last session of the Quebec Legislature a subsidy at the rate of 2,000 acres of land per mile, not convertible into money, was voted in aid of the construction of a line from Lyster station, running towards Lime Ridge, in the county of Wolfe, a distance of about 60 miles, in lieu of the subsidy voted in 1906. (See Quebec, Eastern Ry., Feb., pg. 99.)

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Mabou Ry. and Coal Co.—See Cape Breton railways.

Macleod, Cardston and Montana Ry.—See Western Alberta Ry.

Manitoulin and North Shore Ry.—The report of the engineer of the Ontario Department of Public Works for 1907, says the work of extending the main line from mileage 13 had been gone on with, and the grading had been completed to mileage 13.92.

The Dominion Parliament at its current session passed an act extending the time for the construction of the railway for two years. A clause was inserted to the effect that if the company is to maintain its charter rights, it must expend \$25,000 in construction work on the Manitoulin end of the line before the middle of July, and also satisfy the Board of Railway Commissioners of its intention to complete the rest of the line before the two years' extension of its charter privileges accorded expires. (Feb., pg. 99. See also Manitoulin Island, April, pg. 245.)

Replying to the question whether "the Government or any member thereof had given a pledge to the effect that if the present holder of the M. and N.S.R. charter fails to carry out the building of the road in the proper time, the Government will take the matter in hand and build a railway from Manitoulin Island to connect with the C.P.R.," the Premier of Ontario said in the Legislature recently "The Government is not in the habit of giving pledges upon any subject of public policy."

Matane and Gaspé Ry.—At the last session of the Quebec Legislature a subsidy of 4,000 acres of land per mile, not convertible into money, was voted in aid of the construction of a line from Ste. Flavie, on the I.C.R. towards Matane, for 37 miles, in lieu of the subsidy voted in 1906, for 30 miles from St. Octave de Metis to Matane.

An action has been entered in the Superior Court at Montreal, on behalf of H. J. Lyons, contractor of that city, for \$1,000,000 damages against the company, and Jas. Mitchell, a contractor of New York. The object of the action, it is said, is to prevent the company signing a contract for the construction of the line with N. S. Mitchell. (Mar., pg. 183.)

Metebetchouan Co.—At the last session of the Quebec Legislature a subsidy of 1,000 acres of land per mile, not convertible into money, was voted in aid of the construction of a line from Lake Bouchette to St. Andre on the Metebetchouan River. (Aug., 1907, pg. 563. See also Quebec and Lake St. John Ry., Mar., 1904, pg. 81.)

Orford Mountain Ry.—The Quebec Legislature last session granted a subsidy at the rate of 2,000 acres per mile, not convertible into money, in aid of the construction of the following lines: From Mansonville to the International boundary, 3.12 miles, for 7.54 miles of the line between Bolton and Mansonville; from Windsor Mills to Brompton Falls, eight miles; from the Melbourne road crossing to the village of Melbourne, 3.50 miles; and from a bridge on the main line to Lake Bonallie, on the south side, in lieu of the subsidy voted in 1905. (May, pg. 333.)

Pontiac and Interprovincial Ry.—At the last session of the Quebec Legislature a subsidy at the rate of 4,000 acres of land per mile, not convertible into money, was voted in aid of the construction of a line from Waltham station, on the old Pontiac Pacific Junction Ry. (C.P.R. branch line), to Ferguson's Point, Pontiac county, about 20 miles, in lieu of the subsidy voted in 1906. (July, 1904, pg. 235.)

Pontiac Central Ry.—The House of Commons at the current session has passed an act authorizing an extension of time for the construction of a line in the province of

Quebec, authorized by the Quebec Legislature, and giving permission to extend the line along the valley of the Nottaway River to East Main River, and southerly to Brockville. Some objection was taken to the proposal on the ground that the method of obtaining a declaration that the projected railway was for the general advantage of Canada, by proposing to extend into another province, was becoming too common. The Minister of Railways held over the bill for some time for consideration, but finally allowed it to pass. The southerly extension of this line from Bryson, Que., to Brockville, would pass through or near Lanark, and Athens, which points, it is suggested, will be served by a branch line of the Brockville, Westport and Northwestern Ry. (May, pg. 333.)

Prince Edward Island Ry.—In connection with the claim of M. J. Haney for \$390,000 on account of work on the construction of the Hillsborough Bridge, on the Murray Harbor branch of the P.E.I. Ry., the Minister of Railways stated in the House of Commons April 24, that the arbitrator had awarded \$164,000. It was undesirable that the claim should be settled by the present Deputy Minister and Chief Engineer, as he had already had it under his consideration when he was acting as chief engineer for Mr. Haney, consequently the matter was left to C. Schriber, the Department's former Deputy Minister and Chief Engineer. Mr. Schriber's powers were extended so that he could deal with the question of equity as well as with those matters which had come before him directly as Chief Engineer for the department. A supplementary estimate for the amount of the award would be asked for at a later date, when the whole matter could be discussed.

Tenders are under consideration for the construction of a spur line to the ballast pit at Surrey, P.E.I. (May, pg. 333.)

Quebec Central Ry.—We are advised that there has not been anything definitely settled with regard to the further extension of the line beyond St. George, Que. This branch as projected is for the purpose of linking up the Q.C. Ry. with the Temiscouata Ry., which is owned by largely the same interests. At the recent session of the Quebec Legislature a subsidy of 3,000 acres of land was voted to aid in the construction of 30 miles of this projected branch, the route being described as following the Famine River to its source near Langeville, and thence following the St. Jean River across the counties of Beauce, Dorchester, Bellechasse, Montmagny, L'Islet, Kamouraska and Temiscouata, to Cabano, on the Temiscouata Ry. The subsidy is not to be converted into money, and construction is to be gone on with within two years. (April, pg. 245.)

Quebec and New Brunswick Ry.—The Dominion Parliament at its current session passed an act extending the time for the construction of this projected railway, and also providing that the company may construct a line from St. Charles Junction, St. Anselme or Chaudiere Junction, on the Intercolonial Ry., to a point on the International boundary between Quebec and Maine, in the 13th tp. of that state; and by adding the words "or a point on the G.T. Pacific Ry. in the valley of the River St. Francis," after junction in sec. 7, chap. 75 of the act of 1900. The company asked to be authorized to make a connection with any railway in Maine, and subject to the approval of the Board of Railway Commissioners, enter into such agreements as may be necessary for that purpose, or may construct or aid in the construction of such railways or portions thereof as part of the continuous line of the company's railway, but this was struck out. The company is

also authorized to enter into agreements with the G.T. Pacific Ry. or any other railway, in addition to others previously specifically mentioned.

In the discussion in committee in the House of Commons, it was stated that there had been about three miles of grading done on the line, and the reason why the work was not continued, was that it was expected that the Transcontinental Ry. Commissioners would take over part of it. When the Eastern Division of the National Transcontinental Ry. was surveyed, it was found that only a very short distance of the route would be required, and it was necessary to have the time for construction extended to complete the arrangements. The company now proposed to go on with construction. The projected line would have a length of 130 miles, and between Connors and Chaudiere Junction would parallel the National Transcontinental Eastern Division for three or four miles. (May, pg. 333.)

Quebec, Montreal and Southern Ry.—See Delaware and Hudson Co.

St. Martin's Ry.—This railway, formerly called the Hampton and St. Martin's Ry., was reopened for traffic May 7, having been closed for several weeks to permit of repairs being made. The line has been given a thorough overhaul, the bridges over the numerous streams and ravines having been strengthened. The largest of these structures is that over the Hammond River at Upham, N.B. This bridge has been practically rebuilt and strengthened by the addition of two reinforced concrete piers; it has a span of 180 ft. The company has secured 15,000 new ties, which will be placed during the current season. During 1907 there were placed in the track 12,000 new ties. Other improvements are contemplated, including the erection of a station-house at St. Martin's, and the extension of the line to the wharf there, a distance of about half a mile. W. E. Foster, St. John, N.B., is President. (Jan., 1907, pg. 3.)

Springfield Ry.—The Davison Lumber Co. propose to extend the main line of its lumbering railway, by adding five miles, during the summer. The company's mills are at Bridgewater, N.S., and the line extends from the mills to the timber limits at Springfield. Oct., 1906, pg. 585.)

Temiskaming and Northern Ontario Ry.—It is expected that the line will be completed this season as far as the junction with the National Transcontinental Ry. With the completion of the bridge across the Watybeag River, 69 miles north of Englehart, Ont., or 208 miles from North Bay. The erection of the bridge at Driftwood is being proceeded with, and when this is completed the steam shovels will be taken across to work on some heavy cuts. The Commissioners have awarded the following contracts: O'Boyle Construction Co., Sault Ste. Marie, Ont.—To paint the stations between North Bay and New Liskeard; to erect a brick office and storehouse at Englehart; and two water tanks. J. K. McConnell, Sturgeon Falls, Ont.—Station buildings at Moose Lake and Dane; and five frame houses. L. C. Wideman, Guelph and Englehart—Waiting room at Thoreau. Tenders are under consideration for a freight shed at Haileybury; an ice house at Englehart; a 40 ft. concrete arch, three 10 ft. concrete culverts, one 5 ft. culvert and three abutments at various points.

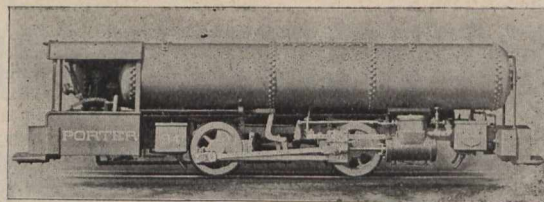
The office building at North Bay has been completed and the operating officials moved into it May 1. It is constructed of cut limestone, with partitions and floors of concrete, and oak finishings with tiled roof. There are large vaults on the first and second floors, and half the basement has been set aside for storage purposes.

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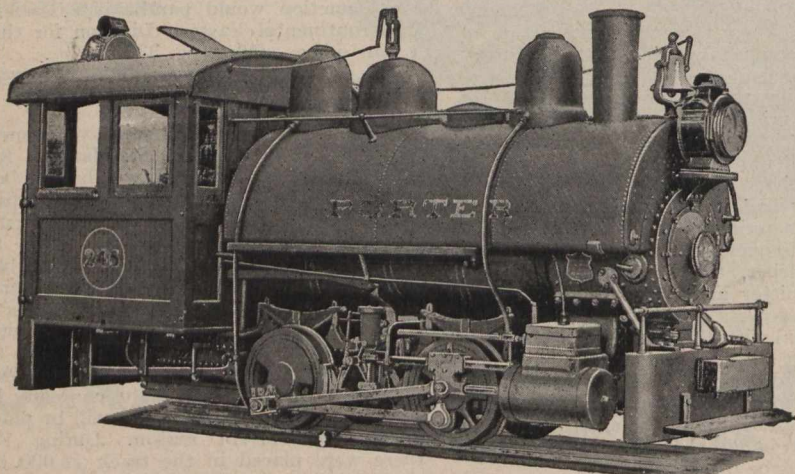
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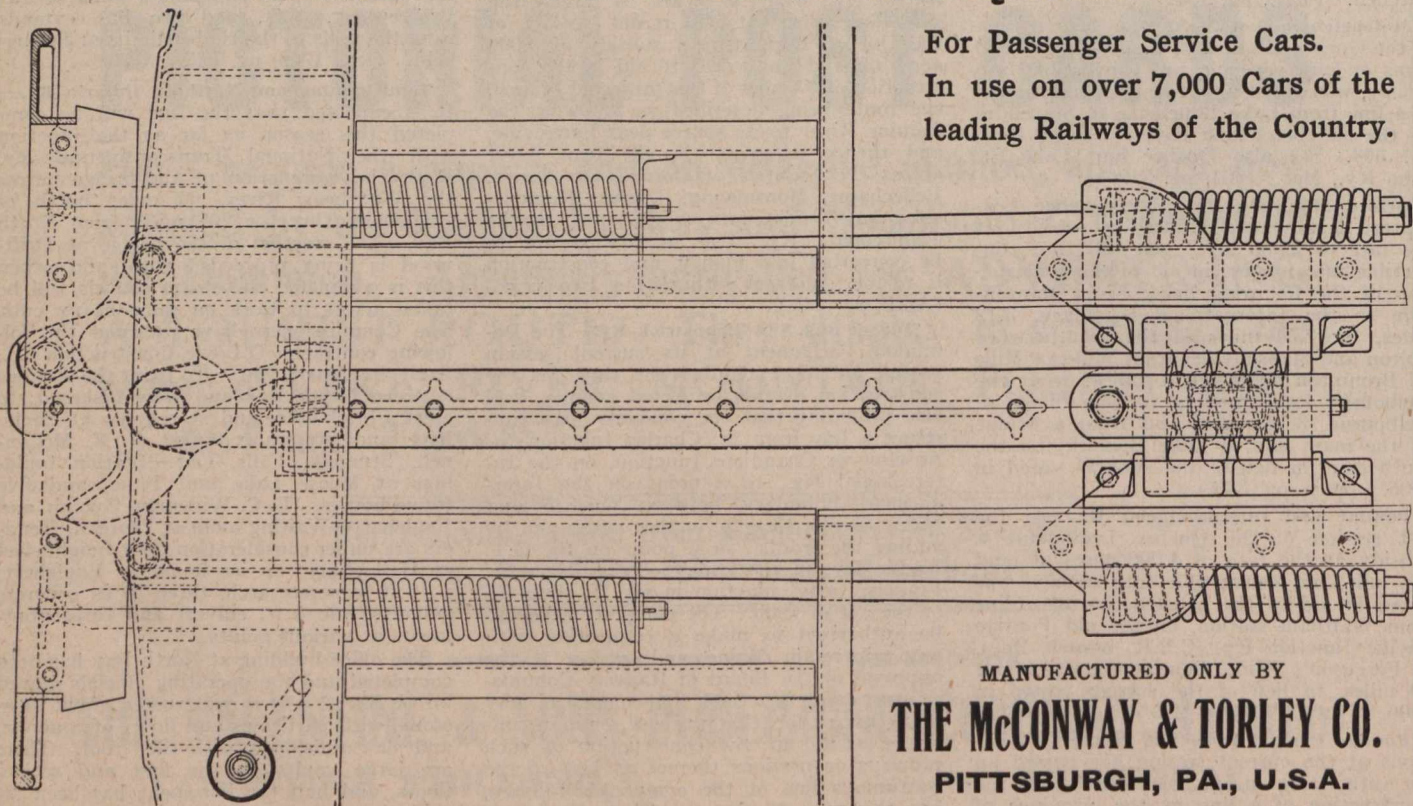
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At Englehart a roundhouse, machine shop and other divisional buildings are practically completed. The roundhouse, which will have a capacity for eight locomotives, is 225 by 90 ft.; the machine shop, 60 by 65 ft.; the boiler house, 30 by 40 ft.; and the coal house, 12 by 20 ft. Besides these buildings there is a small engine room, the engine being used for heating purposes. The coal chute has a total height of 65 ft. from the ground to the roof, and 35 ft. from the ground to the rail; the track is 800 ft. long, the gradient being 6½ inches in 14 ft.; there are 34 chutes, 17 on each side.

A proposal has been made for the extension of the Charlton branch to Elk Lake, Ont., in which district there is a good deal of development going on. (May, pg. 335.)

Trans-Canada Ry.—The Quebec Legislature last session voted a subsidy at the rate of 4,000 acres of land per mile, not convertible into money, in aid of the construction of 30 miles of railway from Roberval, the terminus of the Quebec and Lake St. John Ry., on Lake St. John, towards the west in the direction of James Bay, in lieu of the subsidy voted in 1906. This mileage is covered by the charters of the Trans-Canada Ry., and the Quebec and James Bay Ry., both of which are owned by the same interests. These companies have done considerable surveying and some small amount of grading.

At the current session of the Dominion Parliament an act has been passed extending the time for the commencement of construction of the projected line for two years, and the time for completion for eight years from the passing of the act. (Feb., pg. 101.)

Western Alberta Ry.—The Dominion Parliament at its current session passed an act extending the time for the commencement of construction for two years and the time for the completion of the line for five years. When the bill was before the House of Commons, opposition was offered to its passage on the ground that although the company was given a charter of incorporation in 1898, and a subsidy was voted in 1899, both of which had been extended from time to time, nothing had been done. Other companies, notably the Macleod, Cardston and Montana Ry., held charters covering the construction of lines in the same territory, and might be induced to proceed with construction without unnecessary delay in the event of the Western Alberta Ry. Co. being refused further extension of time. In the course of the discussion it was pointed out that a railway was very badly needed in this section of the country. The line projected by the W.A.R. Co. will extend from the International boundary to the C.P.R. Crow's Nest Pass line, passing through or near Cardston, Alta, about 50 miles. The line will run parallel with the Rocky Mountains, through a good farming district. The Cardston section of the country at present had railway connection with Lethbridge, by the Alberta Ry. and Irrigation Co.'s line, whereas if such a line as this was constructed there would be a saving of about 90 miles in getting the produce of the district to the natural market in British Columbia. It appeared from the discussion that the subsidy for the construction of this line was renewed to the Western Alberta Ry. in 1906, the year following the last renewal of the charter, and that the subsidy was still available for this company. It was stated that the company was now in a position to arrange for construction, and would be prepared to enter into a subsidy contract with the Government under the subsidy act. Under all the circumstances it was decided that the charter should be renewed for a further period. (Feb., pg. 101.) See also Macleod, Cardston and Montana Rd. Mar., pg. 183.

Windsor, Chatham and London Ry.—The Dominion Parliament at its current session passed an act granting an extension of two years for the commencement, and of five years for the completion of this projected railway. (April, 1906, pg. 195.)

June Birthdays.

Many happy returns of the day to—
Harry Abbott, ex-General Superintendent C.P.R., Vancouver, B.C., born at Abbotsford, Que., June 14, 1829.

Jas. Anderson, Manager Sandwich, Windsor and Amherstburg Ry., Windsor, Ont., born at Ayr, Ont., June 20, 1851.

F. F. Backus, General Freight and Passenger Agent, Toronto, Hamilton and Buffalo Ry., Hamilton, Ont., born at Rochester, N.Y., June 4, 1860.

Archer Baker, European Manager C.P.R., London, Eng., born at York, Eng., June 21, 1845.

F. P. Brady, General Superintendent Lake Superior Division C.P.R., North Bay, Ont., born at Haverhill, N.H., June 22, 1853.

E. Callaghan, Agent Hamilton Steamboat Co., Toronto, born at Kingston, Ont., June 17, 1875.

W. H. Darcy, General Claims Agent C.P.R. Western Lines, Winnipeg, Man., born at Manorhamilton, Leitrim, Ireland, June 23, 1859.

A. E. Doucet, Division Engineer Transcontinental Ry. Surveys, Quebec, born at Montreal, June 9, 1860.

G. H. Eaton, Assistant Master Car Builder, C.P.R. Western Lines, Winnipeg, born in Staffordshire, Eng., June 9, 1860.

A. A. Goodchild, Auditor of Stores and Mechanical Accounts C.P.R., Montreal, born at Peckham, London, Eng., June 3, 1866.

H. W. Harding, Local Secretary Canadian Northern Ry., London, Eng., born there June 6, 1869.

F. M. Hawley, city ticket agent G.T.R., Cobourg, Ont., born at Campbellford, Ont., June 22, 1874.

E. J. Hebert, General Agent C.P.R. Passenger Department, Montreal, born there June 18, 1864.

Carl Howe, Manager Merchants Despatch and other fast freight lines, Buffalo, N.Y., born at Berrien Springs, Mich., June 11, 1870.

L. R. Johnson, Assistant Superintendent of Motive Power C.P.R. Eastern Lines, Montreal, born at Abingdon, Berks, Eng., June 22, 1855.

J. F. Jones, Superintendent St. Clair Tunnel, G.T.R., Port Huron, Mich., born at Prairieville, Ill., June 4, 1851.

L. K. Jones, Secretary Department of Railways and Canals, Ottawa, born at Port Hope, Ont., June 9, 1849.

A. C. Lytle, Superintendent and General Freight and Passenger Agent, Orford Mountain Ry., Eastman, Que., born at Hemmingford, Que., June 6, 1854.

W. R. MacInnes, Freight Traffic Manager C.P.R., Montreal, born at Hamilton, Ont., June 7, 1867.

E. H. McHenry, Fourth Vice-President New York, New Haven and Hartford Rd., and ex-Chief Engineer, C.P.R., born at Cincinnati, Ohio, June 25, 1859.

C. E. McPherson, General Passenger Agent C.P.R. Western Lines, Winnipeg, born at Chatham, Ont., June 7, 1861.

W. D. Matthews, director C.P.R., Toronto, born at Burford, Ont., June 22, 1850.

L. Mulkern, chief clerk, General Freight Agent Through Traffic C.P.R., Toronto, born at London, Ont., June 18, 1871.

F. Price, Superintendent Car Service G.T.R., Montreal, born there June 11, 1864.

Allan Purvis, Superintendent, district 4, Central Division, C.P.R., Souris, Man., born at Batavia, Java, June 29, 1878.

Jas. Stephenson, ex-Chief Superintendent G.T.R., Weston-Super-Mare, Somerset, Eng., born there June 2, 1837.

The Victorian State Railways.

The report of the Victorian Railways Commissioners, of which body T. Tait, formerly Manager of Transportation C.P.R., is Chairman, for the year ended June 30, 1907, has been issued. The Commissioners have the management of 4,316.11 miles of track, of which 3,731.82 are main tracks and 584.29 miles are sidings. There are 3,089.81 miles of single track, 303.44 miles of double track line, 2.45 miles with three tracks, 2.22 miles with four tracks, and 3.15 miles with six tracks. There are 81.60 miles of 2 ft. 6 in. gauge line, the remainder being 5 ft. 3 in., and 5.13 miles of electric railway.

The financial results for the year compared with 1905-06 are:

	1906-07				1905-06			
	£	s.	d.		£	s.	d.	
Gross revenue....	4,012,641	8	4	3,787,619	0	8		
Working expenses	2,076,672	14	7	1,999,023	0	6		
Net revenue....	1,935,968	13	9	1,788,596	0	2		
Net revenue Electric St. Ry. (1)	7,802	10	4	308	5	10		
	1,928,166	3	5	1,788,904	6	0		
Special expenditures and charges in reduction of extraordinary liabilities taken over July, 1903	165,749	7	10	117,542	10	9		
Balance total net revenue....	1,762,416	15	7	1,671,361	15	3		
Interest charges and expenses..	1,483,284	5	0	1,472,397	0	4		
Surplus credited to consolidated revenue....	279,132	12	7	198,964	14	11		

(1) The loss shown for the year 1906-07 was after providing for expenditure of £9,941. 2s. 2d. towards replacing damage by fire. The net revenue in 1905-06 was from May 7 to June 30, 1906, only.

The net revenue after payment of working expenses was the largest ever earned, and per mile of railway, viz., £570, and per traffic mile, viz., 3s. 10.30d.; the highest obtained for 19 and 28 years respectively, and was, including the electric street railway, equivalent to 4.86% on the railway debt of the state. In Nov., 1906, the rates for agricultural produce, including wheat and other cereals, were reduced to the extent of £35,000 a year. The rolling stock consisted June 30, 1907, of 497 locomotives, 1,233 passenger cars, 10,625 freight cars, and 494 vans, etc. The total train miles run was 10,035,914, against 9,392,069; passengers carried, 69,920,583, against 65,088,394; freight carried, 3,965,792 tons, against 3,676,017. Gross revenue per average mile open, £1,182, against £1,116; gross revenue per train mile run, 7s. 11.96d., against 8s. 0.79d. The expenses under the heads of transportation and traffic, way and works, rolling stock and general expenses, amounted to 4s. 1.66d. per train mile run, and were equal to 53.75% of the gross revenue, against 4s. 3.08d. and 52.78% in 1905-06.

Natural Gas for C.P.R. Cars.—A press despatch from Medicine Hat, Alta., stated recently that natural gas from the wells there was being used in C.P.R. passenger cars on the Crow's Nest Pass line. We are advised that, so far, only experiments have been made, but that while these appear to be very satisfactory, no definite decision as to the use of the gas has been arrived at. The natural gas has been used in place of Pintsch gas in some of the cars equipped with incandescent mantle lighting and has been found satisfactory from an illuminating standpoint. Experiments are now being made to determine whether the natural gas is absolutely safe for lighting, and until these are completed the use of the gas will not be proceeded with. If, however, it should be decided to use it, it will be compressed into 10 atmospheres and carried in tanks underneath the cars in the same way as the Pintsch gas.

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General Passenger Agent, MONTREAL

C. B. FOSTER,
District Passenger Agent, TORONTO

MAINLY ABOUT PEOPLE.

R. H. Sperling, General Manager British Columbia Electric Ry., is in England for a holiday.

Dr. R. B. Struthers, who acted for many years as C.P.R. physician at Sudbury, Ont., died there May 14.

E. A. Evans, General Manager Quebec Ry., Light and Power Co., has returned to Quebec from Europe.

F. C. Annesley, private secretary to W. Mackenzie, Toronto, has gone to England for a couple of months.

A. E. Harper, of the Long Island Ry. staff, who died at Corona, N.Y., May 5, was a native of Toronto.

N. Curry, of Rhodes, Curry & Co., returned to Amherst, N.S., from a lengthened trip to Great Britain, at the end of May.

Lady Shaughnessy and family intend removing to their country residence, St. Andrews, N.B., this month, for the summer.

Sir Thos. G. Shaughnessy sailed from Liverpool, Eng., May 22, and arrived at Quebec on the Allan Line s.s. Virginian.

H. H. Hansard, law clerk Department of Railways, Ottawa, has retired from the civil service to engage in private practice.

Jas. Osborne, General Superintendent Ontario Division, C.P.R., Toronto, left Toronto May 14, for a holiday trip to Great Britain.

Miss C. E. Stout, daughter of W. S. Stout, President Dominion Express Co., Toronto, was married there May 12 to A. H. Montgomery.

Jas. T. McGregor, a sub-contractor on the G.T. Pacific Ry. in the vicinity of Fort William, Ont., has been married to Miss E. H. Olds.

Mrs. Humphry Ward, the English novelist, and Miss Ward, were guests of Sir Wm. and Lady Van Horne during their recent visit to Montreal.

H. Beatty, of M. Beatty & Son, dredge builders, etc., Welland, Ont., was slightly injured, owing to an automobile he was driving running into a ravine May 6.

R. Marpole, General Executive Assistant C.P.R., left Vancouver, B.C., May 20, for England, accompanied by Mrs. Marpole, C. Gardiner Johnson, and Mrs. Johnson.

W. Stitt, General Passenger Agent Eastern Lines, and W. T. Robson, Advertising Agent, C.P.R., attended the annual dinner of the Canadian Club, New York, May 14.

The total value of the estate of the late Lieut.-Colonel Henshaw, Montreal, director of the Montreal Street Ry., and other transportation companies, has been placed at \$639,731.

Sir Wm. C. Van Horne, Chairman of the Board, C.P.R., returned to Montreal, May 7, from Cuba, where he had been in the interests of the Cuba Company, of which he is President.

L. P. Palmer, Commissioner of the Trunk Line Association's Passenger Department, died somewhat suddenly in New York May 1, aged 60. He had been engaged in railway work since 1863.

W. E. Hamilton, for many years connected with the C.P.R., and later with the Reid Newfoundland Co., is reported to have been appointed Traffic Manager of the Porto Rico Ry.

J. W. N. Johnston, General Passenger Agent Reid Newfoundland Co., is under treatment at Colorado Springs, Col., and recent reports state that his condition does not show much improvement.

W. Whyte, 2nd Vice-President C.P.R., and Mrs. Whyte, returned to Canada by the Empress of Ireland, arriving at Quebec May 22, after spending a short holiday in Great Britain and Southern Europe.

C. W. Mott, chief clerk in the freight claims department of the C.P.R., Montreal, has been presented with a gold watch by the congregation of the Anglican church, Montreal West, in recognition of his services as organist during the past ten years.

S. L. Shannon, Comptroller Intercolonial Ry., returned to Moncton, N.B., May 6, from Washington, D.C., where he had been attending a convention of the Association of American Railway Accounting officers.

The date of the banquet to be given by the Board of Trade, Toronto, to Sir Thos. G. Shaughnessy, President C.P.R., in connection with the opening of the Toronto-Sudbury line, has been fixed for June 15.

Sir Charles Fitzpatrick, Chief Justice of the Supreme Court of Canada, has been selected to act as representative of Canada and Newfoundland at the Hague tribunal, regarding the fisheries dispute with the U.S.

The marriage of Madame Nadeau, niece of J. U. Gregory, recently Agent of the Marine Department at Quebec, to J. A. Gagnon, of the Marine Department, Quebec, was recently announced to take place June 1.

J. G. Scott, General Manager Quebec and Lake St. John Ry., was entertained at a public dinner at Quebec May 26, as a mark of appreciation of the numerous valuable services he has rendered to the city and district.

F. L. Somerville, formerly Resident Engineer G.T.R., Toronto, and latterly practising as a consulting engineer in the city, is an applicant for the position of Superintendent of Queen Victoria Park, Niagara Falls, Ont.

Sir Thos. G. Shaughnessy was entertained at the House of Commons, London, Eng., May 14, to meet the Chancellor of the Exchequer, the President of the Board of Trade, and the Under-Secretary of State for the Colonies.

R. C. G. Gibrade, locomotive foreman Central Vermont Ry., St. Albans, Vt., was married at Stratford, Ont., May 8, to Miss I. J. Preston. He is a nephew of W. D. Robb, Superintendent of Motive Power, G.T.R., Montreal.

J. E. Dalrymple, who has taken up the duties of his new position of Assistant Freight Traffic Manager of G.T. Pacific Ry. at Winnipeg, was entertained at dinner by the principal freight officials of the G.T.R. at the Canada Club Montreal, April 29.

W. A. Pilcher, eastern railway representative of S. F. Bowser & Co., of Fort Wayne, Ind., and Toronto, was one of the twelve who lost their lives in the fire at the Aveline Hotel, Fort Wayne, May 3. He was buried at his old home at Bellevue, Ohio.

Sir Percy Girouard, son of Justice Girouard, of the Supreme Court of Canada, has been appointed Governor and Commander-in-Chief of Northern Nigeria, West Africa, instead of High Commissioner, which position he has held for about three years.

Jas. Dunsmuir, Lieut.-Governor of British Columbia, and head of the Dunsmuir companies, one of which was, until purchased by the C.P.R., the Esquimalt and Nanaimo Ry., has been elected a director of the C.P.R., succeeding C. H. Mackay, New York, resigned.

Thos. Johnston, Chief Accountant Western Ry. of Havana, and formerly in the C.P.R. service, has been visiting Montreal. Mrs. Johnston and family were expected to reach Montreal from Europe at the end of May, and Mr. Johnston came from Cuba to meet them.

C. H. Reynolds, General Manager of the Pacific Cable Board since 1901, died at Lisbon, Portugal, May 22, aged 64. He had been in the service of the Telegraph

Department of India from 1865 to 1895, during the last five or six years being Director-General.

W. McNab, Principal Assistant Engineer G.T.R., Montreal, and Vice-President American Railway Engineering and Maintenance of Way Association, was a guest at the American Railway Guild's annual dinner at New York, April 22, and replied to the toast of Canada.

Mrs. Arthur H. Harris, wife of the C.P.R. Special Traffic Representative, sails from Quebec on the Empress of Ireland May 29, to rejoin her daughter in Switzerland. She will spend the summer in Europe, returning to Montreal in Oct., after placing her daughter at school in Dresden.

John Logan, after 36 years' service in the G.T.R., has been pensioned, and on May 1 he was presented with an address and a couple of easy chairs, one being for Mrs. Logan, by the employees of the car department, St. Thomas, Ont., where he had been engaged during the entire period of his service.

Jos. Clarke, who died at Toronto General Hospital May 1, had been employed as locomotive engineer on the C.P.R. for 27 years, running between Cataract Jct. and Elora. Among his children are Howard, C.P.R. station agent Melrose, Alta.; Roland, train dispatcher, Eau Claire, Wis., and Percy, operator, Warren, Wis.

J. Lawton, a Wabash Rd. conductor, has been sent for trial at the county sessions in June, for running his train from Corinth to Tillsnburg, without an order from the train dispatcher, and without protecting the rear of his train Jan. 2. As a result there was a collision in which an engineer and brakeman lost their lives.

F. R. Latchford, K.C., Ottawa, who was Minister of Public Works, Ontario, from 1889 to 1905, and has latterly been active in the promotion of the Nipissing Central Ry., has been appointed a judge of the Ontario High Court of Justice, to fill the vacancy caused by the appointment of J. P. Mabee, as Chief Railway Commissioner.

