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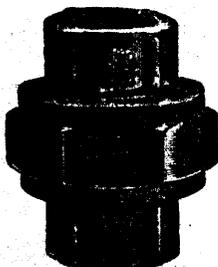
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## The President of the G.N.W.T. Co.

Harvey Prentice Dwight, whose portrait appears on this page, was born of New England parents at Belleville, Jefferson County, N.Y., Dec. 23, 1828. He came to Canada in 1847, & secured a position as an operator for the Montreal Telegraph Co. As business increased in Canada West he was appointed Western Superintendent of the Co. In 1881, when the Montreal & Dominion Telegraph Companies were leased to the G.N.T.W. Co., he was appointed General Manager, & in 1892 was elected President of the G.N.W.T. Co. Three years ago, at a banquet tendered him at the Toronto Club, on his completing 50 years of continuous telegraph service, he made a most interesting speech, from which the following extracts in regard to his career are taken:—

I was brought up on a little stumpy, stony, newly-cleared farm a few miles south of Oswego, where my father, with such assistance as I could render him, occupied his spare time in making flour barrels for the mills at Oswego. When about 18 years of age it dawned upon my mind very forcibly that I had better get out & find some way of making a better living, if possible, than I seemed likely to ever make at home. The erection of a telegraph line had just been completed between Oswego & Syracuse, & I made application & obtained permission to enter the Oswego office in order to learn the business of an operator. I had heard about this time that a telegraph line was being built by the Montreal Telegraph Co. in Canada, where I thought I might get employment. After ascertaining the name of the Superintendent, O. S. Wood, I wrote to him applying for employment, & received a prompt reply, in which he asked, as soon as I was able to manage a small office, to report myself, which in due course I did. I came over from Oswego to Kingston on Aug. 27, 1847, where I met Mr. Wood by appointment, & proceeded with him on the same day to Belleville for the purpose of opening an office there on the line which had been erected during that season between Quebec & Toronto, a distance of 500 miles, on which some 12 or 15 offices were being opened. Mr. Wood, I may mention, was the first pupil of Professor Morse, & one of his most intimate friends. We took instruments along with us, & opened the office in Belleville the following day, where I was left in charge, & where I remained for a couple of months. At the end of that time I was ordered to Montreal, to take my place in that office as an operator. In these early days I might say that a telegraph operator was looked upon as of some importance, & the telegraph office a decided curiosity.

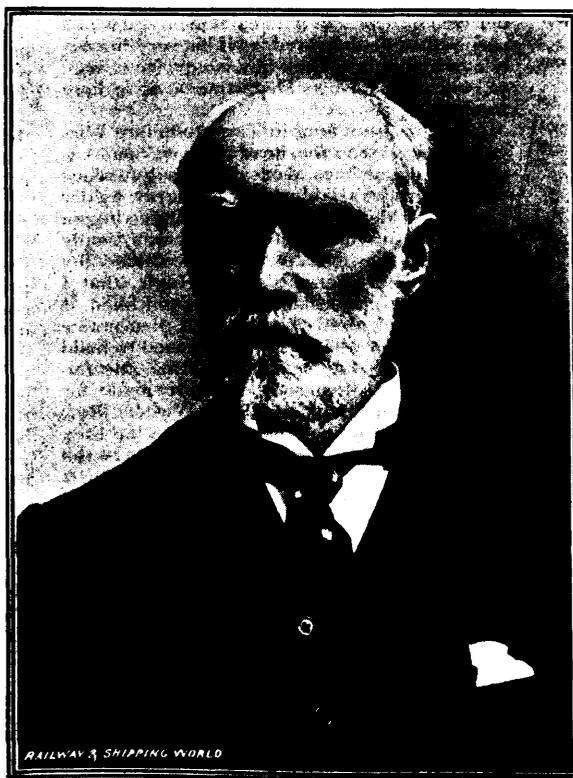
During my stay in Belleville I became ac-

quainted with John Ross, a young lawyer, who afterwards became the Hon. John Ross, who was the first President of the Grand Trunk Ry., & one of the foremost men in Canada. I also became acquainted with Andrew Darling, known then, & for a long time afterwards, as the first & only commercial traveller in Canada, & Mackenzie Bowell, the young editor of the Belleville Intelligencer, now Sir Mackenzie Bowell. A few months ago I received a letter from Sir Mackenzie, in which he wrote as follows:—"Seeing your name reminds me of the time, about 50 years ago,

Holton; Mr. McPherson, afterwards Sir David McPherson; Hon. John Young, & many other men of the day in Montreal, whose names became very familiar to me, & have remained so ever since. Our staff consisted of four or five persons—our Superintendent, myself as Chief Operator (& sometimes the only one), one or two clerks, & one messenger, a faithful old soldier, who delivered messages with a good deal more reliability than speed.

I remember well being terrified & almost paralyzed one day by the clerk from the outer office, who came rushing into the operating room in an excited manner to tell me that Lord & Lady Elgin had called to see the working of the telegraph, & almost before I knew it they were both beside me as I was sending a message over the line. They were accompanied by Lady Alice Lampton & Lord Mark Kerr. Mr. Wood, our Superintendent, soon came in, however, & relieved me from the duty of explaining to the distinguished party the working of the instruments. Lord Elgin made such an impression upon my mind that I have ever since remembered him as one of the handsomest men I ever saw. I heard him speak upon one or two occasions in Montreal, & made up my mind, & have always thought so since, that he was a very great man. Not long after this visit of Lord Elgin to the office I saw his carriage being pelted by a shower of stones thrown by an excited mob as he was leaving the Parliament House, where he had been to sanction some bills which had been passed by Parliament, & which included what was called the Rebellion Losses Bill, about which there had been great excitement throughout the country. After Lord Elgin's carriage, with its broken windows, had escaped, the mob rushed down the street towards the Parliament House, arming themselves on the way with paving stones picked up on the street, & surrounding the building, stoned the windows—the members still present making their escape in the most disorderly manner— & set fire to the building. I stood in a safe doorway on the opposite side of the street & witnessed the whole scene, of which I retain the most vivid recollection.

The Post Office Department at the time I was in Montreal was in charge of the English Government, & the Postmaster-General, Mr. Stayner, was stationed in Montreal, as I have special occasion to remember. A mail steamer was reported from below in a message addressed to Mr. Stayner, & knowing that this news was being anxiously looked for, on discovering that our only messenger was out, I put on my hat & ran to the Post Office, a short distance up St. James Street, without waiting to put the message in an envelope, & delivered it in breathless haste to the great



HARVEY PRENTICE DWIGHT,  
President & General Manager, Great Northwestern Telegraph Co.  
of Canada.

when you were a telegraph operator in Belleville, when you one day read off from the instrument while I copied down the first telegraph news despatch ever sent over the wires, & which I printed in my little paper."

I took my place as an operator in the Montreal office, & remained there until the spring of 1850. While acting as operator, I also did something as messenger, batteryman, line repairer, & in fact everything that was necessary to be done in connection with the working of the office. During the time I was in Montreal I had occasion to know, as a young man, Mr. Holton, afterwards the Hon. L. H.

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Melinda Street, Toronto.

NEXT ANNUAL MEETING at