A. Hardy and J. Clark, who recently retired from the positions of General Freight and Passenger Agent, and Master Mechanic, Quebec and Lake St. John Ry., on the assumption of the management by the Canadian Northern Ry., were each presented, May 16, with an illuminated address, a purse of gold and a souvenir, by their former colleagues.

I. A. Bowles, for a number of years in the C.P.R. service at Montreal, and for some time local freight agent for the Canadian Northern Ry. at Montreal, died there May 9. Wm. C. Bowles, General Freight Agent C.P.R., Winnipeg, and Jos. Bowles, of the traffic department of the Quebec, Montreal and Southern Ry. Montreal, were brothers.

H. G. Elliott, Assistant General Passenger and Ticket Agent G.T.R., has been given leave of absence on account of ill-health, and left Montreal, May 16, and sailed from Vancouver, B.C., May 22, on the s.s. Aorangi for Australia and New Zealand, intending to reach Vancouver again at the end of July, and to return to duty in Aug.

M. J. Dalton, who has been in the G.T.R. employ at St. Thomas, Ont., for over 30 years, and who has been retired under the company's pension scheme, was presented with an arm chair by the employees there, April 26. Prior to entering the G.T.R. service he was engaged as a master mariner in the Great Lakes trade, sailing out of Port Stanley, Ont.

Jas. Watt, ex-Secretary of the Globe Printing Co., Toronto, who died there May 12, was for a short time some years ago general agent of the G.T.R. at Brockville, Ont., and prior to 1871 was in the service of the old Great Western Ry., and the To-

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ronto, Grey and Bruce Ry. Prior to coming to Canada he was with the North British Ry. in Scotland.

J. E. Leith, General Claims Agent, St. Louis and San Francisco Rd., who died at St. Louis, Mo., April 28, was a native of Toronto. He went to the United States after completing his education at Toronto University, and entered railway service in 1879. Among other positions held during his career was that of General Freight and Passenger Agent Texas Midland Rd.

E. W. Smith, recently appointed Superintendent Dining and Parlor Car Service, G.T.R., Toronto, was born at North Bridge, Mass., April 21, 1869, and entered railway service April, 1886, with the South-Eastern Ry., running between Montreal and Vermont. On the purchase of that line by the C.P.R., he was transferred to the Auditing Dept., C.P.R., where he remained four years, subsequently taking service with the G.T.R. in the Passenger Department, until appointed Inspector Dining Car Dept., G.T.R., in 1902, which position he held to date of present appointment.

Hugh Strain Carmichael, whose appointment as C.P.R. General Passenger Agent for Great Britain and Europe at Liverpool, Eng., was announced in our May issue, was born at Glasgow, Scotland, Mar. 7, 1874, and entered the State Steamship Line's service, Mar., 1889, remaining there after the taking over of that line by the Allan Steamship Line, until Dec., 1895, since when he has been successively: Dec. 13, 1895, to May 20, 1903, C.P.R. Steamship Line, Glasgow; to June, 1903, C.P.R. Steamship Line, Liverpool; July 1, 1905, to Sept., 1907, Passenger Agent, C.P.R., Liverpool; Sept. 15, 1907, to April 1, 1908, acting General Passenger Agent, C.P.R., London, Eng.

Geo. S. MacKinnon, Assistant Master Mechanic, Canadian Northern Ry., Winnipeg, who died May 12, was born at Melbourne, Que., Sept. 16, 1854, and entered railway service 1872, his record being: 1872 to 1878, apprentice and foreman Connecticut and Passumpsic River Ry., now Boston and Maine Rd.; 1878 to 1885, engineer South-Eastern Ry., now part of C.P.R.; 1885 to 1889, locomotive foreman C.P.R., Farnham, Que.; 1889 to 1891, Assistant Master Mechanic C.P.R., Farnham; 1891 to 1894, Master Mechanic C.P.R. lines east of Farnham; 1894 to 1901, Master Mechanic Ontario and Quebec Division C.P.R., Toronto; 1901 to 1904, Master Mechanic Western Division C.P.R., Winnipeg, Man.; 1904 to 1907, locomotive foreman Canadian Northern Ry., Winnipeg; Jan., 1908, to time of his death, Assistant Master Mechanic, Canadian Northern Ry., Winnipeg.

The G.T.R. trainmen, after a session at Toronto lasting three weeks, have completed a new schedule of rates of pay, which the company will be asked to grant. The schedule, it is stated, does not include any considerable increases in wages, but rather a readjustment of old prices and conditions.

It is reported from Ottawa that it has been decided to shortly place large orders for rails for the Transcontinental Ry. with the Dominion Steel Co., Sydney, N.S. From Sault Ste. Marie, Ont., it is reported that the Algoma Steel Co.'s rail mill will shortly resume operations, a number of large orders being in sight.

The G.T.R. Montreal city ticket office has been removed to 140 St. James St., heretofore occupied by the New York Central lines, which have moved their District Passenger Agent and city ticket offices to the room heretofore occupied as G.T.R. city ticket office at 137 St. James St., the two offices being on immediately opposite sides of the street.

TRADE AND SUPPLY NOTES.

The matter which appears under this heading is compiled, in most cases, from information supplied by the manufacturers of, or dealers in, the articles referred to, and in publishing the same we accept no responsibility. At the same time we wish our readers to distinctly understand that we are not paid for the publication of any of this matter, and that we will not consider any proposition to insert reading matter in our columns for pay or its equivalent. Advertising contracts will not be taken with any condition that accepting them will oblige us to publish reading notices. In other words, our reading columns are not for sale, either to advertisers or others.

The Canadian Westinghouse Co. has issued a catalogue of fan equipment, and bulletins descriptive of its generators, motors and meters.

The Railway Material Co.'s New York office has been removed to floor 30, new Singer Building, corner Broadway and Liberty St.

R. W. Hunt & Co., bureau of inspection, tests, etc., have removed their Montreal offices to the Canadian Express Building, McGill St.

The American Brake Shoe and Foundry Co. has removed its New York office from 170 Broadway to the Hudson Terminals, Cortlandt Building.

The Canadian Bridge Co., Ltd., Walkerville, Ont., has been granted supplementary letters patent increasing its capital from \$400,000 to \$1,000,000.

W. H. Rosevear, who went to Winnipeg a short time ago to represent N. J. Holden Co., Ltd., of Montreal, has resigned to go with the Brydges Engineering and Supply Co., Ltd.

The Acme uncoupling device, manufactured by the Acme Railway Equipment Co., Philadelphia, Pa., is being placed on 1,800 cars which are being built for the Intercolonial Ry.

The Consolidated Railway Electric Lighting and Equipment Co. has recently issued bulletins 3 and 5, descriptive of its type D generator and the double equipment for its Axle Light system and fans, for railway, passenger and postal mail cars.

The Hart-Otis Car Co., Ltd., Montreal, has issued pamphlet 10, giving instructions for operating Otis dump cars in general service, and pamphlet 11, giving instructions for operating Hart convertible cars in ballast and construction work. Copies will be mailed by the Hart-Otis Co. to anyone asking for them.

The Hayes Track Appliance Co., Geneva, N.Y., has issued its catalogue 51, which is a very complete illustrated publication regarding derrails, and is of great interest to engineers, maintenance of way men, etc. Plans are given for operating derrails by pipe line from main track switch stand, all of the methods being in use, the plans being taken from the drawings of various railways.

A C.P.R. official wrote the Submarine Signal Co. from Liverpool, Eng., April 4, as follows: "The captain of our Empress of Ireland last month had a very striking example of the usefulness of your bell off Halifax harbor. He had had 1,000 miles thick foggy weather; picked up the bell 12 miles away, and worked his way in without any difficulty, notwithstanding the fact that he was unable to hear the fog signal on Sambro Head."

Robert W. Hunt & Co. have established an analytical chemical laboratory in connection with their St. Louis office, 1445 Syndicate Trust Building. In addition to general analytical work, particular attention will be given to analyses of and advice on iron foundry mixtures. This work and the laboratory will be under the direction of J. B. Emerson, who for several years past had charge of the metallurgical part of the

wheel foundry of the Mt. Vernon Car Co. Previous to that engagement, he was in the Illinois Steel Co.'s employ.

The Ideal Fence Co., Ltd., Winnipeg, which was organized last year to take over the western business of the McGregor-Banwell Fence Co., Ltd., of Walkerville, Ont., has contracted with the Dominion Government for the supply, delivery and erection of 70 miles of fencing for the buffalo park near Hardisty, Alta. This fencing is to be over 7 ft. high and of no. 9 hard steel galvanized wire throughout, and will be the heaviest fence ever built in Canada. The posts are to be 15 ft. long. All material will have to be shipped in and carted an average distance of 25 miles across the prairie. This contract is to be completed in the fall, and when completed, the herd of buffalo now enclosed in the Elk Park reserve north of Edmonton will be transferred to the new park and a large herd of buffalo recently purchased by the Dominion Government in Montana will be moved to the reserve also. This will make the largest herd of buffalo in the world.

Railway Commissioners' Rules.

The Board of Railway Commissioners promulgated the following, April 21: "Rule 1 is rescinded, and the following substituted therefor: 1. Regular sittings of the Board will be held at the Court Room, Ottawa, at 10 a.m. on the first Tuesday of every month, for the hearing of matters, applications, or complaints. (a) In addition to its regular sittings, the Board may appoint special sittings at Ottawa or elsewhere.

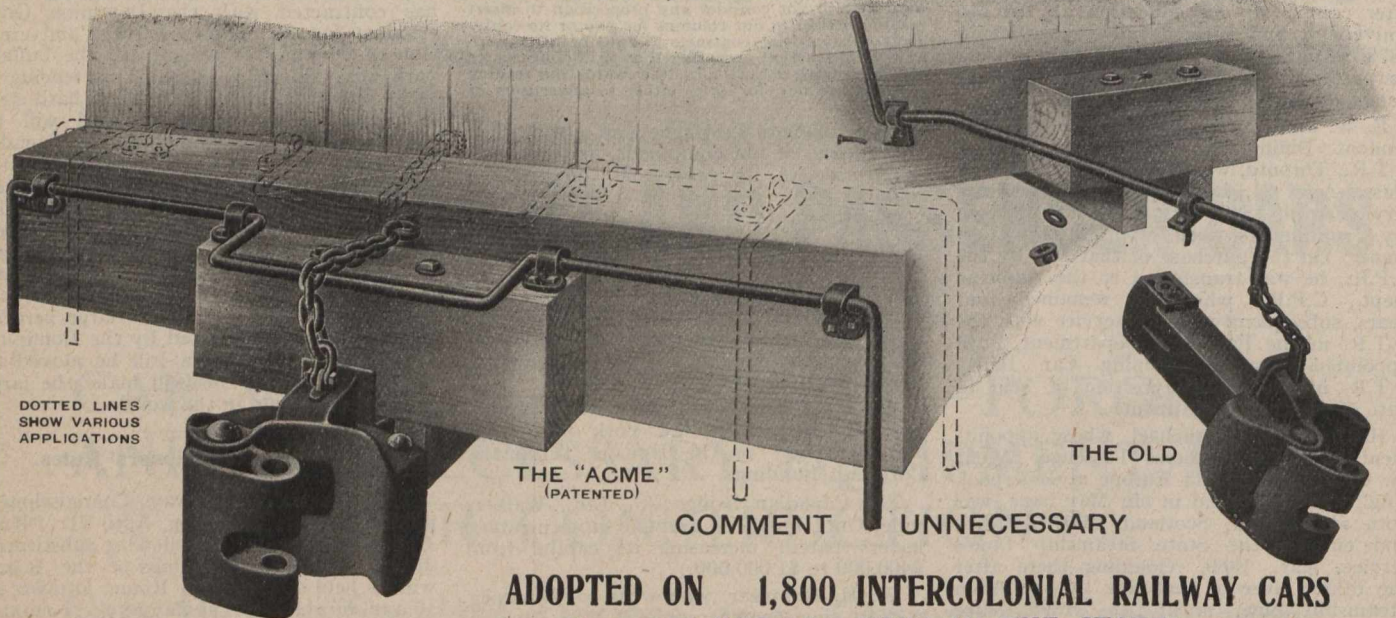
"7. (a) Any party to any matter, application, or complaint pending before the Board, may set the same down for hearing at the next monthly sitting of the Board, upon giving at least ten days', or such shorter notice as the Board may order, to all parties interested. (b) When contested matters, applications or complaints are ready for hearing, and are not at once set down by any party interested, the Secretary shall set the same down for the first sittings commencing after the expiration of ten days (or such shorter notice as the Board may order) from the date of such setting down. (c) When a matter, application, or complaint is set down for hearing by the Secretary, he shall give ten days' notice of hearing (or such shorter time as the Board may order) to all parties interested."

Inspection of Locomotive Tires.

The Secretary of the Board of Railway Commissioners issued the following circular, May 7, to railway companies: "In view of the very frequent breakage of rails on the various railway systems operating in Canada, and the numerous accidents resulting therefrom, the Board's inspectors have made a careful examination of the driving tires of the locomotives used on different railways; and they report that, on the tires of quite a large number of the engines there are skids, or flat spots, three to four inches in length and in some cases even longer. It has not been represented to the Board that these flat spots on the tires have been responsible for the rail breakage referred to; but instances are known where engines with skidded tires have left broken rails behind them, and the Board therefore recommends that railway companies subject to its jurisdiction, adopt some system for a more careful and rigid inspection of tires on locomotives, especially during the winter months, in order to prevent, as far as possible, the running of engines with defects of the kind mentioned. The Board desires your company to give this matter its careful consideration, and to receive such comment as it desires to make in connection therewith."

ACME RAILWAY EQUIPMENT CO.

PHILADELPHIA, PA.



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SHOW VARIOUS
APPLICATIONS

THE "ACME"
(PATENTED)

THE OLD

COMMENT UNNECESSARY

ADOPTED ON 1,800 INTERCOLONIAL RAILWAY CARS
" " 300,000 CARS IN THE STATES

13,927 KILLED AND INJURED COUPLING AND UNCOUPLING
FROM 1903 TO 1906 INC.

INTERSTATE COMMERCE COMMISSION

THREE CANADIAN NORTHERN POINTERS

THE NEXT HOLIDAY

A rare choice of playgrounds newly accessible by Canadian Northern lines:

Muskoka, the Maganetawan; the Superior Divide, the real North West; Lake St. John, the Saguenay, Upper St. Maurice, the Laurentians, from Montreal; the South Shore of Nova Scotia; West Coast of Cape Breton.

BUSINESS AND INDUSTRIES

The best of openings for the best of men are to be found on the 4,100 of Canadian Northern Railway lines.

A Few Suggestions:

New port at Key Harbor, and
New mines at Moose Mountain, Ontario;
New pulpwood areas and waterpowers,
New town at Latuque, and
New country beyond Lake St. John, Quebec;
New mines at Mattawin and Atikokan, with furnaces at Port Arthur;
New railway along the South Shore of Nova Scotia;
The West—Without limit for the landseeker, and all who supply his needs.
Inquiries on these points to the Industries Dept., Head Office, C.N.R. Bldg., Toronto.

FISHERMAN AND HUNTER

There will be a Canadian Northern exhibit from six Provinces at the Sportsmen's Shows at Toronto (March 21-28) and at Montreal (April 4-11).

Four hundred miles in Nova Scotia. Six hundred in Quebec. Two hundred in Eastern Ontario. Three hundred between Lake Superior and Lake of the Woods. All three Prairie Provinces.

For Hunters and Fishermen who cannot attend the Shows there is plenty of information for the asking.

Prospective travellers' inquiries answered by any of the following:

WINNIPEG—G. H. Shaw, Scott Bldg., Main St.; TORONTO—Wm. Phillips Can. Nor. Bldg.; MONTREAL—Guy Tombs, Can. Nor. Que. Offices, St. James St.; QUEBEC—Alex. Hardy, Quebec & Lake St. John Offices; HALIFAX—P. Mooney, 124 Hollis St.

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TIES AND CULVERT STOCK

Quick Shipment.

Low Prices.

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FULLERTON LUMBER & SHINGLE CO., Vancouver, B.C.

Railway Rolling Stock Notes.

The St. Martin's Ry. has added to its rolling stock a first-class combination car, which was purchased second-hand, and remodelled at St. Martin's, N.B.

The G.T. Pacific Ry. has recently placed orders with the Canada Car Co., Montreal, for 28 passenger cars, 6 combination passenger and baggage cars, 6 mail and express cars, and 20 cabooses.

The Temiskaming and Northern Ontario Ry., in addition to the 5 locomotives mentioned in our May issue, has received another from the Canadian Locomotive Co., Kingston, completing the order of six.

The Montreal Locomotive Works during April delivered 19 locomotives to the G.T. Pacific Ry.; 1 locomotive to the Toronto, Hamilton and Buffalo Ry., and 2 contractors' locomotives to M.P. and J. T. Davis.

The Intercolonial Ry., between April 13 and May 13, received the following additions to rolling stock: 5 box cars, 80,000 lbs. capacity, from Rhodes, Curry & Co., Amherst, N.S., and 4 box cars, 60,000 lbs. capacity, from the Crossen Car Mfg. Co., Cobourg, Ont.

The C.P.R. between April 16 and May 13 placed the following orders for rolling stock: 77 box cars, 30 flat cars, 13 stock cars, at its Angus, Montreal, shops; 2 vans, at its Farnham, Que., shops, and 7 Hart-Otis ballast cars with the Dominion Car and Foundry Co., Montreal.

The C.P.R. between April 16 and May 13 received the following additions to rolling stock: 1 Pacific type locomotive, 1 colonist car, 2 mail and express cars, 2 baggage cars, 6 auto-baggage cars, 1 air-brake instruction car, 85 box cars, 43 flat cars, 42 stock cars, from its Angus, Montreal, shops; and 201 Hart-Otis ballast cars from the Dominion Car and Foundry Co., Montreal.

The Dominion Car and Foundry Co., Montreal, during March and April, delivered the following rolling stock: 185 steel underframes for 30-ton box-cars to the Quebec, Montreal and Southern Ry.; 100 steel underframes for 30-ton flat cars, and 40 all-steel 50-ton ore cars, to the Canadian Northern Ry., and 175 Hart convertible ballast cars, 50 tons capacity, built under license from the Hart-Otis Car Co., to the C.P.R.

The Canadian Northern Ry., between April 15 and May 15, received the following additions to rolling stock: 105 box cars for the Quebec and Lake St. John Ry., and 2 first-class coaches from Rhodes, Curry & Co., Amherst, N.S.; 200 Hart convertible cars from the Canada Car Co., Montreal; 2 second-class coaches from the Crossen Car Mfg. Co., Cobourg, Ont., and 5 consolidation locomotives from the Canadian Locomotive Co., Kingston, Ont.

The Intercolonial Ry. has recently received the following additions to rolling stock: 84 box cars, 60,000 lbs. capacity, from the Crossen Car Mfg. Co., Cobourg, Ont.; 10 refrigerator cars, 60,000 lbs. capacity; 43 box cars, 80,000 lbs. capacity; 31 flat cars, 80,000 lbs. capacity, from Rhodes, Curry & Co., Amherst, N.S.; one consolidation locomotive from the Canadian Locomotive Co., Kingston, Ont., and 10 Pacific type locomotives from the Montreal Locomotive Works.

The Canadian Northern Ry. has ordered ten 30-ton refrigerator cars from the Crossen Car Mfg. Co., Cobourg, Ont.

Following are the chief particulars:
 Length, inside.....29 ft. 6 ins.
 Length, over end sills.....36ft. 9 3/4 in.
 Width, inside.....8 ft. 3 3/4 ins.
 Width, over side sills.....9 ft. 0 3/4 ins.
 Height, inside.....7 ft. 8 1/4 ins.
 Body and truck bolsters.....Simplex
 Roller side bearings.....Susemihl
 Brake beams.....Simplex
 Steel couplers.....Latrobe
 Air brakes.....Westinghouse

The two G.T.R. mail cars recently built by the company at its Point St. Charles shops, which have been placed on the Montreal-Toronto route, are 60 ft. long inside measurement, the internal fittings being in accord with the plans of the railway mail service. The cars are painted in G.T.R. standard colors, with the Canadian arms on either side. They have 6-wheeled trucks, with 38 ins. steel-tired wheels, with cast iron centres, and are equipped with Westinghouse air brakes and air signal, automatic coupler buffing device, and straight steam heating apparatus.

The G.T.R. has had a number of high side steel hopper gondola cars built in the United States, one order being for 500 and the other for 1,000. Following are the general dimensions: Length over end sills, 31' 6"; length of body inside, 30' 1/4"; width of body inside, 9' 6"; width over side stakes, 10' 1 1/2"; height from rail to top of body, 10'; length of drop doors in clear, 2' 4 1/2"; width of drop doors in clear-top, 3' 4 1/2"; width of drop doors in clear-bottom, 3' 7/8"; distance from centre to centre of trucks, 21' 9"; size of journals, 5 1/2 x 10"; light weight of car, 37,400 lbs.; cubic contents or volume, 1,918 cu. ft. Special equipment: Westinghouse air brakes, Climax couplers, twin spring draft gear, arch-bar trucks with pressed steel bathtub type of truck bolsters, and pressed steel brake beams.

C.P.R. STANDARD SPECIFICATIONS.

Following are standard specifications of C.P.R. passenger and freight cars, which do not change for the different types of cars. In future in giving particulars of C.P.R. equipment orders these specifications will not be repeated, but if any particular cars differ from the standards the fact will be mentioned:

PASSENGER CARS.

Body and underframe.....Wood
 Axles.....5 x 9 in., M.C.B.
 Bolsters.....Double
 Brake beams.....Simplex trussed with adjustable head, high speed.
 Brakes.....Westinghouse air, high speed
 Brasses.....5 x 9 in., M.C.B.
 Couplers.....Tower passenger
 Heating system.....Gold with frumveller heater
 Journal boxes.....McCord malleable with steel inserts
 Lighted by.....Pintsch gas
 Roofs.....Standard passenger covered with canvas
 Wheels.....36 1/4 in., steel tyred

FREIGHT CARS.

Body and truck bolsters, and brake beams.....Simplex
 Brakes.....Westinghouse air
 Centre bearings.....1 of malleable and 1 of steel
 Couplers.....Tower with solid steel knuckles
 Journal bearings.....M.C.B.
 Journal boxes.....McCord
 Side bearings.....Susemihl
 Springs.....C.P.R. standard
 Trucks.....All steel diamond pattern Barber roller, Simplex
 Wheels.....33 in. cast iron

C.P.R. ROLLING STOCK UNDER CONSTRUCTION.

The rolling stock ordered by the C.P.R., as stated in our last issue, is of standard dimensions, with the following exceptions or additions:

Business car for Superintendent at Saskatoon, Sask., building at Angus shops; length, outside knuckles, 42' 2", over frame, 35'; total wheel base, 28' 10", truck centres, 24', width, 8', 11", over frame. The layout comprises an observation room at back of car with table, desk and sofa, a bedroom, toilet room, a pull-out sofa with berth above for attendant; a kitchen, lockers, etc., with cellar under car.

Mail and express car, 1, building at Angus shops; length, 60', 0" x 9' 10 1/2" over frame. Platforms, none, steel I beams to carry draft rigging, etc.; springs, 38" quadruple elliptic; trucks, 4 wheel 5 x 9" journals; vestibules, none.

Baggage car, 1, building at Angus shops; length 60' 0" x 9' 10 1/2" over frame. Capacity, 20 tons of freight; platforms, none, steel I beams to carry draft rigging, etc.; springs, 38" quadruple elliptic; trucks, 4 wheel 5 x 9" journals; vestibules, none.

Refrigerator cars, freight, 48, building at Angus shops; length, 41' x 9' 1 5/8" over frame. Capacity, 30 tons of freight; length inside in clear between ice boxes, 34' 6"; width inside, 8' 3 3/8"; height from top of slats to ceiling, 7' 6 1/2"; height from top of slats to meat racks, 6' 11"; body and underframe, wood; axles, 5 x 9", M.C.B.; doors, refrigerator type with insulation. Regarding the passenger refrigerator which is to be built, will be exactly the same as the freight refrigerators as regards general dimensions, etc. The capacity for the passenger refrigerator is 20 tons; 34" steel-tired wheels are used and steam pipe and air signal pipe are placed under the car so that it can be run in passenger trains.

Box cars, 127, building at Angus shops; length, 36' 8" x 9' 0 5/8" over frame. Capacity, 30 tons; length inside, 36' 0"; width inside, 8' 6"; height inside, 8' 0"; body and underframe, wood; axles, 4 1/4 x 8"; doors, security; paint, C.P.R. standard mineral brown.

Hart-Otis ballast cars, 2, being built by Dominion Car and Foundry Co., Montreal; length, 37' 3" x 8' 10" wide over frame. Capacity, 50 tons; length inside as gondola, 35' 3"; length inside as hopper, 21' 6"; width inside, 8' 8"; height inside, 4' 2 1/2"; length between sills, 36' 10"; length over sills, 37' 3"; width over sills, 8' 10"; body and underframe are of steel construction with wooden floor and doors; axles, 5 1/2 x 10", M.C.B.

Stock cars, 13, building at Angus shops; length, 36' 8" x 9' 5" over frame. Capacity, 30 tons; length inside, 36' 0"; width inside, 8' 9 3/4"; height inside, 7' 1 1/4"; body and underframe, wood; axles, 4 1/4 x 8", M.C.B.; paint, C.P.R. standard mineral brown; roofs, double board.

Flat cars, 48, building at Angus shops; length, 36' 8" x 8' 10" over frame. Capacity, 30 tons; body and underframe, wood; axles, 4 1/4 x 8", M.C.B.; paint, C.P.R. standard mineral brown.

Vans, 18, building at Farnham shops; body and underframe, wood; axles, 4 1/4 x 8", M.C.B.; bolsters, none; brake shoes, unflanged steel back diamond "S"; brasses, 4 1/4 x 8", M.C.B.; couplers, Tower; heated by stove; roof, canvas; trucks, none, pedestals are attached to underframe of car; wheels, 33" cast iron. All sills are carried out to buffer beam and form the timbers for supporting the platform, steps at each corner of car being provided after the style of box car steps.

Canadian Railway Club.

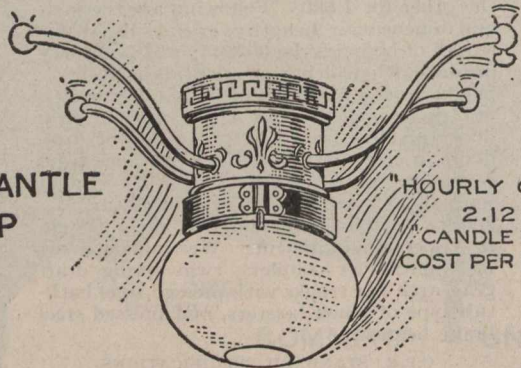
At the annual meeting in Montreal, May 5, the reports showed the Club to be in a flourishing condition. During the year 136 new members were admitted, making the total membership 682. The following officers were elected: President, L. R. Johnson; First Vice-President, H. H. Vaughan; Second Vice-President, A. A. Maver; Executive Committee, J. H. Callahan, J. Coleman, A. A. Goodchild, T. McHattie, A. W. Wheatley and W. N. Dietrich; Secretary, James Powell; Treasurer, S. S. Underwood.

During the evening the past presidents were presented with valuable tokens in appreciation of their services, the following being recipients: E. A. Williams, President 1902-1903; T. McHattie, 1904; S. King, 1905-1906; W. E. Fowler, 1906-1907; W. D. Robb, 1907-1908; After the business was concluded, refreshments were provided and a very enjoyable concert was held.

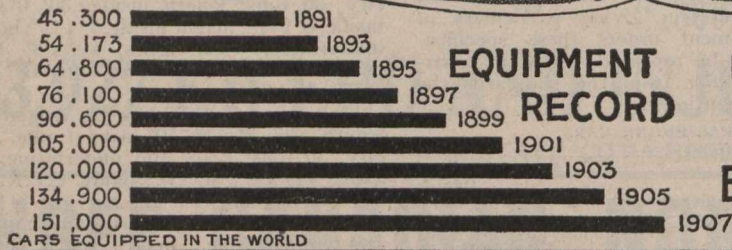
The employees of the Port Hood-Richmond Ry. Coal Co., Port Hood, N.S., have applied to the Dominion Department of Labor, for the appointment of a board of arbitration in connection with the application for an increase of wages.

PINTSCH LIGHT

LATEST MANTLE LAMP



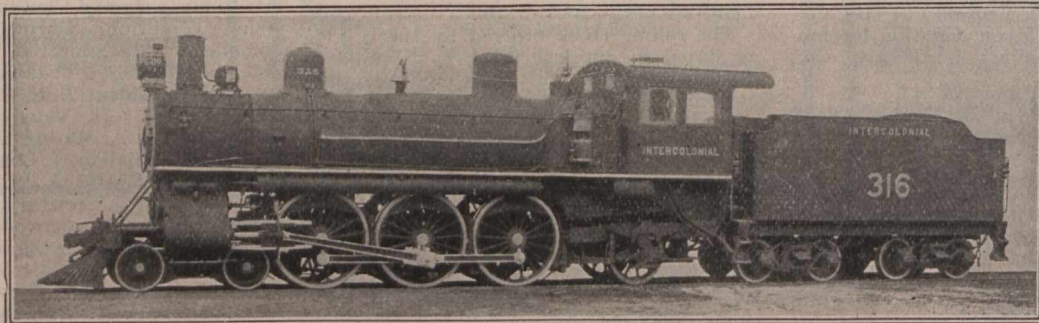
"HOURLY CONSUMPTION
2.12 CUBIC FEET"
"CANDLE POWER 99.5"
COST PER HOUR, ONE CENT.



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UNEQUALED SAFETY,
ECONOMY, RELIABILITY,
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CANADIAN LOCOMOTIVE Co. LTD.,
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Builders of Simple
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LOCOMOTIVES

Adapted to every
variety of service.

National Transcontinental Railway.

The tabular statement appearing in the official report of the speech of the Minister of Railways, referred to in our last issue, shows the total length of the Eastern Division from Moncton, N.B., to the west bank of the Red River, at Winnipeg, to be 1,804.66 miles. The sections not under contract are given as: Mileage 656.07 to 877.75, near Weymontachene, to near Harricanaw River, 221.68 miles; mileage 1,127.75 to 1,171.85, one hundred miles west of junction with Temiskaming and Northern Ontario Ry., to west end of district D, 44.10 miles; mileage 1,409.35 to 1,429.76, from 19½ miles west of Mud River to west end of district E, 20.41 miles; mileage 1,429.76 to 1,557.80, from westward district E to Lake Superior Junction, 128.04 miles. The estimated cost of these sections is \$19,030,173.

A report from Montreal May 4 says as a result of an interview between the Premier of Canada, the Premier of Quebec and C. M. Hays, President G.T.P.R., on the previous day, it is expected that the portion of the Transcontinental Railway to run through the Province of Quebec would take a more southerly route than that on which construction is now in progress. Officials of the G.T.P. Ry. at Montreal refused to discuss the matter, but reports from Quebec and Ottawa state there is nothing in the report, the dispatch from Ottawa stating that no change of plans or location of the line is under consideration.

A press report May 8 said: "It is estimated that the building of the N.T.R. through New Brunswick will involve a total expenditure of close on \$15,000,000 between now and 1911 in that Province." On April 13 the Minister of Railways presented a tabular statement in the House of Commons showing the mileage under contract, with the estimated cost of each section. This shows the total mileage from Moncton to the New Brunswick-Quebec boundary to be 256.68 miles, and the estimate upon which the contracts were let amounts to less than \$7,000,000, distributed as follows:

	Miles.	Estimate.
Moncton to Chipman.....	50.00	\$ 989,895.90
Chipman easterly.....	8.55	289,190.62
Chipman westerly.....	39.05	967,434.95
Intercolonial crossing west..	66.40	1,898,124.21
Mileage 164 to Grand Falls..	31.80	1,646,253.65
Grand Falls to boundary....	60.88	1,385,941.09
	256.68	\$6,976,840.42

A sub-contract is reported to have been let to Powers and Brewer, Woodstock, N.B., for the bridgework on the section from mileage 164 to Grand Falls, 31.80 miles, the general contractor for which is the Willard Kitchen Co., Grand Falls, N.B. Sub-contracts for grading have been let as follows: Jas. Kelly, four miles; Cook Kitchen, four miles; Wesley Kitchen, four miles; — Phillips, P.E.I., one mile; P. Pagano, Montreal, three miles.

Sub-contracts are reported let to W. C. Chambers, Harriston, Ont., and to — McQuigge, Kenora, Ont., for sections on the line north of Lake Nepigon.

The Dominion Government has decided to meet the request of the New Brunswick Government that the Commissioners of the Transcontinental Railway take over the expense of protecting from fire the forests of the Province along the route of the railway.

Owing to the high water in the St. Maurice River, about two miles of the line under construction near La Tuque, Que., is submerged, and it is feared that several miles of the line will be washed out.

The location of the Transcontinental Ry., says the engineer of the Ontario Department of Public Works in his annual report for 1907, has been completed across the Province, a distance of 758.47 miles, under the direction of the Commissioners of the

Transcontinental Ry. From the Manitoba boundary eastward 157.80 miles are under construction. The total approximate number of miles graded from the Manitoba-Ontario boundary to English River, in detached sections, is 84 miles. From the Quebec boundary westward 71.75 were under construction.

GRAND TRUNK PACIFIC RY.

The tabular statement appearing in the official report of the speech of the Minister of Railways, referred to in our last issue, gives the location of the several contracts on the main line of the G.T. Pacific Ry., between Winnipeg, Man., and Prince Rupert, B.C., with the names of the contractors and the dates when the contracts were entered into, and when the work should be finished. The work to be done under these contracts included grading the roadbed and building small culverts and bridges.

Date of Contract	Name of Contractor	Location of Work	Date set for Completion
June 22, 1907....	Treat & Johnson, Winnipeg, Man.	Winnipeg to Portage la Prairie, 54 miles	Nov. 1, 1907
Aug. 28, 1905....	McDonald & McMillan, Winnipeg..	Portage la Prairie to Touchwood Hills, 275 miles.	Completed.
Feb. 20, 1906....	Canadian White Co., Montreal....	W. line Sec. 6, Tp. 27, R. 13, W. 2nd Mer., to W. line Sec. 24, Tp. 36, R. C. W. 3rd Mer., 140 miles.	Completed
Feb. 20, 1906....	Foley Bros., Larsen & Co., Battleford.....	W. line Sec. 24, Tp. 36, R. 6 W. 3rd Mer., to a point near Edmonton, Alta. 316 miles.	Nov. 1, 1906.
Jan. 4, 1908.....	Foley, Welch & Stewart, Kenora..	East line of Sec. 13, Tp. 53, R. 24 W. 4th Mer., to east bank of Wolf Creek, 129 miles.	Nov. 30, 1908.
Mar. 19, 1908....	Foley, Welch & Stewart, Kenora..	Prince Rupert to Copper River, 100 miles.	Aug. 31, 1909.

The Department, said Hon. G. P. Graham, has been advised that contracts have been awarded for the following works, but no details were given: Concrete piers, pedestals and abutments of steel bridges; steel superstructures of large bridges; station buildings, engine houses and machine shops; water services; steel rails and fastenings, frogs, diamond crossings, etc.; ties, fence posts, telegraph posts.

In making a statement as to the position of construction April 30, Collingwood Schriber, Consulting Engineer to the Department of Railways, said with the exception of about 500 miles of the mountain section, the whole of the line being constructed by the G.T. Pacific Ry. was under contract. The whole of the prairie section, from Winnipeg to the foot of the Rocky Mountains, about 100 miles west of Edmonton, was expected to be open for traffic in the fall. Rails were laid from within 30 miles of Winnipeg to Battle River, and from Battle River west to Edmonton much of the grading was completed. The delay in the work of completing the tracklaying into Edmonton was due to the loss of time in the construction of the bridge over the Battle River.

Tenders for the supply of 600,000 ties for delivery at points west of Edmonton are reported let, and arrangements are being made to secure a sufficient supply of ties to carry the line as far as the Yellowhead Pass.

The British Columbia Government has granted registration to the G.T. Pacific Ry. townsite at Prince Rupert, despite the fact that the name had been appropriated by a land speculator. Sub-contracts are reported to have been let by Foley, Welch and Stewart for grading on the line easterly from Prince Rupert to Ross and Caulson, Kenora, Ont.; J. E. Bostrom, H. and A. McClure, and the Burd Contracting Co. of Bellingham, Wash., and F. Antonelli.

G.T. PACIFIC BRANCH LINES.—At a session of the Board of Railway Commissioners in Ottawa, May 5, D. McNicoll, Vice-President C.P.R., objected to the G.T. Pacific Ry. plans for lines in Fort William, Ont., on the ground that they would seriously interfere with the construction by the C.P.R. of enlarged terminals. The C.P.R. favored the construction of joint terminals

for the two companies, it being understood that the Canadian Northern Ry. could join in. The C.P.R. would consider the giving of running rights over the C.P.R. through Fort William to a diamond crossing with the Canadian Northern Ry. at Port Arthur, on the wheelage basis. The Chief Commissioner told the companies to reach an agreement on this basis, otherwise the Board would make an order.

When the G.T. Pacific Ry. bill for an extension of time for the construction of the branch lines, which it is authorized to construct as the G.T. Pacific Branch Lines Co., came before the House of Commons in committee of the whole, May 8, T. H. Lennox moved the insertion of an amendment with respect to taking over of the lines by the Government. The amendment provides that if the price of the branches cannot be agreed upon it shall be deter-

mined by the Board of Railway Commissioners, either side having permission to appeal to the Supreme Court, but the Government before it can exercise its option to purchase must have a resolution of Parliament authorizing it to do so. The debate was adjourned.

The Engineer of the Ontario Department of Public Works, in his report for 1907, says the G.T. Pacific Ry. has located a branch line from North Bay to a junction with the main line of the Eastern Division of the G.T.P. Ry. (National Transcontinental Ry.), a distance of 225 miles. The construction of a line known as the Lake Superior Branch, from Fort William, Ont., to a junction with the main line of the Eastern Division, at a point known as Superior Junction, a distance of 202.8 miles, which has been finally located, has been in progress for the last two years. About 70% of the grading and bridging is completed, and 115 miles of track laid from Fort William westerly. It is expected that the entire branch will be completed during the current season. The company has located an extension of this branch through Fort William to Port Arthur and thence easterly to Bare Point.

An item has been going the rounds of the daily press to the effect that a shipment of about 2,500 tons of steel rails had been delivered at Vancouver, B.C., by the Holt Blue Funnel Line, for the G.T. Pacific Ry.; that this shipment, the place of origin of which was given as Pittsburg, Pa., was sent to British Columbia, via New York, thence by the Atlantic route, through the Suez canal, to Kobe, Japan, and from there across the Pacific. We are officially advised that the item is entirely incorrect, and that no rails have been bought for the Pacific coast end of the line.

GRAND TRUNK PACIFIC TOWNSITES.—G. N. Riley, Land Commissioner G.T.P. Ry., in an interview at Winnipeg, May 4, said the company had then 80 townsites on the market, including five divisional points. Only one townsite had been surveyed west of Edmonton, viz., adjoining the Canadian Northern Ry. at Stoney Plains. In laying out these future towns and cities a great deal of care has been taken to have them regular. With three exceptions, all the

BALDWIN LOCOMOTIVE WORKS

The following locomotives are in stock and available for immediate delivery:—

FOR PASSENGER SERVICE:

One American type with cylinders 18" x 24", standard gauge.

FOR LOGGING SERVICE:

Two six-coupled double ender locomotives with cylinders 15" x 20", standard gauge.

FOR SWITCHING SERVICE:

One four-coupled locomotive with cylinders 18" x 24", standard gauge.

One six-coupled locomotive with cylinders 18" x 24", standard gauge.

Two six-coupled locomotives with cylinders 21" x 28", standard gauge.

FOR FREIGHT SERVICE:

One ten-wheeled type with cylinders 18" x 26", standard gauge.

One ten-wheeled type with cylinders 18" x 24", standard gauge.

One consolidation type with cylinders 28" x 32", standard gauge.

Three consolidation type with cylinders 20" x 24", standard gauge.

One consolidation type with cylinders 19" x 24", standard gauge.

FOR SWITCHING AND CONTRACTORS' SERVICE:

Ten tank locomotives with cylinders 10" x 16", three feet gauge.

One six-coupled double ender locomotive with cylinders 17" x 20", three feet gauge.

Full particulars and specifications of any of the above locomotives will be furnished on application.

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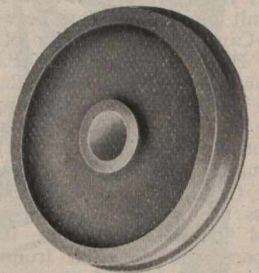
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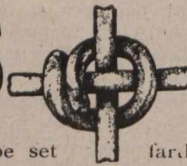
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townsites are on the north side of the railway. Main streets run at right angles to the railway and directly north from the depot. The next parallel street to the east is King St., and then Dominion St. To the west is Queen St., and then the name of the Province in which the town lies. Parallel with the railway line are avenues numbered. All the lots are rectangular blocks, and consequently there will be no flat-iron buildings in future. Parallel with the railway and adjoining the depot right-of-way, a long strip of land 100 ft. wide has been reserved by the G.T.P. at each town for the purpose of planting trees and shrubs and beautifying the town. The company will impose building restrictions in all towns. Along Main St. and on the avenues close to the depot on a given area, no buildings will be allowed to cost less than \$1,000. No blocks with shops, livery stables, or other noisy and disagreeable business will be allowed near the depot. They will be segregated in one block at a convenient place in the town. (May, pg. 347.)

The Commissioners are receiving tenders for the construction of steel superstructures and floor system (with ties and rail guards complete) for bridges at the following points: Mileage 21.7, Canaan River; mileage 57, Salmon River; mileage 184, Little Salmon River viaduct; mileage 197, Four Mile Brook; mileage 207.8, Grand River; mileage, 209.8, Sigas River; mileage 213.8, Quisbis River; mileage 220.9, Green River; mileage 227.8, Iroquois River; mileage 230.2, Madawaska River; mileage 243.8, Baker Brook.

Michigan Central Railroad Report.

The directors' report for the year ended Dec. 31, 1907, covers the operation of the following mileage: Main line, 270.07 miles; proprietary lines, 345.05 miles; leased lines, 1,117.34 miles; lines operated under trackage rights, 14 miles; total, 1,746.46 miles. Of these lines 380.04 miles are in Canada, comprising the Canada Southern Ry., 226.18 miles, and branch lines 153.86 miles. The total cost of road and equipment to Dec. 31, 1907, was \$35,213,257.09, representing for the 270.07 miles owned, \$130,386 per mile; the Joliet and Northern Indiana Rd. construction account was increased \$791,000. The gross earnings were \$28,547,109.94, an increase of \$2,271,521.81 over the previous year. The freight earnings were \$19,926,803.28, an increase of \$1,276,573.72, due to a generally increased movement of all commodities. The passenger earnings were \$6,541,102.67, an increase of \$612,228.65, due to a general increase of local and interline business. The express earnings were \$1,241,632.68, an increase of \$340,217.68. The expenses of operation were \$23,131,750.65, an increase of \$1,401,486.66, largely due to the higher cost of material and increases in wages. Maintenance of way and structures showed an increase of \$1,502,734.11; maintenance of equipment a decrease of \$1,472,301.22; and conducting transportation, an increase of \$1,362,266.28. The net earnings were \$5,415,359.29, an increase of \$870,035.15 over those of the previous year. Other income was \$702,518.99, against \$402,003.85 in 1906, the increase of \$300,515.14 being due to increased revenue from securities and interest on advances. The first charges totalled \$4,388,512.80, an increase of \$429,012.33, caused chiefly by interest on additional bonds issued and interest on loans. Of the balance available for dividend, \$1,729,365.48, cash dividends of 8%, against 5% for the previous year, were paid, absorbing \$1,499,040.00, leaving a surplus of \$230,325.48; of which \$112,160.03 was debited to profit and loss in adjustment of sundry accounts; the balance of \$118,165.45, together with \$9,012,961.89 credit balance at Dec. 31, 1906, making a balance for Dec. 31, 1907, of \$9,131,127.34.

A Railway to Hudson Bay.

According to a recent Ottawa despatch the Government has practically decided to submit a bill at the current session of the Dominion Parliament providing for the construction of a railway to Fort Churchill, on Hudson Bay. This question has been before Parliament in one shape or another since 1880, and during the present session has been discussed on more than one occasion.

Replying to a question in the House of Commons Mar. 30, the Minister of the Interior said several suggestions had been brought to the attention of the Government for the construction of a railway to Hudson Bay, but no definite proposition had been made. The act of Parliament authorizing a land grant for the construction of such a railway was still in force. This subsidy was granted by sec. 7 of the Dominion Lands Act, 1884, and is a standing grant of 12,800 acres of land per mile of a railway from Winnipeg to Hudson Bay.

A discussion was raised in the House of Commons, April 7, by W. E. Knowles, M.P. for West Assiniboia, upon the question, by moving a resolution to the motion to go into supply that the Government should take into consideration the transportation needs of the great west, especially in regard to the immediate construction of the Hudson Bay Ry. The completion of such a line to Fort Churchill would only mean the construction of about 475 miles of railway over a route that was particularly adapted to construction. Fort Churchill was reported to be one of the finest harbors in the world, was open for nine months of the year, and could with icebreakers be kept open the year round. At present Hudson Straits could be made safely navigable for four months in the year and perhaps longer. The Canadian Northern Ry. had already constructed a line to the Pas Mission, on the Saskatchewan River, and had practically the whole of the territory from that point to Fort Churchill under survey. The Minister of the Interior stated that the matter was under the consideration of the Government, and it was expected that a definite statement of policy would be made before the close of the session.

From the information in the possession of the Government it is estimated that the line will cost about \$30,000,000. The construction will not be heavy, as the prairie country stretches to within 120 miles of Fort Churchill. From this point until the Bay is reached, the proposed route will follow the Churchill River pretty closely, and considerable earth cuttings will be necessary. W. Mackenzie, President Canadian Northern Ry., is reported to have submitted an offer to the Government, and it is said that during his present visit to England he will consult as to the financing of the construction of the line. The project involves the subsidizing of a line of steamers from Fort Churchill to Liverpool, Eng.

The details of the measure are being worked out, but it is understood that it will be along the lines suggested in the House last session by the Premier, and further explained by Hon. C. Sifton in March. The suggestion of the ex-Minister of the Interior is to fund the proceeds from the sale of an area of about 3,000,000 acres of Dominion lands on even-numbered sections in the West hitherto set apart as railway reservation lands for the C.P.R. and Canadian Northern Ry. These even-numbered sections or railway grant lands in the west, aggregating some 30,000,000 acres, will shortly be released for homesteading. It is estimated that in a few years the proceeds from, say, 3,000,000 acres of these lands reserved by the Crown for sale would realize \$30,000,000, a sum sufficient to pay the cost of the construction of the road to Hudson Bay by the

Government, the building of elevators at Fort Churchill, improvements to the harbor, and any necessary buoying and lighting of the channel for steamers in the bay and straits.

Recent Provincial Legislation.

At the recent session of provincial legislatures the following acts affecting transportation interests were passed:

NOVA SCOTIA.

Acadia Coal Co.—Amending the company's act of incorporation.

Annapolis Valley Ry.—Amending the original act of incorporation.

Arisaig and Country Harbor Iron and Ry. Co.—Amending the act of 1906 incorporating the company.

Bedford Electric Co.—Consolidating and amending the acts passed with respect to the company.

Cape Breton Coal, Iron and Ry. Co.—Amending the acts passed respecting the company.

Dartmouth Ferry.—Amending the act of 1890 with respect to the ferry.

Dartmouth Tram and Power Co.—Reviving and amending the act of 1890, incorporating the company.

Halifax and Southwestern Ry.—Respecting right-of-way of the railway and certain damages therefor.

Intercolonial Coal Mining Co.—Amending the company's act of incorporation.

Inverness.—Amending the act with respect to the provision of aid for the construction of a railway in the county of Inverness.

Liverpool.—To enable the town of Liverpool to borrow money to pay railway land damages.

Mabou Coal Co.—To incorporate the Mabou Coal Co.

North Mountain Ry.—Amending chap. 130 of the acts of 1902 incorporating this company. A second act respecting the N.M.R. Co. was also passed.

Yarmouth Street Ry.—To amend the act consolidating the acts relating to the company.

QUEBEC.

Ha! Ha! Bay Ry.—Act of incorporation.

L'Avenir and Melbourne Ry.—Act of incorporation.

Magdalen River Valley Ry.—Authorizing change in location of terminals, etc.

Quebec Electric Co.—Amending the act incorporating La Compagnie de Pouvoir Electrique, Quebec.

Railway subsidies.—Respecting subsidies to certain railways.

Sherbrooke.—Amending the charter of the city.

Montreal Street Ry.—Amending the acts relating to the company.

The question of freight rate rebates and shipments from flag stations is being considered by a number of Ontario boards of trade. The matter, it is stated, has been brought before the notice of the Board of Railway Commissioners, with the result that a representation has been made that the boards of trade should offer suggestions as to new regulations, shipping bills, etc.

During March, 26 employes were killed and 23 were injured in railway and railway construction service. Of the fatalities, 14 were due to dynamite explosions, 4 to being run over, 3 to being caught between cars, 3 to being struck by trains, and 2 to falling materials. Of the non-fatal accidents, 5 were caused by derailments, 4 each by dynamite explosions and by collisions, 3 by falls, 2 each by being caught between cars, by being struck by cars, and by falling materials, and one by machinery.

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The question of the reclamation of Ash-bridge's Bay has been under consideration by the Toronto City Council for several years, and a good many plans have been prepared and proposals made upon the subject. The latest plan has been submitted by J. Osborne, General Superintendent Ontario Division, C.P.R. The Corporation Commissioner of Industries recommends that the council acquire the whole waterfront along the north shore of the bay, and that the bay itself be used for commercial navigation.

A petition for a winding up order has been granted in the case of McRae, Chandler and McNeil, Ltd., contractors on the Temiskaming and Northern Ontario Ry.

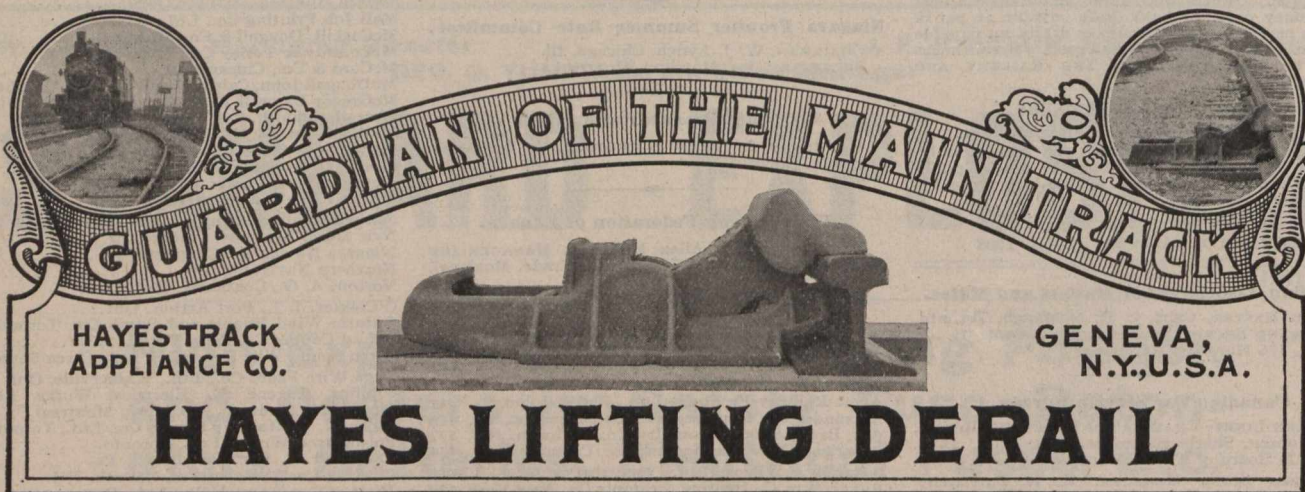
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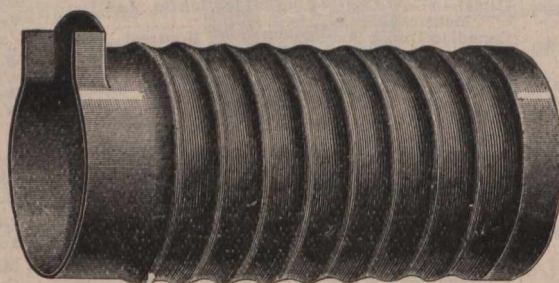
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TRANSPORTATION APPOINTMENTS.

The information under this head, which is almost entirely gathered from official sources, is compiled with the greatest care, so as to ensure absolute accuracy. Any of our readers who may notice any error in our announcements will confer a favor by advising us.

Canadian Northern Express and Telegraph Cos.—D. B. Hanna, Third Vice-President, has issued a circular announcing that Scott Griffin, heretofore Superintendent at Winnipeg, has been appointed manager of these companies with headquarters at Toronto. All communications respecting tariffs, classifications, conference committee and Express Traffic Association bulletins and matters of a general nature pertaining to the Manager's office should be sent to him at Toronto.

Canadian Northern Quebec Ry.—R. M. Gauthier, heretofore storekeeper C.N.Q. Ry. at Shawinigan Junction, has been appointed storekeeper Quebec and Lake St. John Ry., succeeding A. Hardy, resigned. His new jurisdiction extends over both the C.N.Q.R. and the Q. & L. St. J.R. Office, Quebec.

T. C. Hudson, heretofore Master Mechanic C.N.Q.R., Shawinigan Falls, Que., has also been appointed Master Mechanic Quebec and Lake St. John Ry., succeeding J. Clark. All employes of the mechanical and car departments will report to Mr. Hudson. Office, Quebec.

Canadian Pacific Ry.—The office of W. B. Bulling, Assistant Freight Traffic Manager, has been transferred from Toronto to Montreal. For some months past Mr. Bulling has spent most of his time in Montreal.

H. P. Timmerman, General Superintendent Eastern Division, having returned to duty after leave of absence, C. Murphy, who was acting in his stead, is now acting General Superintendent of the Ontario Division during J. Osborne's absence in Europe.

W. G. Annable, General Baggage Agent, issued the following circular May 1: J. O. Apps, Montreal, is Assistant General Baggage Agent, and in charge of Baggage Department, Atlantic, Eastern, Ontario and Lake Superior Divisions and Upper Lake Steamship Service. He will report to the General Baggage Agent, Montreal. J. Sparks, Winnipeg, is Assistant General Baggage Agent, in charge of Baggage Department, Central and Western Divisions. He will report to the General Baggage Agent, Montreal. E. V. Dangerfield, Calgary, is District Baggage Agent, in charge of Baggage Department, Western Division, reporting to Assistant General Baggage Agent, Winnipeg. F. E. Quinn, Vancouver, is Assistant General Baggage Agent in charge of Baggage Department, Pacific Division, the British Columbia Coast, Lake and River Service, and the Pacific Service. He will report to General Baggage Agent, Montreal.

J. H. Boyle, heretofore Trainmaster district 3, Eastern Division, Montreal, has been appointed Assistant Superintendent district 3, with office at Quebec, succeeding E. Reynolds, who has resumed service as a passenger conductor.

R. W. Bishop, Assistant Engineer, Smith's Falls, Ont., has resigned to go into general contracting. It is not the intention to fill the position for the present at least.

R. C. Montgomery has been appointed roadmaster at Smith's Falls, Ont., vice J. Drinkwater.

F. L. Crawford, relieving agent, is acting as agent at Galt, Ont., pending the appointment of a successor to W. C. Whittaker, transferred to London, Ont.

Wm. C. Whittaker, heretofore agent at Galt, Ont., has been appointed agent at London, Ont., succeeding Jas. Houston, who has been granted two months' leave of absence. On Mr. Houston's returning to duty he will be assigned another place in the company's service.

W. P. F. Cummings, General Steamship Agent C.P.R. Passenger Department, Winnipeg, is reported to have resigned owing to ill-health, and to have been succeeded by H. M. Tait, heretofore his assistant.

Pending the opening of the section of the line into Saskatoon, Sask., June 15, C. S. Maharg, who has been appointed Superintendent of the new district of the Central Division, with office there, is in charge of the operation of construction traffic. The boundaries of the new district are not definitely fixed, and until then the full staff of officials will not be appointed. The Superintendent's present staff comprises: Trainmaster, W. M. Ansley; Bridge and Building Master, A. H. Bears, heretofore Bridge and Building Master, Winnipeg, Man.; Roadmaster, J. Canty, heretofore Roadmaster, Brandon.

R. A. Bainbridge, heretofore acting as assistant to C. E. Cartwright, Divisional Engineer, C.P.R., Vancouver, B.C., is reported to have been appointed Divisional Engineer of Construction and Maintenance, Esquimalt and Nanaimo Ry., with office at Victoria, B.C.

When F. W. Flanagan, General Passenger Agent for Great Britain and Europe, was compelled last Sept. to resign, owing to failing eyesight, after 25 years' conscientious attention to the duties of the department, H. S. Carmichael was appointed acting General Passenger Agent with office at 62 Charing Cross, London, Eng. Mr. Carmichael has now been appointed General Passenger Agent, with office at 24 James St., Liverpool, Eng., as stated in our last issue.

J. Murray Gibbon has been appointed Advertising Agent. Office, 62 Charing Cross, London, Eng.

Grand Trunk Pacific Ry.—W. A. Gallier, M.P. for Kootenay, B.C., is reported to have been offered the position of Western Solicitor and Legislative Agent G.T.P.R.

Jno. Leitch, son of Jas. Leitch, Chairman Ontario Ry. and Municipal Board, and heretofore engaged on C.P.R. second-track work between Fort William and Winnipeg, is reported to have been appointed an assistant divisional engineer on the G.T.P.R. Rocky Mountain section.

Grand Trunk Ry.—E. W. Smith, heretofore Assistant Superintendent Dining and Parlor Car Service, Montreal, has been appointed Superintendent Dining and Parlor Car Service, succeeding J. Watson, retired under the provisions of the company's pension fund. Office, Toronto.

The following agents have been appointed: Massena Springs, N.Y., W. C. English; St. Paul, Que., J. A. Bernier; Kinmount, Ont., A. Donnelly; Novar, Ont., F. A. Tebo; Phelpsston, Ont., J. H. Donnelly; Kingsbury, Ind., P. D. White; Aubrey, Que., A. Allen; Algonquin Park, Ont., M. W. Boyle; Outside Agencies, Orillia, Ont., G. H. Clark.

Lackawanna-Grand Trunk Line.—I. W. Gault, Division Freight Agent G.T.R., Toledo, Ohio, has also been appointed Manager L.-G.T. Line, vice W. Craigie, acting Manager. Mr. Gault's office as Division Freight Agent, G.T.R., remains at Toledo and the L.-G.T. Line office remains at Chicago.

National Transcontinental Ry.—G. C. Dunn, District Engineer, with headquarters at N.B., is reported to have resigned, and C. O. Foss is said to have succeeded him.

L. P. Farris, until recently Commissioner of Agriculture in the New Brunswick Government, has been appointed by the Dominion Government and Commissioners of the Transcontinental Railway, Commissioner of Police along the line in the Province of New Brunswick.

Niagara, St. Catharines and Toronto Ry.—D. D. Mann having resigned from the directorate, D. B. Hanna has been elected to

succeed him and has also been elected a Vice-President.

Quebec and Lake St. John Ry.—See Canadian Northern Quebec Ry.

Quebec Central Ry.—W. S. Fry has been appointed Treasurer, succeeding F. C. Young, who has been acting Treasurer since the suspension of E. H. Anderson, who was subsequently convicted of embezzlement.

Questions before the Railway Board.

The Secretary of the Board of Railway Commissioners issued a notice April 8 that the Board would sit in Ottawa April 24, to hear the application of the railway trainmen of Ontario to consider and settle the proposed uniform code of train rules, also that the Board would consider the following proposals submitted by the joint committee of the legislative board of the Brotherhood of Railway Trainmen, viz.:

That co-employees be allowed to attend investigations held by the Board's Inspector of Accidents, on request of witness. That witness fees to be paid at such investigations be increased.

That the Board order an increase in the number of men on trains for flagging purposes.

That telegraph operators be not employed under the age of 21, and evidence be furnished of their having one year's experience in railway work.

That the Board's inspectors be required to ride on and inspect the conditions of locomotives.

That all locomotives be equipped with dump ash pans, such as will avoid the necessity of a man going under the locomotive to clean it.

Also that the Board would consider the following matters presented to it by memorial through the Ontario Brotherhood of Railway Trainmen:

That all brakes, dogs and ratchets be placed on the top of the car instead of on the step at the end of the car.

That all cars used as cabooses be equipped with air brakes, gauge, conductors' valve, platform steps and cupola.

That operating levers be placed on both sides of the draw-bar along the end of the car.

That no obstructions be piled on the tops of any box cars while being hauled by the train crew.

That any order requiring men to ride on the top of trains be abolished.

That safety hand holds and steps be placed on locomotives.

That obstructions and structures be placed not less than 6 ft. clear of rail.

That not less than five men be placed on any train, and not less than three men on light engines.

That there be a car limit as to number.

That passenger brakemen have one year's experience in yard or freight service.

That steps be taken to prevent the handling of crippled cars on trains, except on wreck trains.

The application and proposals were heard by the Board as notified and are still under consideration.

Speaking at a gathering of the Canada Club in London, Eng., May 7, C. A. Hanson associated with Hanson Bros., financial agents, Montreal, said, in spite of the financial crisis of 1907, at least \$125,000,000 had been invested by British capitalists in Canada, and that a large proportion of this amount was put into railway securities. The total amount of Canadian issues placed in London, Eng., during the past six months, is reported by cable to have been \$109,475,000, of which \$64,000,000 was for railway purposes.

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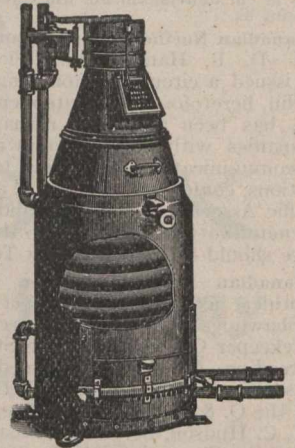
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Canadian Northern Ry. Construction.

Quebec and Lake St. John Ry.—At the recent session of the Quebec Legislature, subsidies were voted in aid of the following lines: For a branch from the main line at Charlesbourg to L'Etang, on the Montmorency River, six miles, a subsidy at the rate of 6,000 acres of land, not convertible into money, to complete 3.8 of its line from Valcartier to Ste. Catherine, a subsidy at the rate of 3,000 acres of land per mile, not convertible into money, in lieu of the subsidy voted in 1906; for a branch line from Valcartier station in the direction of Gosford tp., 3,000 acres of land per mile, not convertible into money; and for an extension of 12 miles of the Valcartier branch to Gosford tp., including a branch of 3.50 miles to Riviere-aux-Pins, in the parish of St. Gabriel West, 3,000 acres of land per mile, in lieu of the subsidy voted in 1906. In connection with the second and third lines subsidized, it is provided that the lands are granted on condition that the company shall establish a free passage by the building and maintenance of the bridge over and the approaches on both sides of the Jacques Cartier River, for foot passengers, vehicles and animals, at or near the old railway bridge over the river, according to plans to be approved by the Government.

The La Tuque branch was formally taken over from the contractors May 1, and the train service is now being operated by the company.

Canadian Northern Quebec Ry.—The Quebec Legislature, at its last session, voted a subsidy of 3,000 acres of land, not convertible into money, in aid of the construction of a railway from St. Jacques to Rawdon, and thence northerly towards Lake Archambault, not exceeding 20 miles. Also to aid in the construction of 65 miles of its line from Montreal to Grenville a subsidy of 2,000 acres of land per mile, not convertible into money.

Canadian Northern Ontario Ry.—The company is reported to have decided upon proceeding with the erection of the shops on Eastern Ave., Toronto, and plans are in preparation.

Canadian Northern Ry.—Hon. R. Rogers, Minister of Public Works for Manitoba, on returning to Winnipeg, after a conference with W. Mackenzie, President Canadian Northern Ry., stated that he had obtained an agreement for the construction of three new lines in the Province during the summer, viz.: An extension of 10 miles of the Wakopa section, running from Greenway to Adelpha, 51.8 miles; a line 10 miles northerly from Virden, crossing the C.P.R. tracks; and a line of 25 miles from the Rosburn line, through Rapid City, into the Viola Dale country.

M. H. McLeod, General Manager, has been on a trip of inspection to Oak Point, Man., and local reports state that it is expected that construction will shortly be started upon an extension of the line there.

A contract is reported let to Jas. Cowan, for the construction of an additional 18 miles on the Rosburn branch, which is at present in operation from Rosburn Junction to Rosburn, 78.7 miles, and it is intended to extend it to a junction with the Gilbert Plains-Edmonton line, near Buchanan, Sask.

Speaking of the company's construction programme for the season, D. D. Mann, Vice-President, said, at Winnipeg, May 7, all the lines will be ballasted and improved, and all construction work that was started last fall will be completed. There will be about 80 miles of new heavy steel rails laid within about a month. A line will have to be constructed to the Alberta coal fields, in which the company is interested, and which are about 150 miles from the railway. The work will probably be commenced this summer, either from Edmonton or Strathcona. The coal lands are located just on the mountain

slope of northern Alberta; the construction work will be heavy, as the line will run through the mountains, and there is a lot of rock in the country. Surveys have been in progress in connection with the development of the coal lands for the last 18 months. (May, pg. 327.)

D. D. Mann, in the course of an interview at Winnipeg, May 12, said the company's Brandon-Regina line was to be newly ballasted, and several of the buildings in use as stations would be replaced by new structures during the summer.

Railway Commissioners' Traffic Orders.

4533. March 25, in the matter of the application of J. M. Dudley, Secretary for Canada of the Railroad Department of the International Committee of Young Men's Christian Associations, under sec. 341 of the Railway Act, for an order authorizing the G.T.R. Co. to continue certain transportation privileges heretofore granted to secretaries of railroad branches of the said associations, over its line of railway. Upon reading what is alleged in the said application and the letters of C. M. Hays, Second Vice-President and General Manager of the G.T.R. Co., and W. R. MacInnes, Chairman of the Advisory Committee of the Canadian Freight Association. The Board orders that any railway company operating in Canada subject to its jurisdiction be, and it is hereby, authorized to issue to the secretaries of railroad branches of the Y.M.C.A. located on its railway, of which its employes are members, and for their household effects, free transportation or reduced rates over its railway, when the said secretaries are travelling in connection with their secretarial duties, or are being transferred by the said Association. Provided that this order shall not apply or extend to city organizations of the Y.M.C.A. which are in no way connected with the work of the railway companies.

4559. April 1.—In the matter of the application of the C.P.R. Co., under sec. 341 of the Railway Act, for leave to grant a special rate to a party of mining students of McGill University, upon the report and recommendation of the Chief Traffic Officer of the Board, it is ordered that the company be granted leave to carry the party at a special rate of \$50 each for the trip from Montreal to Vancouver, and return, including side trips to Rossland and Greenwood, in B.C.; or at a rate of \$40 each from Montreal to Rossland, Phoenix and Greenwood, B.C., and return. That the company be granted leave to carry such members as may desire to leave the returning party at Moyie, B.C., and to return to Greenwood, B.C., for the purpose of continuing their practical studies until the close of the summer vacations, at 1c. per mile from Greenwood to Moyie and back to Greenwood, and to return from Greenwood to Montreal at the rate set out above. That any other parties desiring to travel for the same purpose to British Columbia or any other mining district, be granted equally favorable terms until otherwise ordered by the Board.

4682. May 5.—In the matter of the complaint of the Board of Trade of Fredericton, N.B., complaining that the C.P.R. Co. and the G.T.R. Co. were unjustly discriminating against the City of Fredericton in the rates charged on traffic originating west of Montreal, and in favor of St. John, N.B., and applying for an order directing that the discrimination be removed. Upon hearing counsel for the applicant, the C.P.R. Co. and the G.T.R. Co., the evidence adduced, and what was alleged, it is ordered that the Intercolonial Ry. and the G.T.R. be absolved from the agreement with the C.P.R. Co., as the result of which the rates to Fredericton on traffic from points west of Montreal were raised from 2½c. to 8c. per 100 lbs. above the rates on traffic

from the same points to St. John, N.B., and that the G.T.R. be directed to restore to Fredericton the St. John basis of rates on traffic originating west of Montreal as aforesaid.

KLONDIKE MINES RY. FREIGHT TARIFF.

4684. May 7.—In the matter of the application of the Klondike Mines Ry. Co., under sec. 326 of the Railway Act, for approval of a proposed standard freight tariff submitted to the Board by the company, Oct. 25, 1907, for distances up to and including 35 miles, in substitution of its standard freight tariff approved by the Board Nov. 19, 1906. Upon the report and recommendation of the Chief Traffic Officer of the Board, it is ordered that the maximum freight tariff of the applicant company, submitted for the approval of the Governor-in-Council April 21, 1902, in substitution of its standard freight tariff, approved by the Board Nov. 19, 1906, be approved for all distances to and including 35 miles, pending the submission by the applicant company of its report to the Department of Railways and Canals for the 12 months ended June 30, 1908.

FREIGHT ON PUBLIC SCHOOL BOOKS.

4680. May 7.—In the matter of the application of the Morang Educational Co., Ltd., of Toronto, under sec. 321 of the Railway Act, for an order fixing a proper freight classification through Canada on public school books; Upon hearing counsel for applicant, the C.P.R. Co. and the Canadian Northern Ry. Co., the evidence adduced, and what was alleged; it is ordered that Canadian Classification 13 be amended by the addition of a carload rating of third class on books in boxes or cases (item 3, page 12); and that the amendment become effective not later than May 30, 1908.

Quebec Railway Subsidies.

At the recent session of the Quebec Legislature an act was passed authorizing the Government to grant subsidies in aid of the construction of railways in the Province as follows:

ATLANTIC, QUEBEC AND WESTERN RY.—For 50 miles from near Gaspé Basin towards Causapsal on the Intercolonial Ry.; 4,000 acres of land per mile not convertible into money, in lieu of the subsidy granted in 1906. A similar land grant in respect of 80 miles of line between Port Daniel and Gaspé, in lieu of the subsidy voted in 1906.

CANADIAN NORTHERN QUEBEC RY.—For a railway from St. Jacques to Rawdon, thence towards Lake Archambault, not exceeding 20 miles, a grant of 3,000 acres of land per mile.

For 65 miles of its line between Montreal and Grenville, 2,000 acres of land per mile.

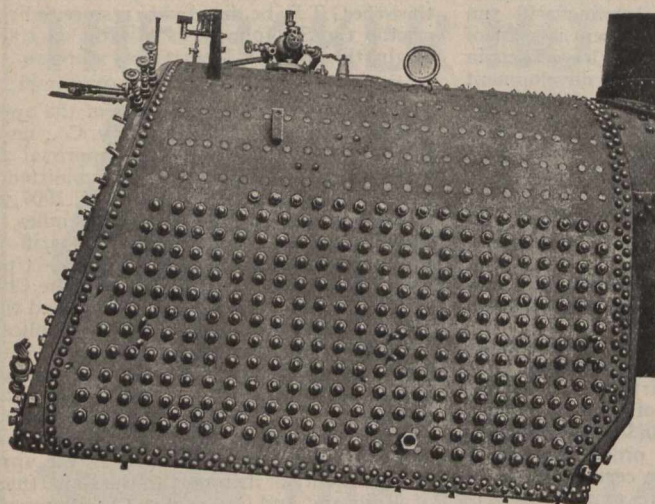
INDIAN RIVER RY.—For a line near the north end of Lake Megantic towards the south end of the lake at the International boundary, not exceeding 19 miles, a subsidy of 4,000 acres of land per mile. This subsidy is in lieu of that voted in 1904.

INTERPROVINCIAL AND JAMES BAY RY.—For a line from the present terminus of the C.P.R. line (Temiscamingue Colonization Ry.) at Gordon Creek, to Ville Marie, about 50 miles, a subsidy of 4,000 acres of land per mile, in lieu of the subsidy voted in 1906.

JOLIETTE AND LAKE MANUAN COLONIZATION RY.—For a line from Joliette in the direction of Lake Manuan, for a distance of 60 miles, a subsidy of 4,000 acres of land in lieu of the subsidy voted in 1906.

LITTLE NATION RIVER RY.—For a line from between Thurso and Montebello, to Cheneville, and thence to the C.P.R. near Nominique, about 30 miles, a subsidy of 3,000 acres of land per mile.

LOTBNIERE AND MEGANTIC RY.—For a line from Lyster station running towards Lime Ridge, about 40 miles, a subsidy of 2,000 acres a mile, in lieu of the subsidy voted in 1906.



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MATANE AND GASPE RY.—For a line from Ste. Flavie to Matane, about 37 miles, a subsidy of 4,000 acres of land per mile, in lieu of the subsidy voted in 1906, for 30 miles from St. Octave de Metis to Matane.

METELETCHOUAN COMPANY.—For a line from Lake Bouchette to St. Andre on the River Metebetchouan, 13 miles, a subsidy of 1,000 acres of land per mile.

ORFORD MOUNTAIN RY.—A subsidy of 2,000 acres of land per mile in respect of the following lines of railway: From Mansonville to the International boundary, 3.12 miles; from Bolton to Mansonville line, 7.54 miles; from Windsor Mills to Brompton Falls, 8 miles; from Melbourne road to the village of Melbourne, 3.50 miles; from a bridge on the main line to Lake Bonallie on the south side, five miles, in lieu of the subsidy voted in 1906.

PONTIAC AND INTERPROVINCIAL RY.—For a line from Waltham Station to Ferguson's Point, a subsidy of 4,000 acres of land per mile, in lieu of the subsidy voted in 1906.

QUEBEC AND LAKE ST. JOHN RY.—For a branch from Charlesbourg to L'Etang on the Montmorency River, about six miles, a subsidy of 2,000 acres of land per mile, not convertible into money. For a line from Valcartier to Ste. Catherine, about 3.8 miles, a subsidy of 3,000 acres of land, in lieu of the subsidy granted in 1906. For a line from Valcartier Station in the direction of Gosford tp., a subsidy of 3,000 acres of land per mile. (This subsidy and the one for the line from Valcartier to Ste. Catherine are granted on the condition that the company shall establish a free passage over the Jacques Cartier River.) For a line from the terminus of the last mentioned line for 12 miles to Gosford tp., including a branch 3.50 miles in length to a point on Riviere-aux-Pins, in St. Gabriel West, in lieu of the subsidy granted in 1906.

QUEBEC CENTRAL RY.—For a line from St. George de Beauce towards Cabano on the Temiscouata Ry., about 30 miles, a subsidy of 3,000 acres of land per mile.

QUEBEC, MONTREAL AND SOUTHERN RY.—For a line from Yamaska in the direction of Levis, about 107 miles, a grant of 2,000 acres per mile. A similar subsidy for a branch from the main line at Becancourt to the St. Lawrence River, about four miles.

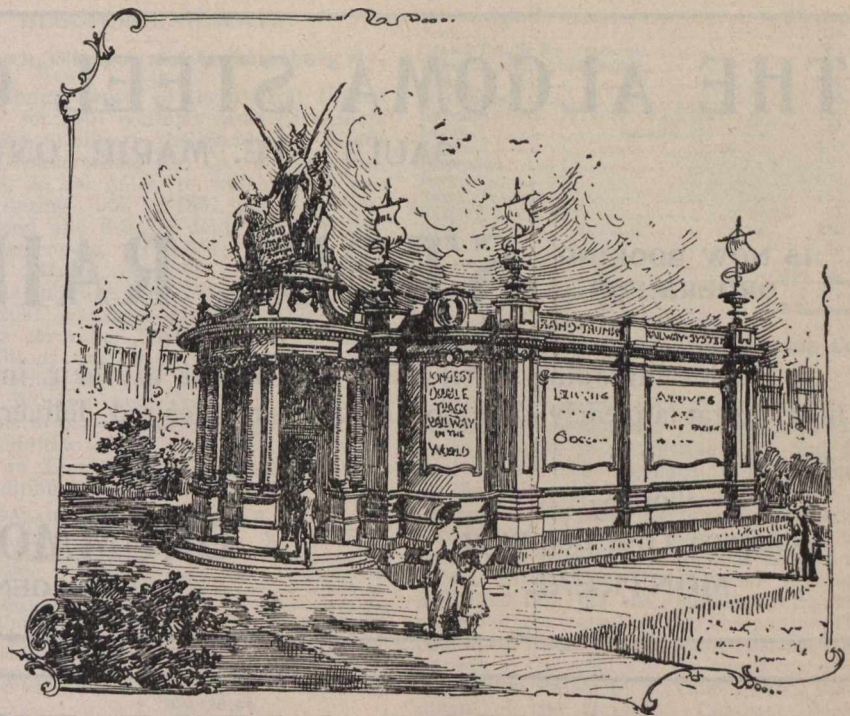
Subsidies have been voted for the construction of railways as follows, no special company being mentioned:

Jonquieres to Ha! Ha! Bay, about 20 miles, a subsidy of 4,000 acres of land per mile, in lieu of the subsidy voted in 1906.

Herbertville to St. Joseph d'Alma, about 10 miles, a subsidy of 4,000 acres of land per mile in lieu of the subsidy voted in 1906.

Roberval towards James Bay, for 30 miles, a subsidy of 4,000 acres of land per mile, in lieu of the subsidy voted in 1906.

Uncoupling Devices for Freight Cars.—In Feb., 1907, the trainmen requested the Board of Railway Commissioners to order that operating levers for uncoupling freight cars should be placed at both sides of the ends of the cars. No action having been taken on the request, it was again brought before the Board on April 24, when it was decided that the Board's inspectors look into the matter and report. The railway companies oppose the request on the ground that it is unnecessary, owing to the fact that there is always an operating lever for either one car or the other on the side from which the trainman may be operating. The trainmen contend that those levers are frequently out of repair and that the pin in the knuckle, which is on the side convenient to operate, is frequently bound so that it cannot be lifted, and that by having the operating lever on both sides cars could be uncoupled without the necessity of going underneath trains to get across to the other side.



The G.T.R. Pavilion at the Franco-British Exhibition in England.

At this exhibition, which is being held at Shepherd's Bush, London, Eng., which opened in May, and will run until October, the G.T.R. has erected a beautiful pavilion covering about 2,000 sq. ft. of space in a picturesque spot known as the French Court. This structure follows in design the Renaissance style of architecture with an artistic pillared entrance. Over the entrance rises a group of statuary representing the G.T.R. as speed, with an electric star surmounting the head of the central figure, emblematic of the Star of Empire, and on each side of this figure is represented in smaller figures the Atlantic and Pacific oceans, the central figure joining their hands, representing the spanning of the continent by the National Transcontinental Ry. This allegorical group is a very imposing one, and the idea is appropriate.

The interior of the building is arranged in a combination of color harmony of olive green and red. The scenic views of the G.T.R., as well as views of the summer tourists' districts, and fishing and hunting resorts in Canada, are beautifully portrayed by a series of bromide enlargements finished

in a sepia tint and framed in a dull quartered oak. These pictures cover the walls to a distance of 2 ft. from the ceiling, and the entire interior has been set off by a beautiful frieze made up of grains and grasses from Ontario, Manitoba, Saskatchewan and Alberta. In this frieze are embedded specimens of Canadian fish and game mounted in an attractive way, the whole forming a unique and pleasing effect. In the centre of the room a pyramid has been erected, on which is shown samples of Ontario cereals, as well as natural samples of fruit from the "Garden of Canada." Animated moving picture machines, projecting fishing, hunting and railroad scenes, are other features on the floor space. Among the special features on display are two exceptionally fine moose heads, one the record head, taken from Ontario, and the other a freak head that will attract a great deal of attention.

S. W. Cummings, who until recently was General Passenger Agent of the Central Vermont Ry., is in charge of this exhibit, the arrangements for which were made by the company's advertising agent, H. R. Charlton.

Reform Movement Among Railway Men.

At a conference of C.P.R. engine and train men running out of Calgary, Alta., recently, papers were read by Conductor E. C. Elson on "Profanity," by Baggage-man J. Carson on "Temperance," and by Locomotive Engineer Pullar on "Honesty and Truthfulness." The papers were referred to committees, which reported as follows:

"Your committee appointed to report on the very excellent paper on the subject of Profanity, submitted by Conductor E. C. Elson, beg to report that they deplore the use of profanity and the telling of impure stories, and after fully considering the opinions expressed by all railway men at this conference, your committee recommend that an earnest effort be made by all concerned in railway interests, to abolish profanity on the Western Division for the honor of the company and the general good of the men.—J. M. Fryers, Conductor; J. McMillan, Superintendent of Telegraphs; G. Monilaws, Engineer."

"That it be resolved, That it is the sense of this convention that the use of intoxicating liquor by men engaged in the performance of their daily duties as servants of the railway company should be discouraged in every instance, and that the safety of the travelling public, the preservation of property entrusted to the care of railway employes, and the best interests of the company and employes are best served by total abstinence at all times.—J. R. Dalton, Conductor; J. W. Fay, Engineer; G. M. Reddick, Brakeman; H. C. McMullen, General Live Stock Agent."

"Your committee appointed to report upon the paper read by Mr. Pullar on the subject of 'Honesty and Truthfulness' feel that the case is presented in such a form as must, in the main, be accepted by everyone. We recognize that the first principle in railway life is honesty in every department, and that it should be lived up to by officers and men alike, and constantly practised, without fear or favor, in the relations existing between them. We believe that real efficiency of work must rest upon sterling

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individual honesty, because rules and regulations designed, as the result of long experience, for the safety of life and property, are of very little value unless a large organization such as ours can rely upon the individual honesty of the men in whose hands some portion of responsibility is placed. We respectfully suggest that honesty and truthfulness can be cultivated throughout all branches of the service by means of a cordial understanding between officers and men, on which a man may rely when possibly he is in trouble or difficulty. Although to speak the truth in some cases may mean discipline, we believe that even in such cases anything less than the truth is a sacrifice of manhood which in nine cases out of ten is easily detected, and which yields no satisfaction on either side. As the system of surprise checking has been mentioned, we wish to say, that in our opinion, the man who is honest in his work has nothing whatever to fear from any system of check, and that if looked upon in the proper light the system will be seen to be intended to take care of the weaker men. In conclusion, we feel sure that this conference has contributed largely to a feeling of confidence on the part of the men and of goodwill on the part of the officers, which will mean a wider acknowledgment of the advantages of being honest in all our dealings and of speaking the truth under all circumstances.—H. Brown, J. Chamberlain, L. R. Ward."

Ontario Railway and Municipal Board.

The second annual report of the Ontario Railway and Municipal Board covers the work for the year ended Dec. 31, 1907. During the year 191 applications were made to the Board, of which eight were pending at the end of the year. Since the date of its first report the Board has made an examination of all the acts—Dominion and Ontario—relating to railways in the Province, in order to ascertain the legislative history of each railway and to settle the question as far as possible of the Board's jurisdiction. The result of this examination is set forth in a table appended to the report, in which appears the names of 490 railways, and a reference to 1,598 acts of the Dominion Parliament and of the Ontario Legislature affecting the same. An examination of these acts showed that there was considerable confusion, particularly in regard to electric railways, as to Dominion and provincial control, and it is submitted there should be a conference between the two Governments with a view of arriving at some understanding which will put all the electric railways under the jurisdiction of the Province. All the railways under the Board's jurisdiction have submitted their tariffs of passenger fares. These tariffs are all in accordance with the law relating to the two cent per mile rate. No complaints have been received by the Board during the year in reference to the fares charged by any railway within its jurisdiction.

Appended to the report are particulars giving some details in regard to each application made to it, the judgments in the more important cases, and a number of statistical tables.

The table giving the number of persons killed and injured during the year shows that 32 were killed and 320 injured. Of those killed seven were passengers, seven employes, 17 were travellers on highways, and one was a trespasser. The table showing the gross and net earnings of the electric railways of the Province contains the same information quoted in the tables given in our Feb. issue, with which other statistical data relating to the electric railways throughout the Dominion were incorporated.

ELECTRIC RAILWAYS.

Sandwich, Windsor and Amherstburg Ry.

The annual report of the Detroit United Ry. Co. for 1907 contains some particulars about its subsidiary, the Sandwich, Windsor and Amherstburg Ry. Co.: Mileage, Jan. 1, 1907, 25,260 miles, to which there was added during 1907 10,1831 miles; interest on funded and floating debt, \$18,000; revenue passengers, 2,604,054; transfer passengers, 282,870; employe passengers, 32,153; car mileage, 601,575; earnings, car mile, .2631; expenses car mile, .1748; net earnings car mile, .0883. Under the head of additions and betterments, there was spent during the year on the construction of the Windsor and Tecumseh extension, additions to power house and lighting plant, seven additions cars and construction of tracks on Elm St. loop, including paving and additional feed wire, \$92,644.06.

BALANCE SHEET S.W. & A.R. CO.

Capital stock.....	\$ 297,000 00	
Mortgage bonds.....	490,000 00	
Bills payable.....	70,000 00	
Accrued interest on bonds.....	1,500 00	
Accrued insurance.....	542 26	
Detroit United Railway.....	193,204 23	
Accident fund.....	733 28	
Current liabilities.....	4,937 61	
Unredeemed tickets.....	1,932 78	
Profit and loss.....	33,518 00	
Plant.....	\$ 904,428 64	
W. & T.E. Ry. Co. (St'k)	10,000 00	
W. & T.E. Ry. Co.....	171,690 50	
Current assets.....	875 80	
Prepaid taxes.....	2,425 34	
Stores.....	1,623 14	
Cash.....	2,324 74	
	<u>\$1,093,368 16</u>	<u>\$1,093,368 16</u>

Guelph Radial Railway Co.

Following are the accounts for the year ended Sept. 30, 1907, of this company, which is owned by the City of Guelph, Ont.:

ASSETS.

Cash in bank.....	\$ 8,500 84	
Cash on hand.....	30 00	
	<u>\$ 8,530 84</u>	
Accounts receivable.....	191 29	
Construction and equipment \$16,428 81		
Edinboro' Road extension.....	1,298 07	
New equipment.....	110 52	
Park.....	972 63	
Feeder wires.....	20 52	
Car barn.....	361 86	
	<u>\$109,192 42</u>	
Stock, rails, ties, etc., for switches.....	580 73	
Stock in car barn, etc.....	1,764 98	
Insurance unexpired.....	224 83	
	<u>\$120,485 09</u>	

LIABILITIES.

Accounts payable.....	\$ 1,521 75	
	<u>\$118,963 34</u>	

NET ASSETS.

Capital stock.....	\$ 108,000 00	
Gain at credit profit and loss, Sep. 30, 1906.....	\$7,024 19	
Dividend 1.....	4,860 00	
	<u>3,945 40</u>	
Premium acc't.....	\$2,164 19	
	<u>1,781 21</u>	
Net gain at Sep. 30, 1907.....	7,017 94	
	<u>\$118,963 34</u>	

PROFIT AND LOSS ACCOUNT.

EARNINGS—	
Passengers.....	\$26,078 36
Freight.....	1,067 86
Advertising.....	250 00
Rent of hotel and pasture.....	225 04
Rent of power.....	267 14
Park.....	250 00
Bank interest.....	159 61
Sundries.....	6 00
Total earnings.....	<u>\$28,304 01</u>
EXPENSES—	
Car barn, maintenance.....	\$ 3,654 86
Track, maintenance.....	1,167 67
Line, maintenance.....	287 22
Power house.....	1,580 48
Passenger operating, wages.....	7,151 55
Freight operating, wages.....	242 65
Freight charges, paid.....	72 19
Oil.....	166 39
Carried forward.....	<u>\$14,323 01</u>

Brought forward.....	\$14,323 01
Coal.....	2,634 88
Grand Trunk Ry. crossing.....	381 38
Painting and upholstering.....	281 14
Office.....	1,500 50
Stationery.....	165 44
Expense.....	137 13
Legal.....	56 46
Taxes.....	100 00
Insurance.....	191 19
Park.....	634 34
Band.....	437 25
Battery.....	76 94
Rink.....	282 81
Hotel.....	83 60
	<u>\$21,286 07</u>
Net gain on year's operations.....	<u>7,017 94</u>

Dominion Power and Transmission Co., Limited.

Following is the first annual report as abridged for circulation: "The directors have much pleasure in submitting their first annual report with reference to the business of the company from its organization to the end of 1907, and the financial statement accompanying same. Accompanying the latter is a combined statement of the receipts, expenditures, profit and loss and final balance of the various companies owned or controlled by this company. This combined statement affords a basis of comparison of the results of the year's operation with those shown in previous annual statements of the Hamilton Cataract Power, Light and Traction Co. The incorporation of this company was the result of necessary increase in the financial capacity of the Hamilton Cataract Power, Light and Traction Co., which has become inadequate to meet the expansion of that company's business and the probable extension of its field of operation, and this company's charter from the Dominion of Canada was framed with a view to the acquisition by this company of the control, and practically the taking over, of the business of the Hamilton Cataract Power, Light and Traction Co. In view of the fact that four-fifths of the stock of the latter company has been acquired by this company, it may be regarded as a successor to that company and its business; but on a larger scale.

"The following subsidiary companies are now either directly or indirectly owned or controlled by this company, viz.: The Hamilton Radial Electric Ry. Co., the Hamilton Street Ry. Co., the Hamilton and Dundas St. Ry. Co., the Dundas Electric Co., the Hamilton Electric Light and Power Co., and the Lincoln Electric Light and Power Co., which are immediately subsidiary corporations of the Cataract Co., while this company has acquired the direct ownership of the entire stock of the Brantford and Hamilton Electric Ry. Co., the Western Counties' Electric Co., with its subsidiary corporation, the Brantford Electric and Operating Co., as well as the Hamilton Terminal Co., and control of the Welland Electric Co., and the Hamilton, Grimsby and Beamsville Electric Ry. Co.

"The completion of the Hamilton terminal station building during the latter part of last year has enabled this company and all other companies to transfer their office operations to these premises, and all the suburban railway companies to take advantage of the very desirable terminal facilities thereby afforded. This company has become, and is acting as the administrative authority for all the companies, resulting in a more methodical and efficient, as well as economical, conduct of business. The completion of the construction of the Brantford and Hamilton Electric Ry. was greatly retarded by unexpected difficulties in connection with the mountain section thereof—heavy rock and earth slides having occurred which were not anticipated and could not have been obviated. The rails of that line of railway have been laid into Brantford, and cars have been for some time past



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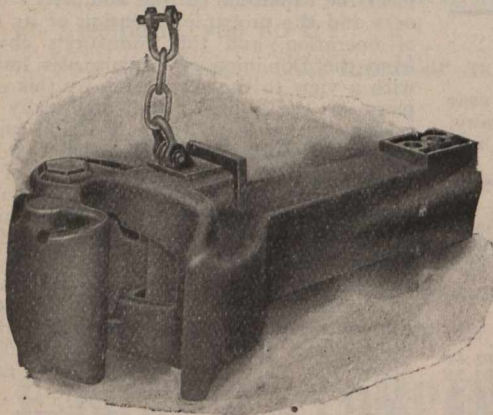
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regularly running as far as Ancaster, and it is expected that the whole line will be in full operation sometime during May, and the prospects of a good traffic seem to be very encouraging. The Western Counties' Electric Co., with its established business, has had a prosperous year, and in view of the fact that a power transmission line from Hamilton has been completed to a connection with the power system of that company, thus affording direct connection with our main power station at Power Glen, there should, and probably will be, a considerable expansion of power business in Brantford. The Welland Electric Co. has been, during the first year of its business, quite successful, although meeting with direct opposition at that point from one of the Niagara companies.

"Two half-yearly dividends have been paid out of the proceeds of the company's business during the past year; but by reason of the large expenditures in the Brantford and Hamilton Electric Ry. and in connection with the double-tracking of the Radial Railway on private right-of-way, from which capital expenditures no revenue returns can be said to have been realized

through the truck frames, and the centre pins are relieved of all hauling strains.

The superstructure consists of a main operating cab and two auxiliary end cabs.

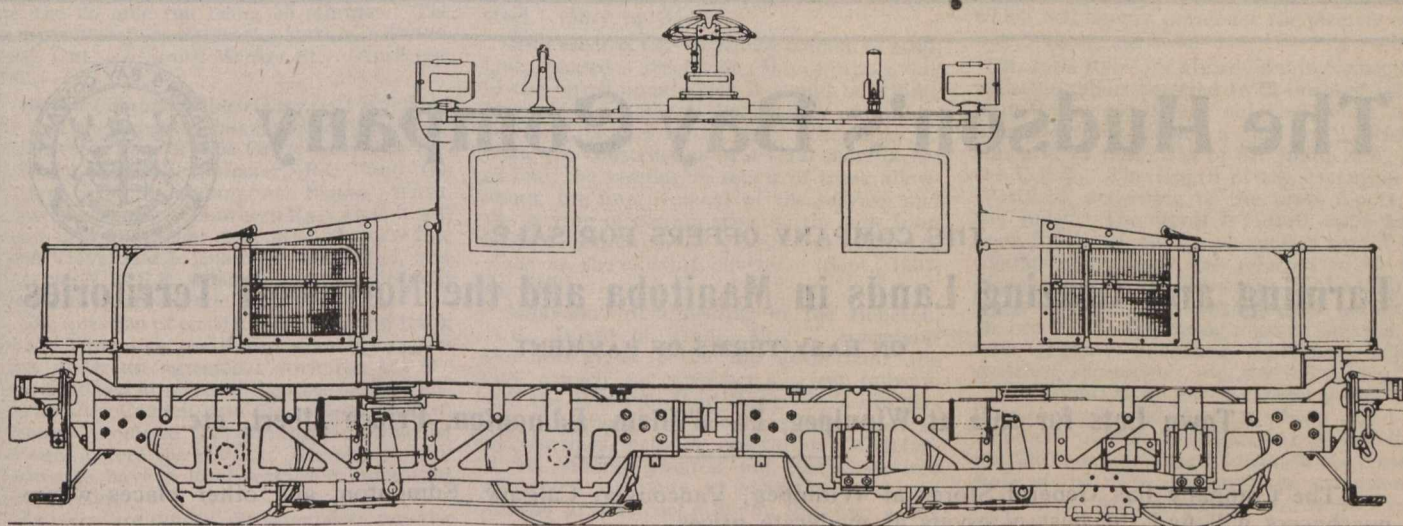
The main cab is 15 1/2 ft. long, and contains the engineer's operating mechanism and valves, while the contactors, rheostats and air reservoir are contained in the auxiliary cabs. The height of the end cabs is such as to permit the engineer to obtain a good view of the tracks. Easy access to the couplers is provided by a narrow platform running from the main cab to the ends of the locomotives.

The electrical equipment of each locomotive consists of four GE-209 motors and the multiple-unit train control. Each motor will develop approximately 300 h.p., and at its hour rating will develop a tractive effort of 9,000 lbs. at a speed of 12 miles an hour, while a complete locomotive is capable of hauling a 900-ton train up a 2% grade at the required schedule speed. The motors are of the commutating pole type, and are among the largest units of this type yet constructed for railway work. The current will be supplied to the motors from an inverted third rail at a potential of 600 volts.

Fenders for Toronto Railway Cars.

The Ontario Railway and Municipal Board made the following order May 6 on the application of the City of Toronto:

"The Board have approved of three fenders for use in front of each motor car, as suitable for the use of the Toronto Railway Co., having regard to the efficiency of each fender. These fenders are the Jenkins, the Quin and the Watson's Improved Type 1908. The company have a right to use any or all of these fenders upon their system. The city asked for an order that the company equip their system with a fender approved by the Board without specifying, and properly so, what fender the company should use. The law requires that the company should adopt and use in front of each motor car a fender as shall be of a design approved from time to time by the Board as suitable for the use of the company, having regard to the efficiency of such fender for life-saving purposes and to the location of the company's line and the speed at which the company's cars may run. It is the prerogative of the Board to approve of a fender. They have no power



ELECTRIC LOCOMOTIVE FOR MICHIGAN CENTRAL RAILWAY TUNNEL UNDER DETROIT RIVER.

during the year, the income of the company cannot be regarded as having reached a normal relation to its investments. Your directors have every confidence in the working out of the company's enterprises and the realization of a most prosperous future career."

Detroit River Tunnel Electric Locomotives.

The accompanying illustration shows the side elevation of one of the six electric locomotives now being built for the Detroit River Tunnel Company, a subsidiary of the Michigan Central Ry., by the American Locomotive Co. and the General Electric Co. These locomotives will be used to haul both passengers and freight trains through the tunnel now being constructed under the Detroit River from Detroit, Mich., to Windsor, Ont. They are moderately slow-speed machines and weigh 100 tons on the drivers. The frame is of the articulated type, and consists of two 4-wheel trucks hinged together. The trucks are of a very solid construction with cast-steel side frames of truss pattern carried on semi-elliptical journal box springs. The diameter of the driving wheels is 48 ins. The draft rigging is carried directly on the outer end frames of each truck, the two trucks being fastened together by substantial hinges and pins. By adopting this method of construction, the draft of the locomotive is carried directly

On account of the high torque developed, which amounts to 4,050 lbs. at a radius of 1 ft., a pinion is mounted on each end of the motor shaft.

The motors will be cooled by forced ventilation, a blower having a capacity of 2,000 cubic feet per minute being installed in the main cab for this purpose. A separate compressor of type CP-26 with a capacity of 100 cubic feet per minute piston displacement provides air for operating the air brakes. The principal dimensions are as follows:

- Length, inside to inside knuckles.....39 ft. 6 in.
- Length of underframe.....34 ft.
- Width over all.....10 ft. 1 in.
- Height from rail to retracted position of contact shoe.....14 ft. 10 in.
- Main cab.....15 ft. 10 in. by 10 ft.
- Truck wheel base.....9 ft. 6 in.
- Total wheel base.....27 ft. 6 in.
- Centre to centre of trucks.....18 ft.

—Railway Age.

C. H. Grantham, father of A. M. Grantham, Purchasing Agent, Toronto railway, died in Toronto, May 4, aged 59.

N. Cantin, St. Josephs, Ont., who is engaged in promoting a number of enterprises, including the St. Josephs and Stratford Radial Ry., has issued a writ against Z. and Mrs. Gallagher, Toronto, to prevent them dealing with various enterprises in which he is interested. Some little time ago Mr. Gallagher had Mr. Cantin arrested for alleged fraud arising out of some financial transactions between them.

to dictate to the company which of the approved fenders the company shall use. Even if the Board had power to so dictate to the company, it would be inexpedient and extremely improper to take sides in contests between rival inventors, and the Board declines to do so. We order the company to equip their system with a fender approved by the Board.

"The only question now remaining for determination is as to the time within which the company should equip their cars with an approved fender. None of the fenders approved by the Board are stock fenders. They are not a commercial commodity. They require to be manufactured specially for the Toronto Railway system. By sec. 20 of the contract between the city and the company, the company are required to manufacture and repair all the cars and railway plant used on their railway during the term covered by the agreement. The performance of this part of the contract may be specifically enforced. Outside of the requirements of their own plant, the company are not manufacturers. The fenders must be manufactured by the company with such facilities as they have in connection with their car shops. They cannot go outside of the city of Toronto and procure these fenders in the market. Patterns are required to be made and the special parts require to be cast. The evidence adduced by the company is to the effect that it will take nine months to manufac-

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ture the fenders and equip their cars. The system is partially equipped with the Jenkins fender. The Jenkins Co. say that they could furnish the number of fenders to complete the equipment in four weeks. The Board have no power to compel the company to use the Jenkins fender to the exclusion of the other two. The public interest requires that the system should be equipped with an approved fender in the shortest possible time. Although the company are entitled to a reasonable time to comply with the order of the Board, yet the Board feel like shortening the time to the shortest possible limit.

"The Board's order is that the company forthwith commence to manufacture and with the utmost despatch equip their system with a fender approved by the Board, the whole system to be so equipped within six months from the date of this judgment.

"The Board makes no order as to costs except that the company shall provide the stamps necessary for the formal Orders."

Projects, Construction and Betterments.

Brantford and Hamilton Ry.—This line was opened for traffic May 23, the schedule time for the 25 mile run being 45 minutes. The company proposes to erect a station in Brantford, Ont., on South Market St. (April, pg. 282.)

British Columbia Electric Ry.—It is reported that the company has leased or purchased the present line of the Great Northern Ry. between New Westminster, B.C., and the International boundary at Blaine, Wash. (New Westminster Southern Ry.), that it will enter into possession as soon as the new line from Cloverdale to Blaine is completed, and that the N.W.S.R. will then be electrified and operated as an electric line.

The question of constructing a second track on the Vancouver and Lulu Island Ry., operated under an agreement with the C.P.R., was discussed at a recent meeting of the Vancouver City Council, and the company's local Manager promised that the matter would be brought before the C.P.R. The city council desires to have a local service in operation over the line.

Tenders are under consideration for the construction of the first section of the proposed electric railway to Chilliwack. The section which it is proposed to construct at once extends from New Westminster to Cloverdale, about 12 miles; and the work covered by the tenders embraces everything necessary to make the roadbed ready for putting down the rails. A steamer has been chartered by the company for carrying over 8,000 tons of 70 lb. steel rails for use on the line, from Liverpool, Eng., to Vancouver, via Cape Horn.

A number of property owners have in preparation a proposal to make to the company with a view of having a line constructed from Victoria to the Ross Bay cemetery. If the plan is accepted by the company, construction can be started Aug. 1, and the line completed this year. The proposed new route leaves Fort St. at Cook St., and follows Cook and May Streets to the Ross Bay cemetery and down the Fairfield road to Foulbay road. (May, pg. 353.)

Calgary.—A meeting of the special committee appointed by the Calgary, Alta., City Council was held May 6, to consider an offer from P. A. Rodrigue, to construct a street railway according to the plans adopted by the council in 1907, for the amount of money mentioned in the by-law, voted upon by the taxpayers, and to operate the line for five or ten years for a percentage of the profits. The discussion of the matter was deferred pending the submission of a more definite offer. (May, pg. 353.)

Edmonton.—Considerable progress has been

made with the laying of steel on the paved portions of First St. and Namayo Ave., Edmonton, Alta., and it is expected to have about 3¾ miles of track laid by the fall. In the construction of the track, 7", 80 lbs. T rails and steel ties have been used. The city council has been approached by an English syndicate with an offer to take over, construct and operate the railway, but nothing definite has yet been done. (May, pg. 353.)

Grand Valley Ry.—The route of the proposed extension from Brantford to London, Ont., has been approved of by the municipalities interested for the entire distance, with the exception of a small section east of Ingersoll, and a short distance near London. It has been agreed that the route through these sections will be settled at a later date, subject to the final approval of the Railway Commission. The agreement with the city of Brantford was made subject to the agreement now existing between the city and the company with regard to the streets and the strengthening of certain bridges. Application was made at Ottawa, April 29, for the approval of the route so far as agreed upon by the Department of Railways.

The company's existing line between Brantford and Galt is being relaid with 80-lb. steel. (May, pg. 353.)

Hull Electric Co.—The city council of Hull, Que., passed a resolution, May 4, approving of the terms upon which it would be willing to grant the company the privilege of double-tracking its lines in the city. The terms include the construction of several short pieces of line, the keeping in repair of track allowances, the improvement of the service, and the paving of certain streets; the new franchise to expire in 35 years from 1905, the same as the existing charter. (Sept., 1907, pg. 683.)

Moncton.—At a meeting of the Moncton, N.B., Board of Trade, May 7, consideration was given to the bill authorizing the city council to construct a street railway, and the Westmoreland Power Co.'s bill giving it authority to construct a number of electric lines, including one through Moncton. F. W. Sumner pointed out that there was already a company in existence having a charter to construct a line in the city; a line had been constructed under it, but it had been torn up; the stockholders, however, believed that they still had the right to construct a line. The Board's legislative committee was asked to look into the whole matter. The city council has also passed a resolution authorizing the city solicitor to examine the different bills and make suggestions thereon. (Sept., 1907, pg. 683.) See also Westmoreland Power Co.

Montreal and Southern Counties Ry.—It is reported that work will be re-started at once upon the construction of the St. Lambert section of this projected railway at Montreal South and at Longueuil, Que. A contract has been let to the Dominion Bridge Co. for the steel work on Black's bridge, and to a U.S. firm for the marine cables across the Lachine Canal. (May, pg. 353.)

Mount McKay and Kakabeka Falls Ry.—We are advised that the surveyed route for this projected railway will follow the main road from Fort William to Kakabeka Falls, Ont., about 15 miles. Two of the curves, those entering the city, will be very sharp, being only 50 ft. radius; the remainder will not exceed 22°. The gradients will not exceed 5%. The track will be laid with 80-lb. steel. Power will be purchased from the Kaministikwia Power Co., at 2,200 volts, three phase, 60 cycle, and transformed by motor generator sets in the sub-station to 600 volts direct current. G. R. Duncan is engineer. (May, pg. 353.)

Niagara, St. Catharines and Toronto Ry.—The company opened its new line to Welland,

Ont., for traffic May 4, giving practically an hourly service to Thorold, St. Catharines and Niagara Falls, from Welland. (April, pg. 283.)

North Midland Ry.—It is expected that contracts will be signed for the construction of the first section of this line, from London to St. Mary's, very shortly, and that construction will be gone on with during the summer. (Mar., pg. 203.)

Ontario West Shore Electric Ry.—Survey parties started from Goderich, Ont., April 28, to make a preliminary survey for the line along the shore of Lake Huron to Kincardine, about 30 miles. The survey is in charge of V. M. Roberts, formerly on the engineering staff of the Guelph and Goderich Ry.

We are advised that the present intention is to build the section from Goderich to Kincardine and that a contract has been let to the Huron Construction Co., which will probably sublet the work. It is also stated that work will be started at an early date and that it is expected to have the Goderich-Kincardine section built by next spring. The persons who control the O.W.S.E.R. charter are also interested in the Maitland River Power Co., which proposes to build a power plant at Black Hole, about 3 miles from Goderich, and which will supply power for the electric railway. (May, pg. 353.)

St. John Ry.—We are advised in connection with the report referred to in our last issue, that the company has not had before it a proposal to construct a line to Westfield, which is 12 miles out of St. John, N.B., on the C.P.R. The length of the extension to Westfield, according to the press report, is 3½ miles. The report is looked upon as a hoax by the Manager, who states that if the Charles Diggs who was referred to in the papers as being the Secretary, is the Charles Diggs who lives in St. John, there is not much chance of the line being a grand success, as "Mr. Diggs is a colored gentleman, selling matches, shoestrings, etc., on the streets."

The question of an extension of the city lines to Rockwood Park has been urged by members of the Horticultural Association, but the company's reply is that in the present state of the money market, the extension is out of the question and cannot even be considered. (May, pg. 355.)

St. Thomas Street Ry.—The general plans for the subway at Ross St., St. Thomas, Ont., have been agreed upon between the engineers of the Michigan Central Rd. and the City Engineer. The plans provide for the division of the roadway into two sections, one 14 ft. wide for the street car traffic, and the other 26 ft. wide, for ordinary traffic. The work is to be done by contract and will be gone on with at once. (Mar., 1907, pg. 191.)

Sarnia Street Ry.—The extension of the line from Wellington St. to River Road, Sarnia, Ont., 1.25 miles, is expected to be completed by July 1. The electrical equipment is being supplied by the Canadian Westinghouse Co. (Mar., pg. 203.)

The Toronto and York Radial Ry. has a large number of men employed in putting in new ties, and in ballasting the line between Newmarket and Jackson's Point, Ont. A station and freight shed are to be erected at Queensville, and a car house and repair shop are to be erected at Deer Park. It is also proposed to construct an extension from Jackson's Point to Sutton, about 1.50 miles. (Jan., pg. 47.)

The Toronto Ry. Co. has notified the city council that it is desirous of laying certain additional lines on city streets, and asking for approval of the same. The company is also applying to the Ontario Railway and Municipal Board for approval of the same lines. (May, pg. 55.)

Toronto Suburban Ry.—Owing to the difficulties in the way of coming to an agreement

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WRITE FOR ILLUSTRATED BOOKLET

DINING SERVICE ON ALL STEAMERS



B. W. FOLGER, MANAGER, TORONTO, CANADA

with the municipal council, it is officially stated that the company has decided for the present to abandon its projected extension to Swansea. (May, pg. 355.)

Westmoreland Power Co.—Application is being made at the current session of the New Brunswick Legislature for an act incorporating a company with this title, with power, among other things, to construct and operate electric railways in the city of Moncton, and throughout the counties of Westmoreland, Kent and Albert. The provisional directors are: C. A. Murray, J. A. Nile, E. A. Smith, G. J. Sproul and R. McManus. (See Moncton.)

Windsor, Essex and Lake Shore Rapid Ry.—The extension of the line from Kingsville to Leamington, Ont., 10 miles, was opened for traffic April 10. The company's line extends from Windsor to Kingsville, 30 miles; and from Kingsville to Leamington, 10 miles, a total distance of 40 miles. (April, pg. 283.)

Winnipeg, Selkirk and Lake Winnipeg Ry.—The electrical equipment of this line has been completed, and the first car, propelled by electricity, has travelled from Winnipeg to Selkirk, Man. A regular service will be operated early in June. The line is owned by the Winnipeg Electric Ry. (Feb., pg. 121.)

Electric Ry. Finance, Meetings, Etc.

Berlin and Waterloo Electric Ry.—The appeal of the company against the city of Berlin, in connection with the recent arbitration proceedings, was argued before the Ontario Court of Appeal, May 19, and judgment has been reserved. The question at issue is as to whether the value of the franchise should or should not be included in the price to be paid the company by the city. The arbitrators fixed the amount to be paid by the city at \$75,000, and the company claims \$213,000.

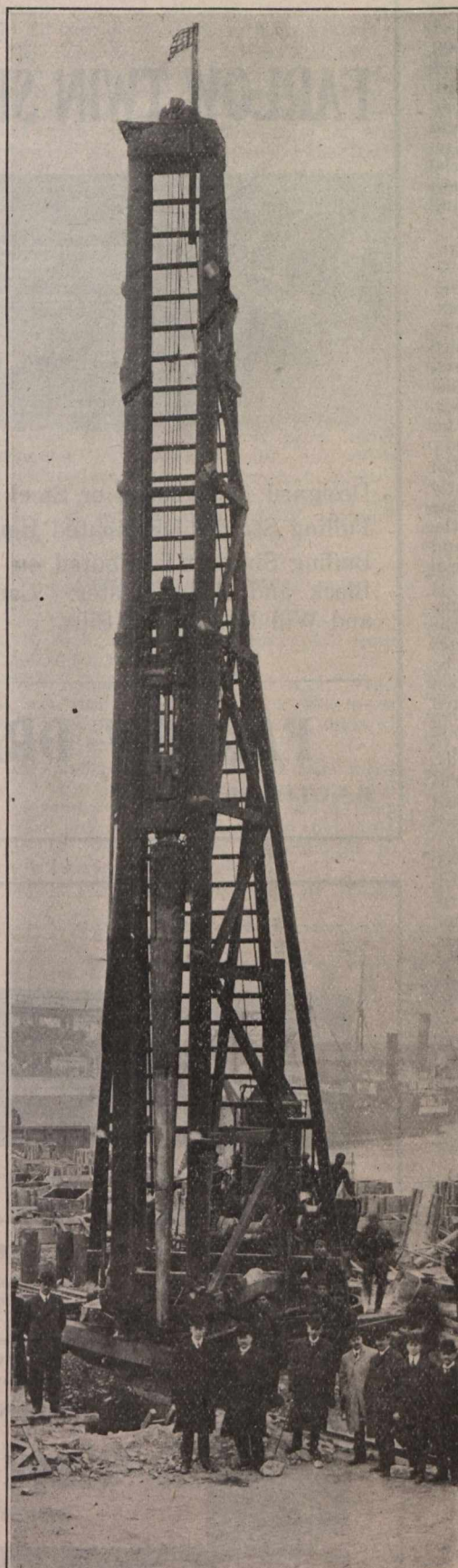
British Columbia Electric Ry.—Gross earnings for March, \$158,339; operating expenses, \$94,114; net operating earnings, \$64,225; renewal funds, \$10,750; net earnings, \$53,475; income from investments, \$11,036; net income, \$64,511; against \$119,363 gross earnings; \$65,665 operating expenses; \$53,698 net operating earnings; \$9,325 renewal funds; \$44,373 net earnings; \$9,536 income from investments; \$53,909 net income, for Mar., 1907. Gross earnings for 9 months ended Mar. 31, \$1,490,260; net earnings, \$727,130; against \$1,072,913 gross earnings; \$530,441 net earnings for same period 1906-07.

Buffalo, Rockport and Rochester Ry.—It is reported that negotiations for the purchase of this line, which it is expected will be opened for traffic during the summer, have been opened by New York financial interests said to be allied with the New York Central and Hudson River Rd. F. Nicholls and E. R. Wood, Toronto, who are interested in the company, which was organized in connection with the development of power at Niagara Falls, returned to Toronto May 8, after going over the line. Mr. Wood said there was nothing in the talk about the proposed sale.

Dunnville, Wellandport and Beamsville Ry.—The taxpayers at Dunnville, Ont., May 10, passed a by-law to purchase \$30,000 of the company's bonds.

Halifax Electric Tramway Co.—Receipts for April, \$13,303.12; against \$12,882.13 for April, 1907. Receipts for 4 months ended April 30, \$51,213.85, against \$48,725.80 for same period, 1907.

Hamilton Street Ry.—After lengthened negotiations an understanding has been reached between a special committee of the Hamilton City Council and the Dominion Power and Transmission Co., owners of the



The core and shell of a Raymond concrete pile preparatory to placing. By means of the core the shell is driven to refusal. The core is then withdrawn and the shell filled with concrete.

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The sheet steel shell which permanently encases each Raymond pile is first placed in position by means of a collapsible core, which alone receives the impact of the hammer.

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H.S.R. The company asks that the city guarantee the company's bonds for the money required to fix up the system, to accept 6 instead of 8% on receipts over \$316,000, no mileage to be charged on the extensions; to make a fixed assessment on the plant, machinery, etc., of the Street Ry., the company to consent to the 5 ft. devil strip, and the company to pay percentage on the receipts of the Deering division. The special committee was not in a position to present a definite report to the council May 11, and its powers to negotiate were continued.

London St. Ry.—Gross earnings for Mar., \$16,907.90; operating expenses, \$13,015.97; net earnings, \$3,891.93; against \$17,716.85, gross earnings; \$13,805.13, operating expenses, \$3,911.72, net earnings for Mar., 1907. Gross earnings for 3 months ended Mar. 31, \$50,287.14; operating expenses, \$38,731.69; net earnings, \$11,555.45; against \$49,914.29 gross earnings; \$38,746.60, operating expenses; \$11,167.69, net earnings for same period 1907.

Montreal Street Ry.—Reports state that J. L. Shaw, New York, who was recently in Montreal, was engaged in negotiating for the purchase of a large interest in the M.S.R., and the Montreal Light, Heat and Power Co., for some New York financial interests.

At the last session of the Quebec Legislature an Act was passed authorizing the company to issue warrants or certificates to bearer for shares in the company, to be issued in such manner and form, and upon such terms and conditions as may be fixed by by-law. The deed of conveyance in trust executed by the company in favor of the Royal Trust Co., Feb. 29, for the purpose of securing bonds or debentures of the company issued or to be issued, is ratified and confirmed. In the schedule attached to the act the trust deed is set out in full.

Gross earnings for April, \$280,735.83; operating expenses, \$170,141.23; net earnings, \$110,594.60; city percentage on earnings, \$19,727.73; interest on bonds and loans, \$17,323.08; contingent for renewals, \$13,850.06; rent leased lines, \$444.43; surplus, \$59,249.30; against \$274,635.30 gross earnings; \$166,421.98, operating expenses; \$108,213.32, net earnings; \$19,015.68, city percentage on earnings; \$12,434.90, interest on bonds and loans; \$13,527.02, contingent for renewals; \$339.96, rent leased lines; \$62,893.76, surplus for April, 1907. Aggregate gross earnings for 7 months ended April 30, \$2,027,872.71; operating expenses, \$1,316,006.96; net earnings, \$711,865.75; fixed charges, \$323,987.31; surplus, \$387,878.44; against \$1,873,683.75, aggregate gross earnings; \$1,240,078.94, operating expenses; \$633,604.81, net earnings; \$284,195.98, fixed charges; \$349,408.83, surplus for same period 1906-07.

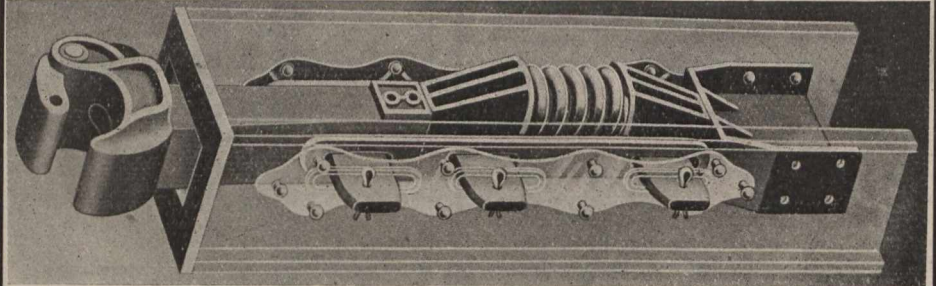
Port Arthur St. Ry.—Several meetings have been held by the joint committee appointed by the Port Arthur and Fort William City Councils, to endeavor to arrange a price for the sale by the former city to the latter of the portion of the Port Arthur street railway within its limits. The Port Arthur delegates set a definite price on their line at \$162,000, which is considered too high.

Sarnia Street Ry.—Gross income for year ended Dec. 31, 1907, \$37,608, against \$36,234 for 1906; operating expenses, \$27,583, against \$24,685; net earnings, \$10,025, against \$11,549; deductions, \$3,384; dividends, \$4,459; surplus, \$2,282; against a surplus of \$3,760 in 1906.

Toronto Ry.—The city authorities have reduced the assessment on the company's property from \$200,000 to \$150,000.

Car earnings for April, \$272,929.02, against \$261,608.68 for April, 1907. Total earnings for 4 months ended April 30, \$1,075,496.61, against \$1,014,586.14 for same period, 1907.

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Fluctuations in Lake Freight Rates.

The statistical report of traffic passing through the Canadian and U.S. canals at Sault Ste. Marie, prepared by the U.S. Army Corps of Engineers, gives some interesting facts regarding the fluctuations in the freight rates for water transportation to Lake Superior charged on the different classes of commerce, for 20 years, from 1887 to 1907. In each of the cases quoted, with only one exception, the rates were considerably lower in 1907 than in 1887, and in a majority of cases the lowest level was reached during 1907. Following are rates charged on the main items, for the years 1887-1897-1907:

	1887	1897	1907
Coal, net tons.....	\$0.90	\$0.30	\$0.31
Flour, brls.....	0.29	0.10	0.20
Wheat, bush.....	0.07	0.017	0.019
Grain (not wheat), bush.....	0.07	0.02	0.019
Manufactured iron, net tons.....	2.35	1.40	1.80
Pig iron, net tons.....	2.35	1.05	1.50
Salt, brls.....	0.18	0.15	0.12
Copper, net tons.....	2.60	1.95	1.40
Iron ore, net tons.....	1.75	0.65	0.67
Lumber, M. ft. B.M.....	4.00	1.55	2.50
Silver ore, net tons.....	3.00	2.33
Building stone, net tons.....	1.15	1.50	1.50
General merchandise, net tons.....	4.00	2.30	2.00

Northern Navigation Co.'s New Vessel.

In our April issue we gave a number of particulars about the steamship which the Northern Navigation Co. is having built for its trade on Lakes Huron and Superior, and in this issue we give an illustration of the vessel. The following additional particulars have been given out: She will be equipped with two pole spars and single smoke funnel, will have straight stem and elliptical stern. The cabins will be capable of accommodating over 400 first-class passengers, about 70 second-class passengers, and about 100 of a crew. The first-class dining room will seat 180 people. The galley, storerooms, refrigerators and pantries will be large and will be equipped with latest modern devices. The passengers will enter on the main deck amidship and pass up a broad stairway to the waiting room on the spar deck, where they will secure accommodations from the purser and steward, whose offices and quarters will be facing the waiting room. The staterooms will be located forward and aft of this waiting room with bathrooms, closets and lavatories grouped conveniently, and the staterooms and quarters on this deck will be lighted by 20-in. brass headlights arranged along each side. A broad stairway will lead from the waiting room to the social hall on the awning deck. This room will be designed for the purpose of a general assembly room. The dining room will be directly aft of this social hall, and staterooms and parlor suites directly forward with a drawing room forward of the parlor suites. The galley and stores will be directly aft of the dining room, and the smoking room and buffet is at the after end of this deck.

A prominent feature of the awning deck will be a clear 6-ft. walk at each side of the ship leading from forward to aft, making a very desirable promenade. Leading directly from the social hall will be two stairways to the observation room on the promenade deck. This observation room will be 80 by 28 ft., and will be practically a glass house, or sun parlor. It will be conveniently arranged to be used for a ballroom or place of entertainment. Directly forward of this observation room will be the captain's and navigating officer's quarters, and the pilot house and bridge, and directly in front of the pilot house will be a large clear deck for passengers; a clear promenade will be arranged on this deck leading from in front of the pilot house clear around on each side and aft of midships of the boat. This will be covered over with awnings,

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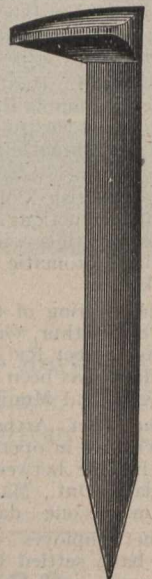
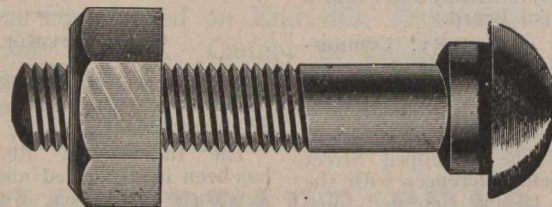
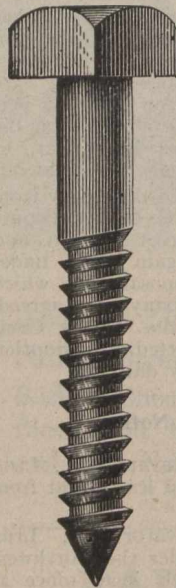
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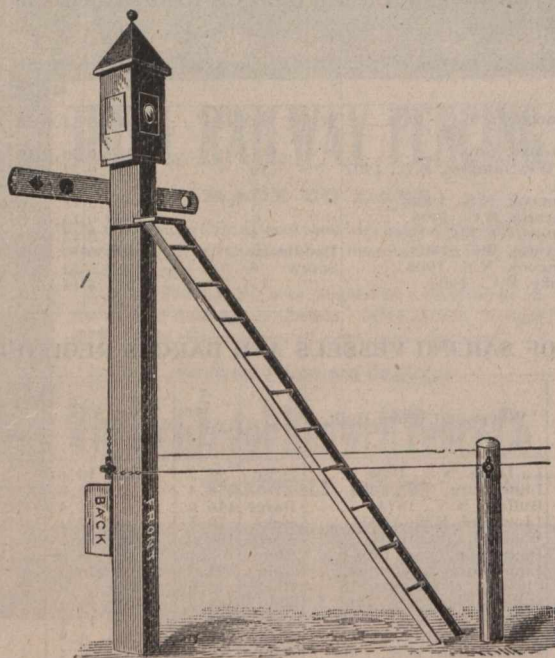
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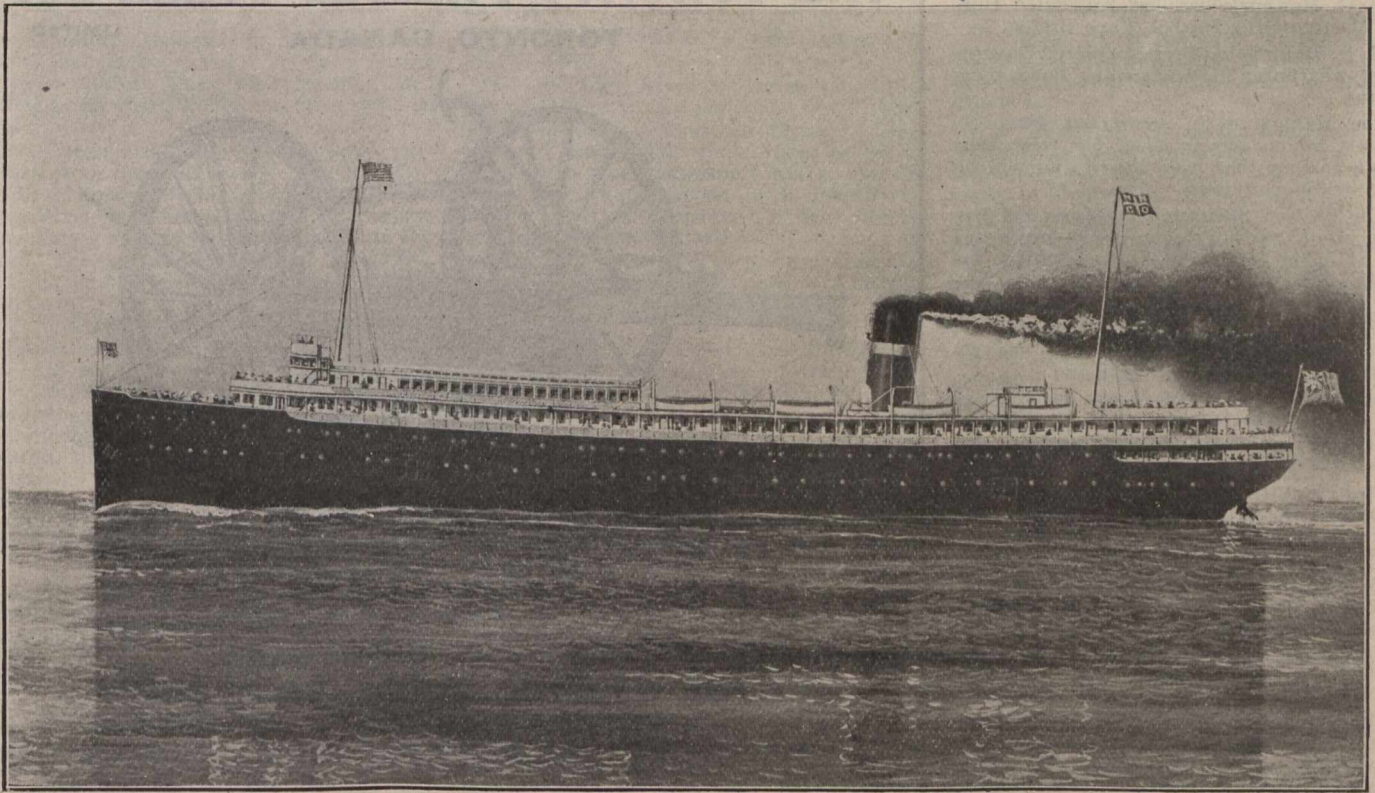


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and will be a very desirable feature for the passengers' pleasure. The accommodations throughout will be finished handsomely in

hardwood panelling, oak, mahogany, etc. Running hot and cold water will be connected to all staterooms, bathrooms and

toilet rooms, and a central station system of call bells will be fitted and connected to all passengers' quarters and staterooms.



NORTHERN NAVIGATION CO.'S VESSEL, NOW UNDER CONSTRUCTION.

Atlantic and Pacific Ocean Marine.

The Allan Line S.S. *Hesperian* arrived at Montreal, May 7, on her maiden trip from Great Britain.

Announcement has been made that the C.P.R. will continue for the present to make Quebec the summer terminus of its Atlantic service.

The C.P.R. steamship *Mount Temple* has been temporarily repaired at Halifax, so that she can proceed to the U.S. where permanent repairs will be undertaken.

The C.P.R. steamship *Empress of Ireland* sailed from St. John, N.B., May 1, being the last of the ocean-going vessels to leave the port for the winter season.

The Thomson Line s.s. *Latona*, which sailed from Montreal May 9, was run down by the s.s. *Japanese* in the English channel recently, and is considered, with her cargo, a total loss.

The C.P.R. steamship *Empress of Britain*, on her first trip on the St. Lawrence route this season, created a record in the number of passengers brought on one vessel, viz., 1,580.

The exports from St. John, N.B., during the winter were valued at \$23,000,685, an increase of \$3,500,000 over the previous year. Wheat shipments totalled 6,500,000 bush., and deal 20,500 standards.

Sir Thos. G. Shaughnessy, President C.P.R., when in London, Eng., in May, emphatically denied the recent report that the C.P.R. Pacific fleet was to be sold to the Peninsular and Oriental Steamship Co.

The C.P.R. steamship *Empress of Britain* in coming to her moorings in Quebec harbor, May 8, came into contact, on account of the strong gale and rough sea, with the G.T.R. tender *Pilot*, smashing the latter's top railing and bridge.

The Allan Line S.S. *Corsican* was the first ocean-going vessel to enter Montreal this season, arriving about 9 a.m., April

30. She was followed shortly after by the Dominion liner *Dominion* and the Thomson liner *Fremona*.

A. Piers, Manager C.P.R. steamship lines, is reported to be negotiating for the purchase of two vessels for the Pacific service, to replace the *Lennox* and *Glenfarg*, at present under a time charter. These two vessels were chartered to replace the *Athenian* and *Tartar*, which were sold to a Japanese company.

Capt. W. J. Farrel, of the British s.s. *Silvia*, has been exonerated from any blame in connection with the loss of that vessel on the *Sow and Pigs* shoal, Mar. 14. It has been decided that the accident was caused by an unknown set of the current and the fact that the whistle and bell on the shoal were not acting properly.

A Liverpool, Eng., despatch recently stated that the White Star Steamship Line will inaugurate a Great Britain-Canada service next year in conjunction with the existing Dominion Line service. The two boats under construction for the Dominion Line, named *Alberta* and *Albany*, will, it is said, be operated by the White Star Line and renamed *Laurentic* and *Megantic*, running alternately with the Dominion Line steamships *Canada* and *Dominion*.

The Thomson Steamship Line is reported to have purchased the S.S. *Consuelo* for its St. Lawrence-London trade, and it intends to have it renamed. The *Consuelo* was owned by T. Wilson, Sons & Co., Hull, Eng., and was built at Newcastle, Eng., in 1900. Her dimensions being: Length, 461.5 ft.; breadth, 52.1 ft.; depth, 31.1 ft.; tonnage, 6,025 gross, 3,960 register; with triple expansion engines, cylinders, 22, 37 and 64 ins. diameter, by 42 ins. stroke, and 783 n.h.p.

Sir Thos. G. Shaughnessy in an interview in London, Eng., recently on the "all red" route, said that the proposed Halifax-

Blacksod Bay route was impossible, chiefly because of the necessary transshipment of passengers and goods. R. Ambrose, M.P., in response to this, stated that Sir Thomas has often been informed that it is intended to "take passengers direct from London to Blacksod Bay without transshipment." Mr. Ambrose does not say how this is to be performed.

The Dominion Line s.s. *Ottawa*, which sailed from Montreal May 9, collided with the Dominion Coal Co.'s s.s. *Trold*, in the Gulf, during a dense fog, May 11. The *Ottawa*, which was considerably damaged, returned at slow speed to Quebec, where she arrived May 13, while the *Trold* made for Caspe Basin, where she was beached. A survey was held of the *Ottawa*, and it was decided to send her to Montreal to discharge cargo, after which she will return to Quebec for temporary repairs, prior to crossing the Atlantic for Great Britain, where permanent repairs will be undertaken. The *Ottawa's* passengers were transferred to the s.s. *Kensington*, which sailed May 16.

The C.P.R. steamship *Milwaukee* collided with the Government icebreaking steamer *Montcalm*, in the St. Lawrence River, May 7, after which the *Montcalm*, which was considerably damaged, headed for Quebec harbor, where she sank, and was subsequently refloated. The *Milwaukee* was apparently undamaged and proceeded to Montreal. An enquiry has been held into the causes of the accident by Commander O. G. V. Spain, whose judgment in the matter is given in another column. Replying to questions in the House of Commons, May 14, the Minister of Marine said: "That the contract price of the *Montcalm* was \$265,233; the amount expended for repairs since her purchase to May 1 was \$119,377.22. From 1904 to May 1 there had been expended for furnishings, \$6,853.19. The total expense for the same period, including salaries of crew, clothing, provisions, etc., was \$657,725.41.

Maritime Provinces and Newfoundland.

G. Watt has been appointed measuring surveyor of shipping at Chatham, N.B.

D. G. McKenzie has been appointed Harbor Master at Big Harbor, Cape Breton.

M. R. McInnis has been appointed Government wharfinger at Amaguadus Pond, Cape Breton.

The Halifax, N.S., steamboat Isaac N. Veasey, which was wrecked last year near North Sydney, has been raised and will be thoroughly overhauled.

The Eastern Steamship Co.'s receiver has been granted permission to issue certificates for \$115,300 for expenses of operation, including \$22,950 for St. John, N.B.

The British survey ship Ellinor is being utilized this summer on the northeast coast of Newfoundland. Capt. Coombe has recently been appointed in command.

Salvage operations are being continued on the wrecked s.s. Tolesby off the Newfoundland coast, but she is gradually breaking up. About 2,800 bales of cotton have been salvaged.

The Plant Line s.s. A. W. Perry, bound from Boston to Halifax and Charlottetown, struck on McMillan's Point, near Port Hawkesbury, N.S., May 19, and it is feared will be a total loss.

G. E. Bentley, Port Greville, N.S., launched a schooner recently, named Irma Bentley. Her dimensions are: Length, 151.5 ft.; breadth, 35.5 ft.; depth, 12.4 ft.; tonnage, 414 register.

The Kennebecasis Steamship Co.'s steamer Hampton opened navigation on the Kennebecasis River April 22, which is about 10 days earlier than it was possible to do in 1907, on account of ice.

The May Queen Steamship Co.'s steamboat May Queen, which has been equipped with new machinery, and additional staterooms, was placed on her route between St. John, N.B., and Chipman, May 13.

J. Whelan, Carbonear, Nfld., and N. Gosse, Spaniard's Bay, Nfld., have been appointed Surveyor of passenger accommodation on board steam and sailing vessels, and Surveyor of lumber, respectively, for those ports.

The s.s. Bridgewater has been fitted up as a wrecking vessel, and is engaged in salvage operations on the Donaldson Line s.s. Kildona, which was recently wrecked off Cape Sable. Capt. Landry is in charge of the work.

The Montreal Transportation Co.'s s.s. Stormount was at Sydney, N.S., recently, for the first cargo of rails this season, from the Dominion Iron and Steel Co., and loaded part for Quebec and the remainder for Port Arthur.

The Kilkeel Co.'s s.s. Kilkeel was damaged in collision with the Dominion Government ferry steamer Scotia at Port Mulgrave, N.S., May 6, and after unloading her cargo of coal, steamed to Halifax, where the necessary repairs were effected.

The St. John, N.B., City Council, May 4, adopted a resolution to the effect that a new harbor improvement committee be appointed, and that steps be taken to use the dredges at present working in the port, in a comprehensive scheme of harbor improvement.

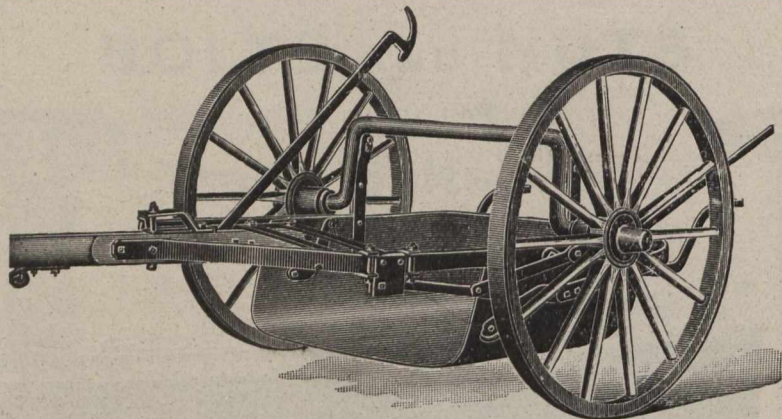
An order-in-council has been passed ordering that sec. 3 of the regulations respecting the Canadian coasting trade, dated April 17, 1883, be amended by providing that licenses taken out for a year or part of a year shall always terminate on Mar. 31, instead of on June 30.

The contract for the icebreaking steamship for New Brunswick-Prince Edward Island winter service has been awarded by the Dominion Marine Department to Vickers Sons and Maxim Ltd., London, Eng. The con-

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Our **SOLID PRESSED BOWL DRAG** and **WHEEL SCRAPERS** are the most satisfactory in the market. They are pressed out of one solid sheet of steel and have no joints or seams.

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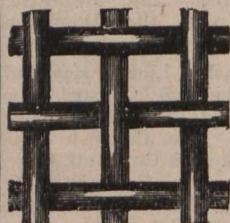


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MONTREAL, QUE.

tract price is £103,000, and delivery is to take place within ten months of the signing.

The C.P.R. is reported to be in negotiation for the purchase of the Maine Coast Transportation Co.'s business. This company owns the steamships Massasoit and Mohawk, vessels of the lake type, and maintains a service between Boston, Mass., and Machias, Me., calling at Eastport, Lubec and other ports en route.

The steamboat Sincennes, recently purchased from the Sincennes-McNaughton Co., by D. J. Purdy, St. John, N.B., for the St. John River route, made a trial trip recently, conveying a number of invited guests up the river. She has been thoroughly overhauled, and will be operated by the Crystal Steamship Co.

G. A. Morris, of Advocate, N.S., has sold the schooner Emily to a Five Islands syndicate, for use in the packet service between Five Islands and St. John, N.B. The Emily was built at Spencer's Island, N.S., in 1902, her dimensions being: Length, 64.6 ft.; breadth, 23.1 ft.; depth, 6.5 ft.; tonnage, 59 register.

The steamboat Harland, which was launched from J. McGill's yard at Shelburne, N.S., May 2, is being built for the Island Steamship Co., Charlottetown, P.E.I., for freight and passenger traffic on the river. Her principal dimensions are: Length, 120 ft.; breadth, 27 ft., and a draft of 6½ ft. She will be fitted with twin screws.

The Lewiston Shipping Co., Ltd., has been incorporated under the Dominion Companies Act, with a capital of \$7,000 and office at Lewiston, N.S., to carry on a general shipping business; to own and operate steam and sailing vessels, wharves, docks, etc. The provisional directors are: G. E. M. Lewis, B. J. Lewis, G. E. Lewis, F. L. Lewis, Truro, N.S., and J. Lewis, Brownville, Me.

The Halifax, N.S., barque Strathern, which sailed from St. John, N.B., Dec. 17, for the West Indies, and which was subsequently wrecked and refloated, and was being brought back to Halifax, was reported, May 5, to have been abandoned at sea, and set on fire. She was built at Maitland, N.S., in 1893, her dimensions being: Length, 212.8 ft.; breadth, 38.8 ft.; depth, 23.5 ft.; tonnage, 1,272 registered.

The Magdalen Islands Steamship Co. is offering for sale its new passenger and freight screw steamship Lady Sybil. Her dimensions are: Length, 165 ft.; breadth, 28 ft.; depth, 12¼ ft. She is fitted with triple expansion engines, with cylinders 16, 26½ and 43 ins. diam., by 30 ins. stroke, with a speed of 12 knots, and capacity of 500 tons dead-weight. There is accommodation for 54 passengers.

The Dominion Department of Marine has under consideration, tenders for dredging at the following places in N.S.: Digby, Cheticamp, Fawson's Cove, Fourchu, Lunenburg, Liverpool, L'Archveque, Mabou, Musquodoboit, McKinnon's Harbor, Mahone Bay, North Sydney, Port Hawkesbury, Petpeswick, Red Islands, Ship Harbor, South Ingonish, Sheet Harbor, Three Islands, Yarmouth, Weymouth and Windsor.

Cushings Ltd. has been incorporated under the New Brunswick Companies Act, with a capital of \$350,000, and head office at Lancaster, N.B., to carry on a lumbering business; to construct, purchase or otherwise acquire and operate steam and other vessels, and to carry on the business of carriers by land and water. The provisional directors are: T. Cushing, R. K. Jones, A. Wilson, G. S. Cushing, St. John, N.B.; and W. C. Cushing, Pittsburg, Pa.

The Newfoundland Marine Department issues a notice to mariners to the effect that a square wooden tower, 24 ft. high, has been erected on Salmon Cove point, from which a

white occulting light with alternate periods of 7 seconds light and 3 seconds dark will be shown during the period of open navigation. The light is dioptric of the sixth order, elevated 104 ft. above sea level, and should be visible in clear weather 10 miles seaward in all directions.

The St. John River Steamship Co., Ltd., has been incorporated under the New Brunswick Companies Act, with a capital of \$48,000 and head office at St. John, to build, purchase or otherwise acquire, and to operate steam and other vessels on the St. John River and branches and elsewhere; to carry passengers and merchandise, and to act generally as common carriers. The provisional directors are: L. A. Curry, R. K. Jones, G. R. Vincent, E. J. Jones and S. J. Vincent, all of St. John, N.B.

A bill respecting signal dues at Halifax, N.S., is under consideration at the current session of the Dominion Parliament. The object of the bill is to permit vessels having a tonnage of less than 150 tons to come into Halifax harbor without paying signal dues. There is a signal station in the harbor, but only vessels of over 150 tons are signalled, and the Government, in introducing the legislation, desired to exempt such vessels as were not compelled to signal from the payment of the dues.

The s.s. Norwood, bound from Glasgow, Scotland, to Sydney, N.S., with a general cargo, and under a time charter to the Dominion Coal Co., was badly damaged by icebergs off Newfoundland recently, and abandoned in a sinking condition near Miquelon. An enquiry into the causes of the loss has been held at St. John's, Newfoundland. She was built at West Hartlepool, Eng., in 1888, her dimensions being: Length, 290 ft.; breadth, 38.2 ft.; depth, 20.3 ft., with triple expansion engines, cylinders 22½, 36½ and 60 ins. diam., by 39 ins. stroke; tonnage, 2,297 registered.

The Maritime Contracting and Commercial Co., Ltd., has been incorporated under the Dominion Companies Act, with a capital of \$20,000 and office at North Head, N.B., to carry on the business of contractors, and to build, purchase, or otherwise acquire and operate vessels of every description, for the conveyance of passengers, mails and merchandise, and to carry on the business of carriers by land and water, warehousemen, wharfingers and forwarding agents; the provisional directors are: E. R. Reid, A. M. Reid, A. D. Reid, J. D. Gaskill, L. J. LeBlanc, North Head, N.B.

Replying to A. A. McLean, P.E.I., in the House of Commons, May 4, on a question of delay caused to shipping at the maritime ports, owing to the priority accorded to steam vessels in the matter of loading coal, the Minister of Marine said, that if the piers at which the sailing vessels had been delayed were Government piers, some regulations might be adopted to meet the situation complained of; but all the piers at which there had been such delays belonged to the coal owners, and were private properties. The suggestion that the Government should by legislation compel the colliery owners to regulate their methods of doing business raised a serious question. The matter was one of civil rights and should be dealt with by the provincial legislatures. He had been told by the coal-owners that the grievance was incidental to the exceptional circumstances of last year, and was not likely to recur.

W. McDonald has been appointed measuring surveyor of shipping for the port of Souris, P.E.I.

The firm of Henry Fry & Co., steamship agents, etc., Quebec, has been dissolved, R. Stanley retiring. The business will be carried on in future by E. C. Fry, under the old firm name.

Province of Quebec Marine.

T. Beland, Quebec, has been appointed agent of the Marine Department for that city in succession to J. U. Gregory, resigned.

The name of the tug D. S. Walker, official number 116,543, registered at Montreal, has been changed by order-in-council to that of Emma L.

The Montreal Transportation Co.'s tug Bartlett, built on the Clyde, Scotland, has been given her trial run and was expected to arrive at Montreal at the end of May.

At the Montreal Sailors' Institute's annual meeting, May 12, among the subscriptions to the building fund acknowledged were: H. and A. Allan, \$500, and H. A. Allan, \$250.

G. W. Stephens, Chairman of the Montreal Harbor Commissioners, who has represented the St. Lawrence division of Montreal in the Quebec Legislature for three years, has announced his withdrawal from political life.

J. W. Hayes, of the Bristol, Eng., Dock and Harbor Commission, who has been on a visit to Canada, inspected the Montreal Harbor Works and other industrial centres, before leaving for home by the Empress of Britain, May 15.

G. W. Stephens, Chairman of the Montreal Harbor Commission, on his recent return from Europe, presented various members of the staff with watches in recognition of their faithful services during his absence.

At the annual meeting of the Quebec and Levis Ferry Co., held May 19, the following officers and directors were elected for the current year: President, D. C. Thomson; Vice-President, C. H. Shaw; other directors, S. H. Dunn, A. Gourdeau, G. E. Allen Jones, H. B. Patton, and J. S. Thom.

The Quebec schooner Blanche Alma, owned by J. Simard, was reported ashore near Berthier, Que., in a bad position, recently. It was not expected that she would be saved. She was built at Ste. Anne, Que., in 1890, her dimensions being: Length, 78.2 ft.; breadth, 22.8 ft.; depth, 8.3 ft.; 87 tons register.

The Minister of Marine has approved of the amendment to the Quebec Harbor Commission's by-law regulating how sea-going vessels shall enter or leave the wet dock, Louise docks. The present regulation is repealed and the following substituted: "No vessel shall enter or leave the wet dock, Louise docks, without the assistance of a tow boat."

The construction of the steel sheds on the Montreal wharves is already well in hand. Shed 11, occupying the width between the King Edward and Jacques Cartier piers, is well on the way. It is anticipated that all construction will be completed before the close of navigation, and that everything will be in readiness for the opening of the 1909 season.

The s.s. Henry R. James, recently purchased from the Rutland Transit Co., Ogdensburg, N.Y., by the Quebec and Levis Ferry Co., arrived at Levis May 7. After being overhauled and some alterations made, she will be placed on the ferry route between Quebec and Levis, and utilized chiefly for conveying railway cars between these points. She was built at Detroit, Mich., in 1890, her dimensions being: Length, 240 ft.; breadth, 42 ft.; depth, 23.4 ft.; tonnage, 2,048 gross, 1,552 net.

The Buckingham Rapid Transit Co., Ltd., has been incorporated under the Dominion Companies Act, with a capital of \$20,000, and office at Buckingham, Que., to carry on the business of transporting goods and passengers on the roads, rivers, lakes and waters of Canada and elsewhere; to build, purchase and otherwise acquire and operate stage and automobile lines, ferries, hotels, warehouses, etc., and to own and operate

vessels of every description, and the necessary wharves, docks, and other facilities for the accommodation of passengers and freight. The provisional directors are: A O. Anderson, J. F. Higginson, W. A. MacCallum, J. Macdonald, D. Robertson, all of Buckingham, Que.

G. W. Stephens, Chairman of the Montreal Harbor Commission, returned to Montreal, May 3, after a trip round the chief European ports, extending over four months, in company with F. W. Cowie, Chief Engineer. The object of the trip was mainly to note the methods adopted in the various chief harbors of Europe, in handling freight and in dealing with shipping generally, with a view to the utilization of the same or similar methods in Montreal harbor. A report has been submitted to the Marine Department embodying the view that a 40 ft. channel from the ocean is a necessity for the future well-being of the port. It may be mentioned in this connection that the Mersey Dock and Harbor Board, Liverpool, Eng., has under consideration plans for the dredging of a 40 ft. channel up the Mersey to Liverpool.

In reply to questions raised in the Senate May 7, respecting Government aid to shipbuilding, Sir Richard Cartwright said the question deserved and would receive the attention of the Government. However, it was not one that would be rashly undertaken, but that the Government would have to be persuaded the benefits hoped for would follow, and that to bonus trade would establish a successful industry. The disadvantage of Canadian shipbuilders in having to pay duties on the parts they now brought into Canada for building ships constituted something which, in his opinion, might well be dealt with, though he did not want to be understood that he pledged the Government on this point.

CANADIAN PACIFIC RAILWAY COMPANY.

ISSUE OF \$24,336,000.00 ORDINARY CAPITAL STOCK.

SPECIAL INTEREST PAYMENT.

As intimated in President's Circular to the Shareholders, dated January 14th, 1908, an Interest Payment of 1¼%, or 75 cents per share, will be paid on October 1st, 1908, on the first three instalments (sixty dollars) per share, on the shares of the above new issue represented by the Certificates of Subscription, to holders of record at 3 o'clock p.m., on June 19th, 1908, who have paid these instalments on or before their respective due dates, and it is hereby notified that this Interest Payment will be mailed from New York, to the registered addresses of holders, on September 30th, 1908.

W. R. BAKER.
Secretary.

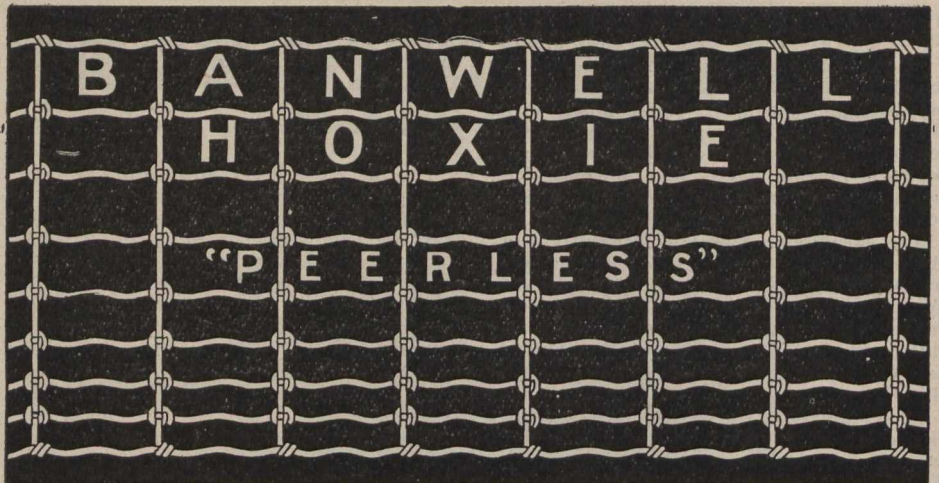
Montreal, 28th May, 1908.

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THE CANADIAN PACIFIC RAILWAY COMPANY have 9,000,000 acres of selected lands for sale in Manitoba, Saskatchewan and Alberta.

Maps, as enumerated below, showing these lands in detail, will be sent free on application.

Map No. 1—Winnipeg to Second Meridian.....	\$ 8.00 to \$15.00 per acre.
Map No. 2—South-Eastern Saskatchewan, 2nd to 3rd Meridians.....	10.00 to 25.00 per acre.
Map No. 3—Main Line, 3rd Meridian to Range 10 W., 4th Meridian(generally)	8.00 " "
Map No. 5—South-Western Alberta.....	8.00 to 15.00 per acre.
Map No. 6—Part of Alberta—Edmonton, Battle and Saskatchewan Rivers Districts—4th Meridian to Range 7, West 5th Meridian.....	10.00 to 25.00 per acre.
Map No. 7—Part of Western Saskatchewan, 3rd to 4th Meridians....	10.00 to 25.00 per acre.

All prices are subject to change without notice.

TERMS OF PAYMENT

An actual settler may purchase not more than 640 acres on the ten instalment plan by paying a cash instalment at time of purchase, interest at six per cent. on the unpaid purchase money at the end of the first year, and the balance of the principal, with interest, in nine equal instalments annually thereafter, as shown in the following table:

160 Acres at \$ 8.00 per acre, cash payment \$191.70 first year's interest \$65.28 and nine instalments of \$160.00	
" " 9.00 " " " 215.70 " " " 73.46 " " "	180.00
" " 10.00 " " " 239.70 " " " 81.62 " " "	200.00
" " 11.00 " " " 263.60 " " " 89.78 " " "	220.00
" " 12.00 " " " 287.60 " " " 97.96 " " "	240.00
" " 13.00 " " " 311.55 " " " 106.10 " " "	260.00
" " 14.00 " " " 335.60 " " " 114.32 " " "	280.00
" " 15.00 " " " 359.50 " " " 122.44 " " "	300.00

Purchasers who do not undertake to go into residence on the land are required to pay one-sixth of the purchase money down, balance in five equal annual instalments with interest at the rate of six per cent. per annum.

Interest at six per cent. will be charged on overdue instalments.

F. T. GRIFFIN, Land Commissioner, Winnipeg.

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This Company has 525,000 acres of selected lands in Manitoba and Saskatchewan which offer excellent opportunities to settlers and investors who desire to secure good lands in well-settled districts. These lands are on sale at the Company's Office at Winnipeg, and at the various land agencies of the Canadian Pacific Railway Company.

F. T. GRIFFIN, Land Commissioner, Winnipeg.

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Ontario and the Great Lakes.

D. McKay has been appointed Harbor Master at Goderich, Ont.

The Niagara Navigation Co.'s steamer Corona opened the Niagara river route May 11.

J. Bassingthwaite has been appointed measuring surveyor of shipping for Sault Ste. Marie, Ont.

The Algoma Central Steamship Co., we are advised, has sold its steamboat Ossifrage to T. J. Stockwell, Amherstburg.

J. Nicholson and W. H. McGauley have been appointed Dominion Government wharfingers at Summerstown and Blind River, respectively.

The wreck of Haney and Miller's barge Resolute has been removed from the dangerous position it occupied in the western entrance to Toronto harbor.

The Turbine Steamship Co.'s steamship Turbinia has been fitted with new propellers, and made her first trip of the season on the Toronto-Hamilton route May 23, creating a speed record.

The St. Lawrence and Chicago Steam Navigation Co.'s lake steamboat E. B. Osler was, it was expected, to undertake her maiden trip at the end of May.

The Canadian Pacific Car and Passenger Transfer Co.'s car ferry Charles Lyon, a press report states, is to be altered, a 70-ft. apron replacing the present 30-ft. one.

The Lake Ontario and Bay of Quinte Navigation Co.'s steamboat North King will run this summer direct to Charlotte, in connection with the New York Central Rd.

It is announced that the U.S. revenue cutter Dallas, which was assigned to the St. Lawrence and Lake Ontario district, has been retired, and will not be placed in commission again.

The Reid Wrecking Co.'s steamboat Fred. Pabst, which was sunk in a collision at the Lake Huron entrance last fall, is to be rebuilt. The contract has been awarded to a Detroit firm.

The Spanish River Navigation Co. has chartered the St. Lawrence River Steamboat Co.'s steamboat Jessie Bain for the season, to run between Manitoulin Island and the north shore.

The Montreal and Cornwall Navigation Co.'s steamboat Filgate has been overhauled and improved during the winter, and was placed on her route between Montreal and Cornwall May 7.

The Toronto Island ferry service was opened May 9, when the new landing stage was used for the first time. The company's new ferry Woodbine was placed on the route May 26.

Detroit vessel owners have agreed to continue their former agreement, to put their boats into commission on June 1. They hold that to do so earlier in the season, when insufficient cargoes are offering, tends to lower rates.

The Winona Steamship Co., operating the s.s. Winona, should have been included in the list of companies managed by R.O. and A. B. Mackay, Hamilton, Ont., merged under the name of the Inland Navigation Co., Ltd., but it was omitted from the particulars furnished us.

The Oswego steambarge Monteagle collided with the Air Line railway bridge across the Welland Canal, May 18, sustaining considerable damage to her deck and boiler houses. On May 21, during a fog, she ran ashore near Oakville, Ont., but was subsequently floated without damage.

A boiler explosion on board the Richelieu and Ontario Navigation Co.'s steamboat

Brockville in Toronto harbor, May 9, caused the death of two men, and injury to three others. At the inquest, the jury stated that the explosion was caused by the interference of some person with the valves.

Capt. A. McNabb, Owen Sound, has been appointed to the command of the Dominion Government survey steamer Bayfield, vice Capt. W. Zealand, resigned. The Bayfield has been recently overhauled, and it is said will be engaged in the vicinity of the Canadian Northern Ry.'s port at Key Harbor.

The Canadian Lakes Transportation Co.'s package freight steamship Tagona, which has been built at Dumbarton, Scotland, is now on the way across the Atlantic, with a cargo of whiskey for various points. On arrival on the lakes, she will be placed on the Port Arthur-Montreal route, with the Kenora and Regina of the same company's fleet, of which she is a sister ship.

The Bay of Quinte and Lake Ontario Navigation Co. recently issued notice to the effect that in view of the extremely high water this spring, and the consequent flooding of the low wharves, it would guarantee safe landing only at Kingston, Picton, Deseronto and Belleville, and would not be liable for any damage sustained in landing of passengers, freight or cattle at other places along the Bay of Quinte.

The steamboat Argyle, owned by the Lake Ontario Navigation Co., Ltd., in liquidation, was offered for sale recently in Toronto; but the bids made were considered too low, and the sale was postponed. She was built at Picton, Ont., in 1899, her dimensions being: Length, 185.1 ft.; breadth, 26 ft.; depth, 9.7 ft.; tonnage, 700 gross, 374 net. She is driven by a paddle wheel, with engine of 274 n.h.p.

The annual returns of the lockmasters on the minor inland waterways subject to the control of the province of Ontario, shows that the lockages during the season of navigation of 1907 were as follows:

	Small Steamers.	Boats.	Scows and Rafts.
Port Carling.....	3,927	936	930
Mary's and Fairy Lake locks.....	423	133	209
Magnetawan.....	1,045	100	444
Total.....	5,395	1,169	1,583

A press report states that a company is being formed under the name of the Peterboro, Midland and Trenton Transportation Co., Ltd., with office at Peterborough, for the purpose of building two stern-wheel steamboats, to start a line of similar vessels on the canals, rivers and lakes in the vicinity for passengers and freight. It is also stated that the vessels which the company proposes to build will have accommodation for 1,000 passengers, and will have berth accommodation, dining-rooms, etc., for 200; and in speed are to average 16 to 18 miles an hour. Capt. Clark, Peterborough, and formerly engaged in the Pacific coast service, is named in connection with the project.

The Dominion Parliament at its current session has under consideration a bill respecting the Meaford harbor, Ont. Its object is to legalize a situation which has existed for some years, and has created some disturbance. The township of St. Vincent was the first authority which had power to deal with the harbor, but in 1874 Meaford was incorporated as a town, the harbor being within its territorial limits. The municipal authority, assuming that it had authority to deal with the harbor, made necessary improvements and levied taxes. As some doubt had been raised as to the action of the town council, the Marine Department was appealed to, and it was decided to ask Parliament to legalize what had been done, and to declare that for the future the harbor shall be vested in the town of Meaford.

The U.S. Lake Survey quotes the lake levels, in feet above tidewater, for April, as follows: Superior, 601.68; Michigan and Huron, 580.82; Erie, 573.22; Ontario, 248.02. Since March, Superior has fallen one inch, Michigan and Huron have risen 2 3/4 ins., Erie, 6 3/4 ins., and Ontario 7 1/2 ins. Superior is 4 ins. lower, Michigan and Huron 5 3/4 ins. higher, Erie 11 1/2 ins. higher, and Ontario 23 ins. higher than the average April stage of the past 10 years. Lake Ontario will probably continue to rise until July, when it will be about 4 ins. higher than in April, after which it will recede, reaching the April level in Sept. The high water in Lake Ontario is caused by ice in the St. Lawrence checking the outflow, to the excessive precipitation in the Ontario basin, to the large flow from the Niagara River due to the high level of Lake Erie, and to the closing of one of the outlets of the lake at the Galops Rapids by the Gut Dam, which if it were not in place would reduce the level in the lake by about 6 ins.

The Ontario Department of Public Works has charge of the duty of maintaining and improving the navigation on a number of minor inland waters. During 1907, considerable dredging was done in the Indian River below the rocks at Port Carling, at a cost of \$1,954.35; and the improvement of Kemp's channel is being gone on with this season. This portion of the channel being improved lies between Bala Park and Acton Island, and the plans for the work in progress provide for the dredging of a steamboat channel 60 ft. wide, to a depth of 6 in. below the level of the lower mitre sill at Port Carling lock. It is hoped to have the channel completed this season. A special appropriation was taken in 1907 for this work, and \$2,775.65 has been expended. Wharf improvements were effected at Port Carling during 1907, at a cost of \$2,000. The Port Carling lock has been improved at a cost of \$537.68; the swing bridge and canal at Port Sandfield repaired at a cost of \$837.54; the clearing of the steamboat channel at Magnetawan, and other work there cost \$1,794.18, and general repairs were given to the Mary's and Fairy Lakes works.

Shipping Companies' Bills of Lading.—After considerable discussion, and a series of conferences with representatives of the various steamship companies and the Dominion Marine Association, the Banking and Commerce Committee of the Senate decided, May 14, to report the bill amending the act respecting the carriage of goods by water, with certain amendments. The principle whereby a steamship company cannot by the terms of its bill of lading, contract itself out of liability for damage to or shortage of goods in transit, is retained. Amendments have been inserted whereby it is provided that steamship companies shall not be held liable for damage to goods by strikes or other causes beyond their control; and that owners of steamships cannot be indicted on a criminal count for a violation of the act; and a new provision is inserted protecting the companies from misrepresentations by shippers as to character and value of consignments; and the clauses providing that steamship companies must defend suits for damages at the point of origin of the consignments, is amended, so that suits must be brought at the Canadian port of shipment or on the other side at the port of arrival.

The Lakeside Pleasure Co., Ltd., has been incorporated under the Ontario Companies Act, with a capital of \$20,000 and office at St. Thomas, to acquire and operate steam and other vessels, in connection with places of amusement. The provisional directors are: A. J. Green, E. O. Penwarden, F. W. Cowley, H. Boughner, A. V. Thayer, St. Thomas, Ont.

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Manitoba, Saskatchewan, Alberta, Etc.

The Dominion Public Works Department is asking for tenders for the construction of a movable dam and other appliances for the St. Andrew's Rapids works near Winnipeg.

The Western Stone Co., Ltd., Winnipeg, capital \$40,000; and the Union Lumber Co., Ltd., Winnipeg, capital \$10,000,000, have been incorporated under the Manitoba Companies Act, with power, among other things, to build, purchase or otherwise acquire and operate steam and other vessels in connection with their businesses.

The Winnipeg Navigation Co. has purchased the steamboat Alberta, said to be the largest steam vessel on inland waters between the Great Lakes and the Rockies. The Canadian register shows the Alberta as owned in Prince Albert, Sask., where she was built in 1904. She is a paddle steamer of 15 h.p., and her dimensions are: length, 130 ft.; breadth, 31 ft.; depth, 4 ft.; tonnage, 315 gross, 214 register.

B.C. and Pacific Coast Marine.

The British steamship Agapanthus was laid up recently at the Esquimalt dry dock for repairs.

It was stated recently that the Dominion Government will spend \$2,000,000 on harbor and dock improvements at New Westminster.

The C.P.R. steamship Otter broke her shaft off the Vancouver coast, May 7, and was towed into port May 8, by the C.P.R. steamship Tees.

F. M. Richardson has resigned the position of inspector of boilers and machinery at Vancouver, to engage in private practice as a consulting marine engineer.

Capt. Alex. McLean has been engaged by Foley, Welch and Stewart, to run cargoes of blasting powder from Prince Rupert, up the Skeena River, for G.T. Pacific Ry. construction work.

J. Robertson, brother of Capt. Robertson of the C.P.R. steamship Princess May, was washed overboard and drowned from the Empress of India on the voyage from Yokohama to Victoria recently.

The R. A. Alley Steamship Line, which operates a line of vessels between Vancouver, Victoria and New Zealand, will be continued under the same name, and under the direct charge of Mrs. R. A. Alley. Mr. Alley died recently.

The Union Steamship Co.'s s.s. Cariboo, built at Troon, Scotland, is on her way to Vancouver to take up service on the coast. A press report states that the company is negotiating for the purchase of a British coasting steamer for use on the B.C. coast.

J. H. Greer, Victoria, has taken over the management of the tug Achates, recently built at Vancouver. Her dimensions are: length, 115 ft.; breadth, 23 ft.; depth, moulded, 13½ ft., and her engines have cylinders 16 and 32 ins. diam. by 20 ins. stroke.

The William C. W. Renny Co., Ltd., has been incorporated under the B.C. Companies Act, with a capital of \$10,000, to conduct a general stevedoring, shipping, and marine insurance business, and to act as agents for shipowners, etc., in the province.

G. A. Keefer, Dominion Government resident engineer at New Westminster, announced recently that it was intended to supply another dredge for harbor work on the coast. The Government had, however, not decided whether to build a dredge in Canada, or to buy one which was at present on sale in Germany.

The C.P.R. tug Nanoose was launched at Victoria recently. Her dimensions are:

Length, 129 ft.; breadth, 24½ ft.; depth, 15 ft.; tonnage, 600 register. She will, it is understood, be used to tow the car ferry barge between the station at Nanoose Bay and the ferry slip at Vancouver, thus connecting the Esquimalt and Nanaimo Ry. with the C.P.R.

Capt. J. W. Troup, Superintendent of the C.P.R. B.C. coast steamship service, arrived in Montreal from Great Britain, May 9. During his visit there he completed the arrangements for the construction of the Princess Charlotte, which he stated would soon be ready for launching, and would probably reach Victoria in Jan., 1909.

A deputation of residents at Metchosin waited on representatives of the Provincial Government recently with a view to enlisting aid in the construction of a wharf for the accommodation of a ferry which it is proposed to establish across Esquimalt harbor, connecting with Victoria. It is intended to run a ferry, at the commencement, for passengers only.

The Western Rivers Improvement Co. was the title of a company for which an act of incorporation was being asked at the current session of the Dominion Parliament. The company desired to have power to effect improvements in the navigation of the Thompson River and tributary waters in B.C. The promoters withdrew the bill after it had passed some of the earlier stages.

The G.T. Pacific Ry. is reported to be about to order a steamboat at Portland, Wash., for use on the Skeena River this summer. A vessel was launched at Victoria, April 15, for the G.T. Pacific Ry.'s Skeena River service, and described in our May issue. We have been advised that the G.T. Pacific Ry., is not negotiating for the construction of a vessel at Portland, nor is there any present intention of doing so.

The Mackenzie Steamship Co. has chartered the British steamship Braemont for a five months' service between B.C. and Alaska ports. The Braemont, formerly Corby Castle, was built at Sunderland, Eng., in 1898, her dimensions being: length, 350 ft.; breadth, 46.2 ft.; depth, 25.6 ft.; tonnage, 3,607 register, with triple expansion engines, cylinders 23½, 40 and 66 ins. diam., by 45 ins. stroke, and 327 n.h.p.

The Vancouver and Victoria Stevedoring Co. has amalgamated with McCabe and Hamilton, and the Washington Stevedoring Co., of Seattle, Wash., for the avowed purpose of reducing the expense of management, and reducing rates where possible. The capital of the combine is \$600,000. The officers of the new company are: President, G. H. Walker, Seattle, Wash.; Vice-President, A. McDermott, Victoria; Sec.-Treas., J. S. Gibson, Seattle, Wash.

Foley, Welch and Stewart, contractors for a portion of the G.T. Pacific Ry., have purchased the steamboat Caledonia, to be utilized in connection with construction work. The Caledonia, which was formerly owned by the Hudson Bay Co., and latterly by the Caledonia Trading Co., was built at New Westminster in 1898, her dimensions being: length, 142.4 ft.; breadth, 30.4 ft.; depth, 4 ft.; tonnage, 569 gross, 359 register. She is a stern-wheeled vessel, with engine of 17 n.h.p.

Judgment was given recently in the appeal of the plaintiffs in the case of Bryce and others vs. the C.P.R., for damages arising out of the collision between the C.P.R. steamship Princess Victoria and the steam tug Chehalis, July 21, 1906; the decision of the lower court being reversed and \$26,500 damages being awarded, less \$4,000 claim not appealed, and \$2,000 conditional on the Admiralty Court's ruling. It is stated that the C.P.R. has given notice of appeal to the judicial committee of the Privy Council.

The Steamship J. A. McKee.

The Western Steamship Co., Toronto, is having a lake steamship built on the Tyne, and it was hoped to have had her in service in May. Capt. W. J. Bassett, Collingwood, who went to England to bring her over, has recently returned home, having abandoned hope that she can be completed in time to take up any route this season, on account of the shipbuilding trades disputes in Great Britain. The vessel, which is to be named J. A. McKee, after the President of the company, is being built to the highest classification of the British corporation, and according to Board of Trade measurements, and is designed to carry 3,150 tons dead weight on 18½ ft. mean draught in salt water. The chief dimensions are: length, between perpendiculars, 248 ft.; breadth, extreme, 43 ft.; depth, moulded, 25 ft.; fore-castle, 42 ft. The officers' quarters are forward, the captain's cabin being on the fore-castle, those for the other officers being below, in addition to two spare cabins. The chief engineer's and steward's cabins are aft on the upper deck, and the general crew are also located aft, on the upper and main decks. The boat is to have 7 cargo hatchways, each 8 by 29 ft., large grain bin, 14 by 34 ft. by 7½ ft. high. The machinery comprises duplicate triple-expansion engines, with cylinders 20½, 33 and 54 ins. diam., by 36 in. stroke, with direct-acting reversing gear, and supplied with steam by two boilers of the cylindrical multi-tubular type, 10 ft. 6 ins. long by 13 ft. 6 ins. diam., at a pressure of 180 lbs. There are also 3 steam winches, and 3 derricks, designed and placed for the expeditious handling of cargo; and a complete electric light installation and steam heating equipment.

Marine Department Appointments.—The announcement of the promotion of Capt. C. E. Kingsmill, R.N., to the rank of Rear-Admiral, as foreshadowed in our May issue, is made in a recent issue of the London, Eng., Gazette. Rear-Admiral Kingsmill has also been appointed to the command of the Canadian marine service, which he takes over June 1. This command has hitherto been vested in Commander O. G. V. Spain, R.N., who was also Wreck and Pilotage Commissioner. The two positions have now been divided, and Commander Spain will devote himself entirely to the duties of the latter office, which have increased considerably in recent years. The appointment of Rear-Admiral Kingsmill presages a broadening and presumably an enlarging of the Canadian marine service, and a steady development of a marine militia. His salary is to be \$3 000 a year.

Lake and Rail Rates.—In the case of Wyman, Partridge and Co. against the Boston and Maine Rd. and other companies, including the G.T.R., the Minneapolis, St. Paul and Sault Ste. Marie Ry., and the Canada Atlantic Transit Co., the Interstate Commerce Commission has decided as follows: Unless a railway forming a part of a lake-and-rail route sees fit to hold itself responsible for losses arising from perils of the sea, it should tender to the public a transportation contract which leaves shippers free to arrange for their own marine insurance. The defendants advanced their through rates from eastern points to Chicago and Minneapolis 3c. per 100 lbs. on first class and 1½c. on rule 25, etc., and these new rates included the cost of marine insurance. The bill of lading issued did not show definitely the rights of the shippers thereunder. The advanced rates are unreasonable and should be reduced unless the carriers issue bills of lading making them responsible for loss by perils of the sea.

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Mariners describe our lighted buoys as "floating lighthouses."

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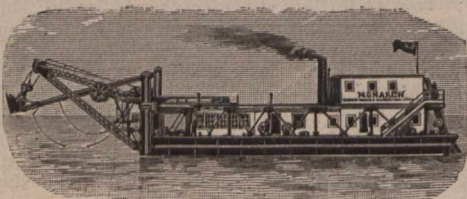
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DERRICKS, CLAM-SHELL BUCKETS, STEEL SKIPS, COAL AND CONCRETE TUBS
AND OTHER CONTRACTORS' MACHINERY.

SUBMARINE SIGNALS

Captain Watt, of the
LUSITANIA, in an
official report on Sub-
marine Signals, says :

"Nearly all my sea life
I have been looking for-
ward to getting the assist-
ance of a reliable sound
signal. Now I feel that
we have got it, and all
that is required, in my
opinion, is its universal
application."

Full Particulars on
Application to the

Submarine Signal

COMPANY

BOSTON, MASS.

Montcalm-Milwaukee Collision Judgment.

Commander Spain, R.N., Dominion Wreck Commissioner, has given the following decision, which is concurred in by Capt. A. Reid, Port Warden of Montreal, and Capt. W. Fraser, of the Donaldson Co.'s s.s. Salacia, who sat with him as assessors to investigate the collision which occurred in Quebec Harbor, May 7, between the Dominion Government s.s. Montcalm and the Canadian Pacific Ry.'s s.s. Milwaukee:

"From the evidence adduced the s.s. Milwaukee, E. Griffiths, master, from London and Antwerp, with a large general cargo, arrived off the Port of Quebec on the night in question. All went well up to that time, and as is usual with all ocean steamships, she slowed down and stopped her engines off the ferry wharf to exchange the sea pilot for the river pilot, manœuvring the engines so as to keep the vessel in position, and to counteract the effects of the flood tide. While in this position, the officers in charge observed a steamer, which they afterwards ascertained to be the Government s.s. Montcalm, coming up rapidly on their port quarter, her green and masthead lights plainly visible. At this time L. E. Bouille, the river pilot, arrived on the bridge of the Milwaukee; the engines of this ship were immediately put full speed ahead (the vessel having lost steerage way, though at no time was she stationary) to proceed on her usual course up the river. The evidence shows that at this time, the green light of the Montcalm was still abaft the Milwaukee's port beam, but she was rapidly overtaking the Milwaukee and passed her till the green light on the Montcalm became obscured from the Milwaukee. The obscuration of this green light was for a very short period, when it came into view again. Immediately this green light was sighted for the second time, the evidence of the master and officers of the Milwaukee goes to show that one prolonged blast of their whistle was given to attract the attention of the Montcalm, and to advise them of their close proximity. This whistle, according to the evidence of the crew of the Montcalm, was not heard on board that ship, but the court considers that it was undoubtedly sounded. The Milwaukee immediately afterwards blew three blasts of the whistle, the orders to stop and go full speed astern being given simultaneously. These orders, by the evidence of the ship's official logs, were carried out immediately, but being a single-screw vessel, the effect was not as prompt or effective as it would have been on a twin-screw vessel, so that almost immediately the vessels came into collision with the resultant damage. Fortunately no lives were lost or any personal injury sustained.

"The Canadian Government twin-screw s.s. Montcalm, S. Belanger, commander, bound up the river from the Gulf, first sighted the s.s. Milwaukee when about the end of the Island of Orleans, some considerable distance ahead. She continued on, keeping their relative distances apart, till the Milwaukee stopped her engines to take on the river pilot, when she rapidly approached, and by the time the exchange of pilots had taken place she was only a little abaft the beam, proceeding very considerably faster than the Milwaukee, and when a short distance ahead of the latter vessel (opposite the Allan wharf, their witnesses and their log show) without giving any warning, that is, one short blast, intimating, 'I am directing my course to starboard,' put her helm hard a port to cross to the north shore, going ahead on the port and backing on the starboard engine, clearly proving that she could not have been as far from the north shore as was endeavored to be shown by the evidence, as the distance was so short that she had to be turned quickly.

Carrying out this manœuvre she fell athwart hawse the Milwaukee, and the collision took place. It appears from the evidence of the Montcalm that it was not until a collision was inevitable that her engines were reversed. The Montcalm being a small vessel compared to the Milwaukee, only 245 ft. long, with twin screws, could, in the opinion of the Court, have been manœuvred and turned around in her own length, whereas the Milwaukee, being a large, heavily laden freight vessel with a single screw, could not so easily be controlled.

"Capt. Belanger, in his evidence, states that he was devoting his attention and carefully scanning the wharves on the north shore to go alongside his berth; no proper attention was given to the movements of the Milwaukee, and she was upon them before they really realized the situation. Capt. Belanger states that he considered the Montcalm was six cables' length from the Milwaukee when he ported his helm, evidently not taking into consideration the fact that the Milwaukee was proceeding up the river, with the combined force of a three-knot flood tide and the way acquired from her own engines, which had been put ahead when the pilot took charge, so as a matter of fact, when he ported his helm, the Milwaukee must have been very near; further, the whole distance from the ferry wharf to the upper end of the Allan wharf is only about 4½ cables.

"Both the Montcalm and the Milwaukee were well founded in every respect, that is to say, that the Board of Trade regulations in regard to boats, life saving apparatus and the certificates of the officers, both deck and engineers, were carried out; the master and chief engineer of the Montcalm holding the best certificates obtainable, as also did the same officers on board the Milwaukee.

"The Court is of the opinion that the master of the Montcalm was guilty of a very grave error of judgment and careless contravention of the rules of the road, in not more carefully ascertaining the exact position of the vessel which he had so recently passed, and before porting his helm, giving the usual signal and receiving a reply. Capt. Belanger has had 35 years' experience in the Government Service, but the court cannot overlook his want of care in this case, which might easily have caused large loss of life, and therefore suspends his certificate for 12 months from May 7, the date of the accident. The master and officers of the C.P.R. steamship Milwaukee are exonerated from all blame."

Coast, Lake and River Officers for 1908.

The following appointments have been made by navigation companies engaged on the coast, lake and river routes for their various vessels during the current year, in addition to those already published. In the first column is given the name of the vessel, in the second, that of the captain, and in the third, that of the chief engineer:

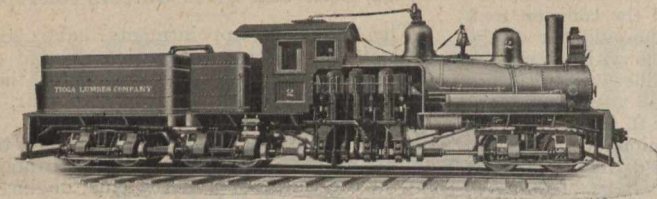
BLACK DIAMOND STEAMSHIP LINE, GLACE BAY, N.S.		
Bonavista	D. C. Fraser	G. Lawson
Borgestad	J. Folkman	
Cabot	J. Kemp	S. A. Stevenson
Cacouna	L. Holmes	P. J. Lahey
Cape Breton	A. F. Macdonald	D. Cameron
Catalone	T. L. Glover	A. Brown
Coban	A. MacPhail	J. Scott
Dominion	H. Dawson	A. S. Mills
Fornebo	C. Hansen	A. Hansen
Fritze	E. Quale	O. Fuglestad
Harold	E. A. Berg	C. Muller
Hermod	A. Gabrieli	C. Schjelderuys
Kronprins Olav	P. A. Nilsen	
Louisburg	H. W. Gould	C. D. Cooke
Mystic	J. Cain	R. A. Richards
Norfolk	B. D. Olsen	G. Glumbeksen
Ocean	G. Olsen	
Oeland	H. Brun	O. Pedersen
Tanke	H. Hansen	
Trold	P. U. Foyn	S. Lie
CRYSTAL STEAMSHIP CO., ST. JOHN, N.B.		
Sincennes	F. Mabee	W. W. Roberts
DOMINION IRON AND STEEL CO., SYDNEY, N.S.		
Ellen	O. Jacobsen	K. Follting
Felix	J. E. Berggreen	L. Lystad
Sygnia	O. Olsen	
MONTREAL AND CORNWALL NAVIGATION CO., CORNWALL, ONT.		
Emerald	J. Lefevre	E. Chertier
Filgate	P. Haim	N. Marchand
NORTHERN NAVIGATION CO., TORONTO.		
City of Toronto	A. A. Bellerose	C. LaVallee
O'CONNOR STEAMBOAT AND HOTEL CO., TEMAGAMI, ONT.		
Belle of Temagami	G. Eyre	A. Wilson
Chance	W. Friday	J. S. Musckett
Spry	C. Moore	
Wanda		G. M. Beecher
QUEBEC TRANSPORTATION AND FORWARDING CO., QUEBEC.		
Aberdeen (bge.)	J. C. Perron	
A. D. (bge.)	M. Lague	
Florence	W. J. Stitt	W. H. Kerr
F. D. Ewen (bge.)	A. Monette	
J. H. Hackett	J. Thibault	J. Goudreau
M. E. Hackett	H. Paquet	J. Legrand
Wm. Hackett	M. Allison	J. Gosselin
Zapotic (bge.)	A. de Repentigny	
TEMAGAMI NAVIGATION CO., TORONTO.		
Temagami	J. Shaw	A. E. Wanamaker
WHITE PASS AND YUKON ROUTE.		
Bonanza King	F. B. Turner	F. J. Mavis
Casca	J. O. Williams	J. R. Gaudin
Dawson	W. H. Turnbull	J. R. Young
Gleaner	T. Richards	J. Kelly
Scotia	W. T. Bragg	D. Sullivan
Selkirk	G. H. McMaster	A. Bertram
White Horse	I. B. Sanburn	P. Larsson

SAULT STE. MARIE CANALS TRAFFIC.

The following commerce passed through the Sault Ste. Marie Canals in April:

ARTICLES.	CANADIAN CANAL	U.S. CANAL	TOTAL
Copper..... Eastbound..... Net tons		1,109	1,109
Grain..... "..... Bushels			
Building stone..... "..... Net tons			
Flour..... "..... Barrels		55,500	55,500
Iron ore..... "..... Net tons			
Pig, iron..... "..... ".....			
Lumber..... "..... M. ft. B.M.			
Wheat..... "..... Bushels	371,400	1,606,080	1,977,480
General merchandise..... "..... Net tons	30	272	302
Passengers..... "..... Number	2	12	14
Coal, hard..... Westbound..... Net tons	2,032		2,032
Coal, soft..... "..... ".....	4,674	7,974	12,648
Flour..... "..... Barrels			
Grain..... "..... Bushels			
Manufactured iron..... "..... Net tons	1,772	3,452	5,224
Iron ore..... "..... ".....			
Salt..... "..... Barrels	5,700	8,545	14,245
General merchandise..... "..... Net tons	10,403	8,369	18,772
Passengers..... "..... Number	87	21	108
Freight—Eastbound..... Net tons	11,172	55,113	66,285
Westbound..... ".....	19,696	21,077	40,773
Total freight..... ".....	30,868	76,190	107,058
Vessel passages..... Number	95	39	134
Registered tonnage..... Net	85,208	51,188	136,396

Canadian Canal opened April 21 and U.S. Canal opened April 27, 1908.



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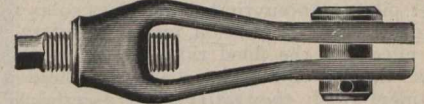
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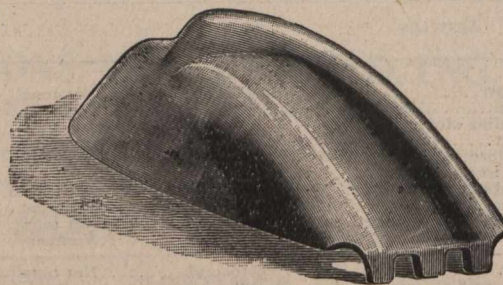
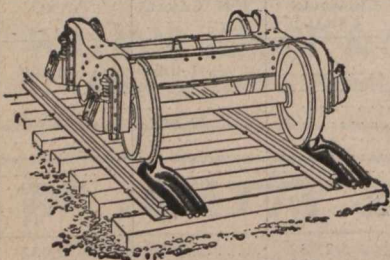
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Sailing from New York Saturdays.

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Boston—Liverpool
Sailing from Boston Wednesdays.

RED STAR LINE

New York—Dover—Antwerp
Sailing from New York Saturdays.

WHITE STAR LINE

New York—Liverpool—Queenstown—
Sailing from New York Thursdays.

N.Y.—Plymouth—Cherbourg—South-
ampton

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Boston—Queenstown—Liverpool

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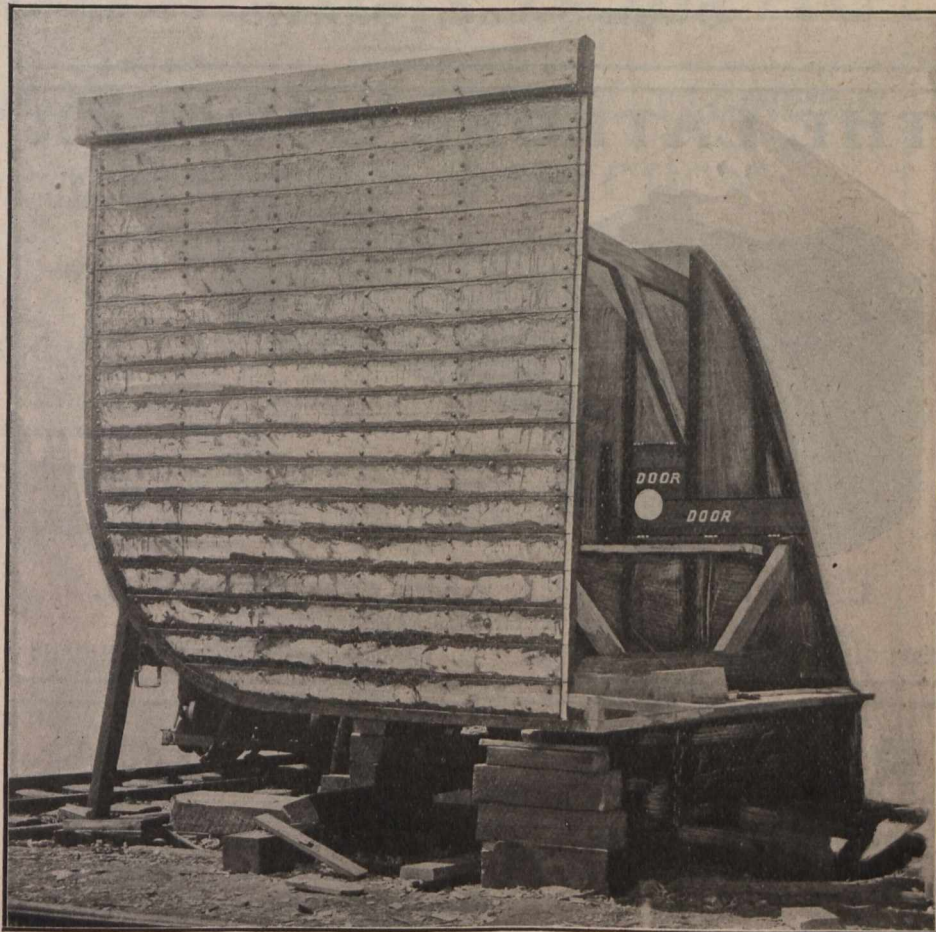
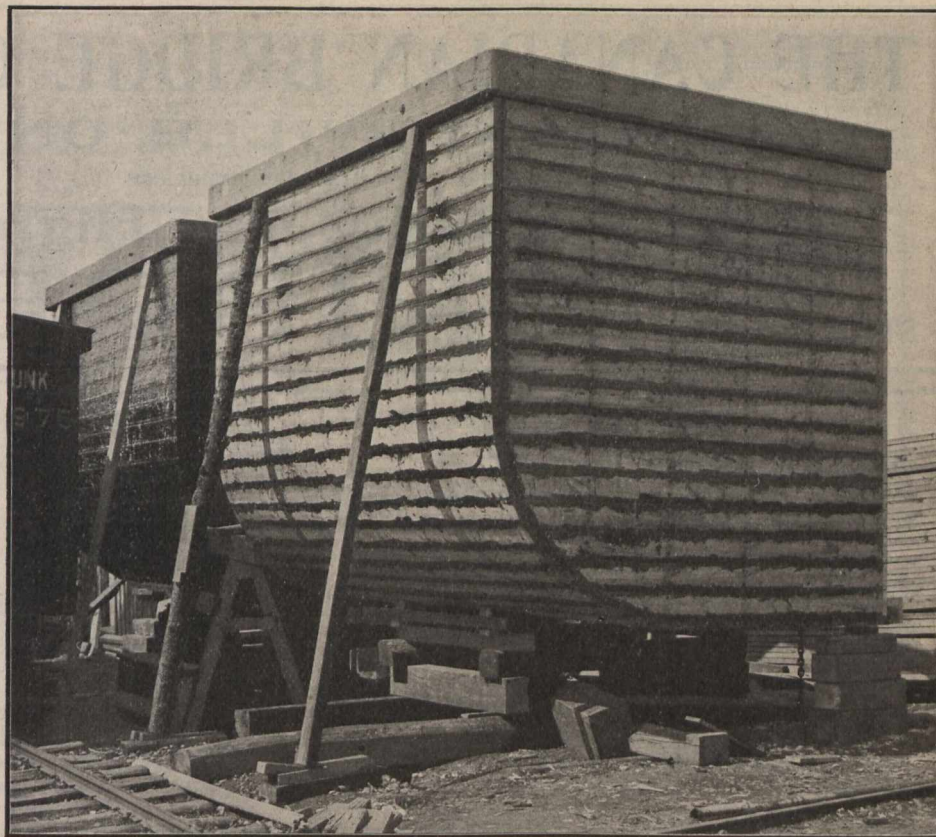
H. G. THORLEY,
PASSENGER AGENT FOR ONTARIO,
41 KING ST. EAST, TORONTO.

Caisson for Repairing Propellers.

With the advent of the fast twin-screw steamship Cayuga in the trans-lake Ontario trade, the Niagara Navigation Co. found itself face to face with the possibility of having the vessel laid off for an indefinite period in case of the breaking of one or more blades of her propellers, owing to the fact that the nearest dry dock is at Kingston, Ont., and that the dock might not be available when required. With a view, therefore, of providing for the speedy repair of the vessel in case of such a contingency, the company has had designed and constructed what may be described as two portable dry docks for the exclusive use of the Cayuga. The arrangement is an ingenious one, and consists of two caissons, each about 16 by 12 ft., and having a depth of about 12 ft., one side being entirely open. The upper of the accompanying illustrations shows the two caissons prior to launching, that in the foreground being for the port side, and that in the rear being for the starboard side. The end of the caisson shown to the right in the illustration is finished with a straight edge, which will fit close up to the sternpost; the edge of the floor of the caisson is also straight so as to fit beneath the keel, the edge of the forward end being shaped to correspond to the curvature of the hull. The two gates or doors showing in the lower illustration, are cut in the forward end to admit of the propeller shaft being brought inside the caisson, an aperture being arranged so as to fit around the shaft. The upper door opens upwards and the lower one downwards. These are opened to admit the shaft, and are then closed by chain attachments.

Each caisson is constructed of steel framework, planked on the outside and braced internally by heavy timbers. When it is required to replace a blade of the propeller, whichever caisson it is necessary to use will be towed to the side of the vessel and, by means of chains passed under the hull, will be drawn into position, rods and turnbuckles attached to the upper portion of the vessel being used to hold it in position. The edges of each caisson, and of the hole through which the shaft passes, are fitted with heavy rubber bands for the purpose of aiding in making a watertight junction. The top of the caisson, when fixed in position for operation, is about 18 inches above the water level. After the caisson is affixed, and the doors closed, the water is pumped out and the workmen are enabled to get inside and to proceed with their work. To facilitate their operations two platforms are provided in each caisson, so that it is not necessary to pump them entirely clear of water. Each caisson weighs about three tons, and has a capacity of about 12,000 gals. of water. It can therefore be gathered that as this quantity of water is pumped out, the pressure on the outside will increase, and aid in holding the caisson in place, and in ensuring the junction with the hull being watertight. The lower illustration shows a portion of the interior of the port caisson, viewed from the stern end, and with the gates closed, the hole for the shaft being in the centre of the forward end. The caissons were designed and constructed under the supervision of B. W. Folger, Manager of the Niagara Navigation Co., by Jno. Whalen.

The device is also valuable for giving access to the stern shaft bearings. The idea is an ingenious one, and the tests made show that it is thoroughly practicable. A single caisson, constructed so as to fit round the stern of a vessel could be utilized for adjusting new blades to single screw steamships, and it might be possible to so develop the idea, by means of screws and double planking, to construct a caisson in such a way that it could be utilized for a number of vessels, not only for repairing propellers,



but for replacing plates and effecting repairs below the water line.

The Richelieu and Ontario Navigation Co. has declared a quarterly dividend of 1¼%, payable June 1.

G. Poliquin, Secretary of the Montreal Longshoremen's Association, pleaded not guilty recently to a number of charges of having obtained sums of money from foreign immigrants on false pretences, and was remanded for enquiry.

THE CANADIAN BRIDGE CO., LIMITED

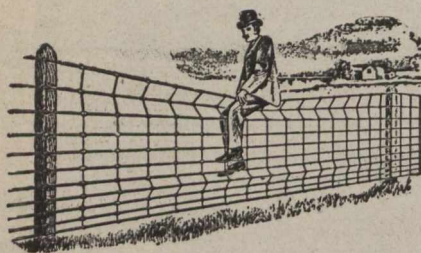
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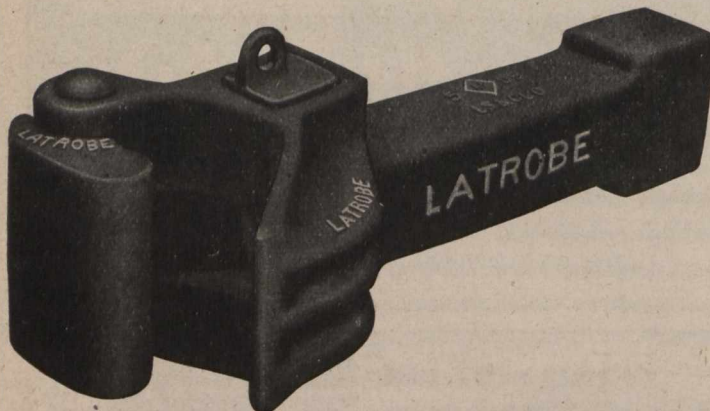
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71 King St. W., Toronto

Vessels Removed from the Register.

The following vessels were removed from the Canadian register during April, for the reasons assigned: Steam.—Aberdeen, Winnipeg, 26 tons, broken up; Athabasca, Winnipeg, 105 tons, broken up; Beaver, Ottawa, 8 tons, burnt; Brandon, Winnipeg, 119 tons, broken up; Kenora, Vancouver, 9 tons, wrecked; Lurline, Windsor, Ont., 40 tons, wrecked; Monarch, Winnipeg, 106 tons, broken up; Princess Helen, Winnipeg, 1 ton, broken up; Regina, Montreal, 411 tons, broken up; Una, Port Arthur, Ont., 12 tons, broken up; Widgeon, Winnipeg, 2 tons, broken up; Sailing.—A. G. Nish, Toronto, 43 tons, broken up; Annie E. Banks, Lunenburg, N.S., 135 tons, transferred to Barbados; Ark, Winnipeg, 49 tons, broken up; Athabasca, Winnipeg, 18 tons, broken up; Baden Powell, Chatham, N.B., 97 tons, wrecked; Bertha McKay, Winnipeg, 158 tons, broken up; Carl, Winnipeg, 32 tons, broken up; Couchiching, Winnipeg, 105 tons, broken up; Elizabeth Ann, Port Hawkesbury, N.S., 11 tons, broken up; Eventide, Windsor, N.S., 97 tons, lost; Fairford, Winnipeg, 437 tons, broken up; Fanny, Winnipeg, 159 tons, broken up; Hugh John, Lunenburg, N.S., 119 tons, transferred to Barbados; I. B. Saint, Halifax, N.S., 74 tons, wrecked; James R., Halifax, N.S., 51 tons, wrecked; Jay, Winnipeg, 32 tons, broken up; John G. Walter, Parrsboro, N.S., 209 tons, transferred to Barbados; Lark, Winnipeg, 39 tons, broken up; Laura, Winnipeg, 35 tons, broken up; Mary A. Duff, Lunenburg, N.S., 90 tons, missing since Feb. 17, 1908; Marjorie J. Sumner, Maitland, N.S., 55 tons, wrecked; No. 2, Ottawa, 31 tons, broken up; Ocean Bride, Halifax, N.S., 23 tons, broken up; One, Winnipeg, 17 tons, broken up; Onyx, Liverpool, N.S., 99 tons, condemned; Palma, Lunenburg, N.S., 249 tons, missing since Jan. 11, 1908; Robert Evans, Winnipeg, 29 tons, broken up; Two, Winnipeg, 17 tons, broken up.

Dry Dock Construction in Canada.

In explaining the Government bill, now before Parliament, to encourage the construction of dry docks, the Minister of Finance in Committee said the amendment was destined to adapt the machinery of the Act, which was put on the statute book some years ago, to some difficulties which had been met in its administration. Under this general legislation a dry dock had been constructed at Halifax, N.S., and another at Collingwood, Ont., and an agreement was entered into for the construction of one at Vancouver, B.C., which had not yet been constructed. The essential difference between the present law and the amendment touches two points. The limitation of the amount in the present law is 3% on \$1,000,000, but in view of the increased size in steamers and the need of larger docks, it is proposed to increase the amount to \$1,500,000, which, at 3%, represents \$45,000. Under the act payments are to be made for 20 years, subject to the condition that the dock shall be at all times kept in successful operation. Some difficulty has been experienced in obtaining capital for the construction of docks on this account, and it was now proposed to provide that in the event of the company failing to operate the dock, the Government shall take possession of it. It is also provided that the subsidy shall be payable in the case of the construction of floating docks. The Government was desirous of promoting the construction of docks at appropriate places, but had no desire to make the conditions so easy that people would be tempted to go into the enterprise of dock construction at any port as a pure speculation, where the business did not warrant the outlay.

Notices to Mariners.

The Dominion Department of Marine has issued the following notices:

No. 29. April 27.—83. Quebec, Saguenay River, Pointe Roche anchorage, occasional lights. 84. Quebec, River St. Lawrence, ship channel between Quebec and Montreal, Lake St. Peter, curve No. 3, light not shown from

Pointe du Lac front range lighthouse, light-ship replaced in position.

No. 30. April 28.—85. Ontario, Lake Superior, Thunder Bay, Fort William, rearrangement of lights.

No. 31. April 30.—86. British Columbia, Vancouver Island, west coast, Pachena Point, lighthouse established, change in sounding of fog alarm.

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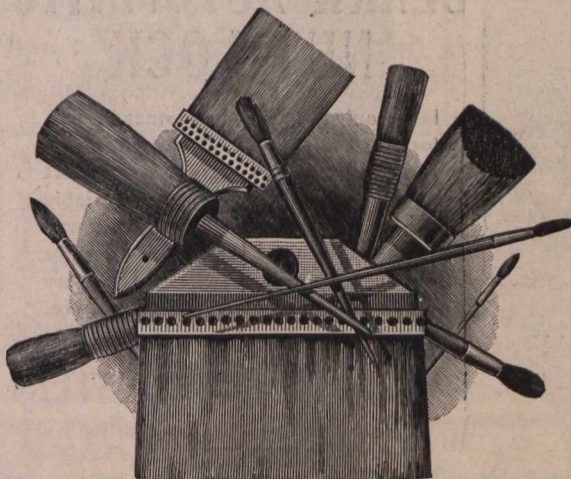
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Norwalk Jett Collision Judgment

The following judgment has been given by Commander Spain, R.N., Dominion Weeks, Commissioner, and pronounced by Capt. A. J. Reid, Port Warden of Montreal and J. Riley, Superintendent of Pilots, who sat with him as assessors, to investigate the collision which occurred between the steamship Norwalk and the barge Jett in Lake St. Louis, on Oct. 23, 1907. The evidence of the crews of the Clide and the barges Jett and Winnipeg was taken at Montreal, Oct. 28, 1907, and of the crew of the Norwalk at Windsor, Ont., Nov. 19, 1907. From the evidence adduced the barge Jett hauled from Prescott for Montreal with a cargo of about 25,000 bushels of wheat seed, left the Soulanges Canal, lashed alongside of the barge Winnipeg, both in tow of the tug Clide. It went well until reaching lightship, Lake St. Louis No. 2, when the Norwalk steamer was seen approaching and came in contact with the Jett immediately after the Clide and her tow had rounded lightship 2, causing the barges to break away from the tug and from each other and also causing the resultant damages. The night was fine, dark but clear, with a strong north wind, and lights were visible a long distance. The barges appear to have been crowded, and were on the south side of the channel as the evidence shows that the Winnipeg, which was on the lee, or south side of the tow, struck one of the stakes or spar buoys on that side of the channel. The Norwalk was bound from Quebec to Detroit with a cargo of pulpwood, the deckload of which was 6 ft high. The weather was fine with a breeze from the northwest; the officer in charge could see the shore and lights plainly; the vessel was drawing 14 1/2 ft and 13' forward, she had touched the ground several times, which may possibly have caused her to steer badly. The tug's lights were seen from the Norwalk at a distance of a tow when about a mile away; she, however, continued on, and immediately after the tug and the tow passing clear of the lightship, came in contact with the barge at a point where the tow had not had time to recover after changing course to follow the tug. "The Court considers that the Norwalk

is to blame for the collision, inasmuch as the tow descending with the current and with a strong wind ahead should have been given the right of way and the Norwalk should have stopped far enough below the lightship to have permitted the tug and her tow to pass into the straight reach of channel between lightship 2 and lightship 1. The collision resulted in serious damage to the Jett and her cargo, and might have resulted in loss of life, (more especially as the steamer Norwalk proceeded on her course without endeavoring to find out in any way what damage she had caused), had the cargo of the barge been wheat or grain, but owing to the peculiar nature of the cargo, the seed, the vessel kept aloft and drifted out of the channel into shoal water where she grounded and the master was unable to deal with the certificate of Capt. Frank Goodrow who was master

of the Norwalk at the time of the casualty, as he holds a S. license and is therefore in this respect outside the jurisdiction of the court. However, the court holds that an action should be instituted against him under the Revised Statutes of Canada, sec. 92. The court also holds that Henry Chesnut, who was acting as pilot of the Norwalk at the time of the casualty, and who holds a Canadian master's certificate of competency as master of any steamer on the inland waters of the Province of Ontario, April 24, 1884, after an examination passed at St. Catharines on March 10, 1884, the court cannot acknowledge Mr. Chesnut as being legally in charge of the Norwalk, as he was not signed on the articles of that vessel nor had he any authority to act as a pilot in the waters then being navigated at the time of the collision, they were in the Montreal Pilotage district, and consequently under the jurisdiction of the Montreal

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treat pilotage authorities, and therefore as he was neither licensed as a pilot nor was an officer of the vessel, his certificate cannot be dealt with, but the facts of the case will be brought to the Department's attention."

Among the Express Companies.

The evidence brought by the French Government for the extradition of a man on a charge of robbery at the American Ex. Co.'s office, Paris, France, was held recently to be insufficient, and he was released from custody at Montreal.

At the annual meeting of the Canadian Ex. Co. held at Montreal, May 2, the following officers and directors were elected for the current year: President, C. M. Hays; Vice-President and Manager, J. Bryce; Secretary-Treasurer, F. Scott; other directors, F. W. Morse, E. H. Fitzhugh, W. Wainwright, M. M. Reynolds, and H. Paton.

At the annual meeting of the Intercolonial Ex. Co., held at Montreal, May 2, the following officers and directors were elected for the current year: President, C. M. Hays; Vice-President and Manager, J. Bryce; Secretary-Treasurer, F. Scott; other directors, F. W. Morse, E. H. Fitzhugh, W. Wainwright, M. M. Reynolds, and H. Paton.

The name of the Hampton and St. Martin's Ry. Co. has been changed to St. Martin's Ry. Co.

The Read Stone Co., which has been incorporated under the New Brunswick Companies Act, with a capital of \$150,000 and offices at Sackville, N.B., is authorized, among other things, to construct wharves, railway sidings, tracks and other transportation facilities, as well as to put up telegraph or telephone lines. The provisional directors are: H. C., G. and H. W. Read, of Sackville.

Canadian Express Co.'s Montreal Building.

The building which has been erected for the Canadian Express Co. on McGill St., Montreal, immediately opposite the G.T.R. general office building, is 130 ft. high from the street level, and contains basement and 10 stories, each floor having an area of about 6,800 sq. ft. The frontages are 114 ft. on McGill St., 86 ft. on St. Paul St., and 79 ft. on Youville Square. The foundation is built of Quebec granite, the superstructure being of grey canyon sandstone from Ohio. The basement will be used by the Canadian Ex. Co. for storage of on hand freight, records, etc. The first or ground floor will be occupied by the Canadian, American and National Ex. Cos. as local offices, freight receiving room, financial department, cashiers, etc. The second and third floors will be devoted to the Canadian Ex. Co.'s general offices. The

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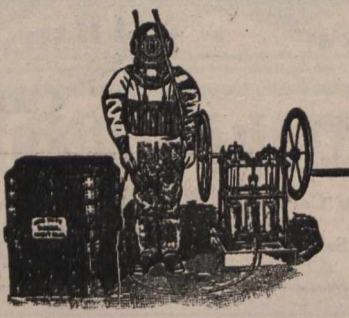
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audit and treasury department will be located on the second floor, while on the third will be the offices of the Vice-President and Manager, the Accountant, tariff department, Superintendent of Money Orders, and the division superintendents. The fourth, fifth and sixth floors are being rented to tenants. The seventh floor will be partly occupied by the G.T.R. Freight Claim Department. The eighth floor will be occupied by the G.T.R. Auditor of Passenger Accounts and staff. The ninth floor will be occupied by the General Purchasing Department, Medical Department, and Secretary of Pension Fund and staff, also by the G.T.R. Insurance and Provident Society, private branch telephone exchange, Superintendent of Telegraph and the offices of the Manager of the Canada Atlantic Transit Co. The tenth floor is being reserved for the G.T.P. Telegraph Co. An illustration of the building was published in our March issue.

The Canadian Ex. Co. will remove from its present quarters in the G.T.R. general office building to its new building early in June. The supply department, which is now located in basement of the G.T.R. general office building, will be removed to the second floor of the C.E. Co.'s local building near Bonaventure station.

Telegraph and Cable Matters.

E. H. Tetu, District Superintendent of the Dominion Government's North Shore lines, who spent the winter in Quebec, has returned to Longue Point de Mingan.

J. D. Oppe, Manager of the Marconi Wireless Telegraph Co. of Canada, has been elected to the directorate of the Marconi Wireless Telegraph Co. of America, for five years.

G. Marconi stated recently that a speed of 24 words a minute has been reached by his system between Canada and Great Britain, and that the business justified a duplication of the plant, for which purpose the shareholders had sanctioned an issue of \$1,250,000.

As a result of a series of interviews with the Minister and Deputy Minister of Railways, and the General Manager of the Intercolonial Ry., the I.C.R. telegraph operators have been granted an increase of pay, amounting to about 10%, the increases to be apportioned to the different positions, as the growth of work and general conditions may warrant.

The telegraph cable between the mainland and Prince Edward Island was broken May 9, by fouling the anchor of the Government steamer Stanley, engaged in placing the

buoys off Cape Traverse. The repairs were completed May 17, and telegraph service resumed. In the interval, the only communication with the island was by means of the steamships Northumberland and Empress.

The Minister of Public Works recently stated in the House of Commons that a proposal had been made to the Government by the Grand Manan Telephone Co., to take over the telegraph cable or cables connecting Grand Manan Island with the New Brunswick mainland. The proposal is still under consideration. The Government operates 7½ knots of cable between Campobello and Grand Manan Island, and 25¼ miles of land lines on the island.

A bill to amend the Railway Act has been given a first reading in the House of Commons, having for its object the provision of an eight-hour day for despatchers and operators on Canadian railways. The bill has been introduced at the request of the parliamentary representative of railway employes, and is being asked for on the ground that an act of the U.S. Congress came into operation April 1, providing for a nine hour day for despatchers and telegraphers. It is not expected that the bill will be passed this session.

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Axles

James Hutton & Co. Montreal.
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International Marine Signal Co. Ottawa.

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Canada Foundry Co. Toronto.
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Canada Foundry Co. Toronto.

Bollers, Stationary and Marine

Babcock & Wilcox (Ltd.) Montreal.

Boiler, Staybolt Iron or Steel Bars

Falls Hollow Staybolt Co. Cuyahoga Falls, Ohio.

Bollers, Steam

Babcock & Wilcox (Ltd.) Montreal.

Bollers, Water Tube

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Bollers Tubes

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Bolsters

Dominion Car and Foundry Co. Montreal.

Bolts, Bridge

Toronto Bolt and Forging Co. Toronto.

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Chicago Railway Equipment Co. . . . Chicago, Ill.
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Brake Shoes

American Brake Shoe & F'dry Co. . Mahwah, N.J.
Canadian Iron and Foundry Co. . . . Montreal.
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Safety Car Heating and Lighting Co. . New York.

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American Car and Equipment Co., Chicago, Ill.
M. Beatty & Sons, Welland, Ont.
Canadian Fairbanks Co., Ltd., Montreal.
J. T. Gardner, Chicago, Ill.
F. H. Hopkins & Co., Montreal.
The W. H. Kelson Co., Montreal.
Kilgore-Peteler Co., Toronto.
Mussens Limited, Toronto.
Toronto Pressed Steel Co., Toronto.

Contractors' Supplies
F. H. Hopkins & Co., Montreal.
Rice Lewis & Son, Toronto.
Toronto Pressed Steel Co., Toronto.

Conveyors, Coal and Ash
Gartshore-Thompson Pipe & Fdry Co., Hamilton.

Cooking Apparatus
Shade Rollers, Montreal.

Copperware
Geo. R. Frowse, Walkerville, Ont.

Copying Presses
James Smart Mfg. Co. (Ltd.), Brockville, Ont.

Corrugated Furnaces
Continental Iron Works, Brooklyn, N.Y.

Counter Scales
Wolfe Brush Co., Pittsburg, Pa.

Couplers, Car and Locomotive
Acme Railway Equipment Co., Philadelphia, Pa.
Latrobe Steel & Coupler Co., Philadelphia, Pa.
McConway & Torley Co., Pittsburg, Pa.
National Malleable Castings Co., Cleveland, Ohio.
Taylor & Arnold, Montreal.
Waltham Steel Castings & Coupler Co., Minneapolis, Minn.

Cross Arms, Top Pins and Side Blocks
Canadian General Electric Co., Toronto.

Cross Arm Braces
Canadian General Electric Co., Toronto.
Toronto Bolt and Forging Co., Toronto.

Crossing Gates
The N. L. Piper Railway Supply Co., Toronto.

Crowbars
B. J. Coghlin & Co., Montreal.
Toronto Bolt and Forging Co., Toronto.

Culvert Pipe (Cast Iron)
Gartshore-Thompson Pipe & Fdry Co., Hamilton.

Cuts
Acton Burrows Limited, Toronto.

Derailing Devices
Hayes Track Appliance Co., Geneva, N.Y.

Derailment Hooks
Dominion Wire Rope Co., Montreal.
The B. Greening Co., Hamilton, Ont.

Derisks
M. Beatty & Sons, Welland, Ont.
Miller Bros. & Toms, Montreal.
Mussens Limited, Montreal.

Dies
Butterfield & Co., Rock Island, Oie.

Diving Outfits
John Date, Montreal.
Mussens Limited, Montreal.

Doors (Ex-Platform Trip)
O. M. Edwards, Syracuse, N.Y.

Drift Signs
Canadian Oil Co., Montreal.
Acton Burrows Limited, Toronto.

Drift Gear
Cardwell Mfg. Co., Chicago, Ill.
Farlow Draft Gear Co., Baltimore, Md.
McCord & Co., Chicago, Ill.
Standard Coupler Co., New York City.

Drawing Materials
James Foster, Toronto.

Dredges
M. Beatty & Sons, Welland, Ont.

Drills
W. Abbott, Montreal.
Wolfe Brush Co., Pittsburg, Pa.

Drills, Twist
Baldwin Steel Co., New York City.
Canadian Oil Co., Montreal.

Dry Goods
The Hudson's Bay Co., Montreal.

Dump Cars (Contractors')
Canadian Fairbanks Co., Ltd., Montreal.
F. H. Hopkins & Co., Montreal.
Kilgore-Peteler Co., Toronto.
Toronto Pressed Steel Co., Toronto.

Dynamo and Electric Castings
American Brake Shoe & Fdry Co., Mahwah, N.J.

Economizers
Babcock & Wilcox (Ltd.), Montreal.

Electric Car Route Signs
Acton Burrows Limited, Toronto.

Electric Cranes
Babcock & Wilcox, Montreal.
Canada Foundry Co., Toronto.
Canadian Fairbanks Co., Ltd., Montreal.
Dominion Bridge Co., Montreal.
Mussens Limited, Montreal.

Electric Ry. Brake Shoes
American Brake Shoe & Fdry Co., Mahwah, N.J.

Electrical Fuses
Standard Explosives Limited, Montreal.

Enamelled Iron Signs
Acton Burrows Limited, Toronto.

Engineers' Supplies
Canadian Fairbanks Co., Montreal.
Kilgore-Peteler Co., Toronto.

Engines, Gasoline
Canadian Fairbanks Co., Montreal.
Ontario Wind Engine and Pump Co., Toronto.

Engines, Hoisting
M. Beatty & Sons, Welland, Ont.
Canadian Fairbanks Co., Ltd., Montreal.

Engines, Stationary and Marine
Polson Iron Works, Toronto.

Explosives
Standard Explosives Limited, Montreal.

Earl Office Signs
Acton Burrows Limited, Toronto.

Fencing
Banwell-Hoxie Fence Co., Hamilton, Ont.
Canada Foundry Co., Toronto.
McGregor Banwell Fence Co., Walkerville, Ont.
Owen Sound Wire Fence Co., Owen Sound, Ont.
Page-Wire Fence Co., Ltd., Walkerville, Ont.

Fire Brick
Mussens Limited, Montreal.

Flags
The Hudson's Bay Co., Montreal.

Fog Signals
The Hudson's Bay Co., Montreal.

Fog Signals
International Marine Signal Co., Ottawa.

Forgings
Canada Car Co., Limited, Montreal.
Cleveland City Forge & Iron Co., Cleveland, O.
Crossen Car Mfg. Co., Cobourg, Ont.
Hamilton Steel & Iron Co., Ltd., Hamilton, Ont.
Standard Steel Works, Philadelphia, Pa.

Fuse Batteries
Standard Explosives Limited, Montreal.

Fuse Detonators
Standard Explosives Limited, Montreal.

Gaskets
McCord & Co., Chicago, Ill.

Gas Pipe (Cast Iron)
Gartshore-Thompson Pipe & Fdry Co., Hamilton.

Gates
Banwell-Hoxie Fence Co., Hamilton, Ont.
Canada Foundry Co., Toronto.
McGregor Banwell Fence Co., Walkerville, Ont.
Owen Sound Wire Fence Co., Owen Sound, Ont.
Page-Wire Fence Co., Ltd., Walkerville, Ont.

Glue Brushes
Wolfe Brush Co., Pittsburg, Pa.

Grain Elevators
John S. Metcalfe Co., Montreal.

Groceries
The Hudson's Bay Company, Montreal.

Hammers
James Smart Mfg. Co., Brockville, Ont.

Handcarts
Canadian Fairbanks Co., Ltd., Montreal.
Crossen Car Mfg. Co., Cobourg, Ont.
F. H. Hopkins & Co., Montreal.
Mussens Limited, Montreal.
Rice Lewis & Son, Toronto.
Toronto Pressed Steel Co., Toronto.

Hardware
The Hudson's Bay Co., Montreal.
Rice Lewis & Son, Toronto.

Headlights
The N. L. Piper Railway Supply Co., Toronto.

Headings
Crossen Car Mfg. Co., Cobourg, Ont.

Hoisting Machinery
Brown Hoisting Machinery Co., Cleveland, Ohio.
Canadian Fairbanks Co., Ltd., Montreal.

Hoists (Pneumatic)
Wolfe Brush Co., Pittsburg, Pa.

Hollow Staybolt Iron and Steel Bars
Falls Hollow Staybolt Co., Cuyahoga Falls, Ohio.

Hoppers, Car (Wet or Dry)
Duner Co., Montreal.

Hydrants
Canadian Fairbanks Co., Ltd., Montreal.
Kerr Engine Co., Ltd., Walkerville, Ont.

Insulations
Acton Burrows Limited, Toronto.

Inspections
R. W. Hunt & Co., Montreal.

Instruments, Surveying and Engineering
James Foster, Toronto.

Interlocking Signals
Montreal Steel Works, Montreal.

Iron and Steel Bars
Hamilton Steel & Iron Co., Ltd., Hamilton, Ont.

Iron, Pig
Hamilton Steel & Iron Co., Ltd., Hamilton, Ont.

Iron Signs
Acton Burrows Limited, Toronto.

Iron Staybolt Bars
Falls Hollow Staybolt Co., Cuyahoga Falls, Ohio.

Jacks
James Smart Mfg. Co., Brockville, Ont.

Japans
McCaskill, Dougal & Co., Montreal.

Journal Bearings
Canadian Bronze Co., Montreal.
Crossen Car Mfg. Co., Cobourg, Ont.
Kerr Engine Co., Walkerville, Ont.
Jas. W. Pyke & Co., Montreal.
St. Thomas Brass Co., St. Thomas, Ont.

Journal Boxes
N. C. Holden Co., Ltd., Montreal.
McCord & Co., Chicago, Ill.

Kalsomine Brushes
Wolfe Brush Co., Pittsburg, Pa.

Lager Beer, &c.
E. L. Dewey, Montreal.

Lamps, Incandescent
Canadian Westinghouse Co., Hamilton, Ont.

Lamps and Lanterns
The Hudson's Bay Company, Montreal.
The Hiram L. Piper Co., Montreal.
The N. L. Piper Railway Supply Co., Toronto.

Launches
Polson Iron Works, Toronto.

Lights, Contractors' and Wrecking
Canadian Fairbanks Co., Ltd., Montreal.
F. H. Hopkins & Co., Montreal.
Mussens Limited, Montreal.

Locomotive Driver Brake Shoe
American Brake Shoe & Fdry Co., Mahwah, N.J.
Canadian Iron and Foundry Co., Montreal.

Locomotive Gauges
Taylor & Arnold, Montreal.

Locomotive Lagging and Covering
Taylor & Arnold, Montreal.

Locomotive Pop Valves
Taylor & Arnold, Montreal.

Locomotives (Compressed Air)
Burnham, Williams & Co., Philadelphia, Pa.
Canadian Locomotive Co., Kingston, Ont.
Montreal Locomotive Works (Ltd.), Montreal.
H. K. Porter Co., Pittsburg, Pa.

Locomotives (Geared)
Lima Locomotive Co., Lima, O.

Locomotives (Electric)
Burnham, Williams & Co., Philadelphia, Pa.
Canada Foundry Co., Toronto.
Montreal Locomotive Works (Ltd.), Montreal.

Locomotives (Logging)
Burnham, Williams & Co., Philadelphia, Pa.
Canadian Locomotive Co., Kingston, Ont.

Locomotives (Rack)

Burnham, Williams & Co. Philadelphia, Pa.
 Canadian Locomotive Co. Kingston, Ont.
 Montreal Locomotive Works (Ltd.) Montreal.

Locomotives (Steam)

American Car & Equipment Co. Chicago, Ill.
 Burnham, Williams & Co. Philadelphia, Pa.
 Canada Foundry Co. Toronto.
 Canadian Fairbanks Co., Ltd. Montreal.
 Canadian Locomotive Co. Kingston, Ont.
 J. T. Gardner Chicago, Ill.
 Hotchkiss, Blue & Co. Chicago, Ill.
 The W. H. Kelson Co. Montreal.
 Lima Locomotive Co. Lima, O.
 Montreal Locomotive Works (Ltd.) Montreal.
 H. K. Porter Co. Pittsburg, Pa.
 Vulcan Iron Works Wilkesbarre, Pa.

Locomotive Staybolts

Falls Hollow Staybolt Co. Cuyahoga Falls, Ohio.
 Flannery Bolt Co. Pittsburg, Pa.

Lubricators

McCord & Co. Chicago, Ill.
 Taylor & Arnold Montreal.

Machine Tools

W. Abbott Montreal.
 Canadian Fairbanks Co. Montreal.

Machinery, Power

Jno. McDougall, Caledonian Iron Works Co. Montreal

Machinery Special

Miller Bros. & Toms Montreal.

Machinery, Transmission

Canadian Fairbanks Co., Ltd. Montreal.
 Miller Bros. & Toms Montreal.

Manganese Steel Castings

Montreal Steel Works Montreal.

Manhole Frames and Covers

American Brake Shoe & F'dry Co. Mahwah, N.J.
 Canadian Iron and Foundry Co. Montreal.

Marine Supplies

Rice Lewis & Son Toronto.

Measuring Tapes

Lufkin Rule Co. Saginaw, Mich.

Milepost Numbers

Acton Burrows Limited Toronto.

Milling Cutters

W. Abbott Montreal.
 Baldwin Steel Co. New York.

Motors

McCord & Co. Chicago, Ill.

Nickel

The Orford Copper Co. New York.

Nickel for Nickel Steel

The Orford Copper Co. New York.

Numbers

Acton Burrows Limited Toronto.

Nut Locks

Dunning & Eckenstein Montreal.
 Positive Lock Washer Co. Newark, N.J.

Nuts, Square and Hexagon

Canada Foundry Co. Toronto.
 Toronto Bolt and Forging Co. Toronto.

Oakum

The Hudson's Bay Company

Office Fittings

Canadian Office & School Furniture Co., Preston, Ont.

Office Signs

Acton Burrows Limited Toronto.

Oil Furnaces

Railway Materials Co. New York City.

Oil Tank

S. F. Bowser & Co. Limited Toronto.

Oils

Canadian Oil Co. Toronto.
 Galena Signal Oil Co. Franklin, Pa., and Toronto.

Packaging

Canadian Fairbanks Co., Ltd. Montreal.
 The N. L. Piper Railway Supply Co. . . . Toronto.

Paint Brushes

Wolfe Brush Co. Pittsburg, Pa.

Painters' Dusters

Wolfe Brush Co. Pittsburg, Pa.

Painters' Scrubs

Wolfe Brush Co. Pittsburg, Pa.

Painters' Wall Brushes

Wolfe Brush Co. Pittsburg, Pa.

Paints

Canadian Oil Co. Toronto.

Pictorial Post Cards

Valentine & Sons Publishing Co. Montreal.

Pinch Bars

The N. L. Piper Railway Supply Co. . . . Toronto.

Pipe and Pipe Coverings

Wm. C. Baker Heating & Supply Co. . . . New York.

Pipe Stocks

Butterfield & Co. Rock Island, Que.

Platforms, Steel

Standard Coupler Co. New York City.

Ploughs, Contractors'

Mussens Limited Montreal.
 Toronto Pressed Steel Co. Toronto.

Pneumatic Tools

N. J. Holden Co., Ltd. Montreal.

Porter

E. L. Drewry Winnipeg.

Portable Bollers

Babcock & Wilcox (Ltd.) Montreal.

Printing

The Hunter-Rose Co. Toronto.
 The Mail Job Printing Company Toronto.

Pumps

S. F. Bowser & Co., Limited Toronto.
 Canadian Fairbanks Co. Montreal.
 Canada Foundry Co. Toronto.
 Ontario Wind Engine and Pump Co. . . . Toronto.
 James Smart Mfg. Co. Brockville, Ont.

Pumps (Centrifugal)

M Beatty & Sons Welland, Ont.

Rail Benders, Roller

F. H. Hopkins & Co. Montreal.
 Montreal Steel Works Montreal.

Rails (new)

Dominion Iron & Steel Co. Sydney, N.S.
 Drummond, McCall & Co. Montreal.
 J. T. Gardner Chicago, Ill.
 J. J. Gartshore Toronto.
 F. H. Hopkins & Co. Montreal.
 Kilgore-Peteler Co. Minneapolis, Minn.

Rails (for relaying)

F. H. Hopkins & Co. Montreal.
 J. J. Gartshore Toronto.
 Mussens Limited Montreal.
 Jas. W. Pyke & Co. Montreal.

Rail Joints

The Rail Joint Co. of Canada Montreal.

Railway Pile Drivers

F. H. Hopkins & Co. Montreal.
 Mussens Limited Montreal.

Railway Supplies

Canadian Fairbanks Co. Montreal.
 The W. H. Kelson Co. Montreal.
 The Hiram L. Piper Co. Montreal.
 The N. L. Piper Railway Supply Co. . . . Toronto.
 Rice Lewis & Son Toronto.

Reamers

W. Abbott Montreal.
 Baldwin Steel Co. New York.
 Butterfield & Co. Rock Island, Que.

Refrigerators

Geo. R. Prowse Montreal.

Rivets, Boiler, Bridge and Structural

Toronto Bolt and Forging Co. Toronto.

Rolled Wheels

Standard Steel Works Philadelphia, Pa.

Roof Trusses

Canadian Bridge Co. Walkeville, Ont.
 Dominion Bridge Co. Montreal.

Rope

F. H. Hopkins & Co. Montreal.
 The Hudson's Bay Co.

Rotary Snow Ploughs

Crossen Car Mfg. Co. Cobourg, Ont.

Sash Balances

O. M. Edwards Syracuse, N.Y.

Sash Locks

O. M. Edwards Syracuse, N.Y.

Saw Steel

Montreal Steel Works Montreal.

Scoria Blocks

W. H. Knowlton Toronto.

Scrapers (Wheel and Drag)

Bechtels Limited Waterloo, Ont.
 F. H. Hopkins & Co. Montreal.
 Mussens Limited Montreal.
 Toronto Pressed Steel Co. Toronto.

Screw Plates

Butterfield & Co. Rock Island, Que.

Screws, Coach and Lag

Toronto Bolt and Forging Co. Toronto.

Semaphore Arms

Acton Burrows Limited Toronto.

Semaphores

The N. L. Piper Railway Supply Co. . . . Toronto.

Sewer Pipe (Cast Iron)

Gartshore-Thompson Pipe & F'dry Co., Hamilton.

Shade Rollers

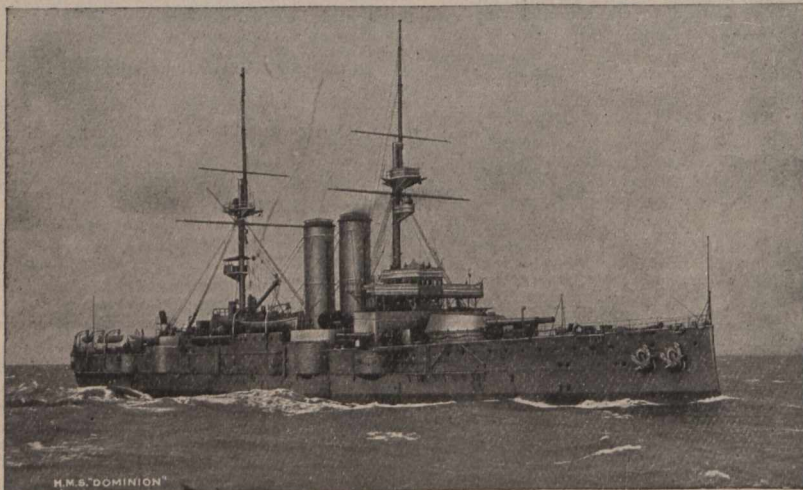
O. M. Edwards Syracuse, N.Y.

Shafting, Hollow

Falls Hollow Staybolt Co. Cuyahoga Falls, Ohio.

Shaking Grates

Babcock & Wilcox (Ltd.) Montreal.

**BABCOCK & WILCOX**

LIMITED

PATENT WATER-TUBE BOILERS

(Over 6,000,000 H.P. in use)

FOR MARINE AND STATIONARY PURPOSES

This cut shews H.M.S. "Dominion," in which are installed sixteen "B. & W." boilers—these are the standard adopted by the British Admiralty.

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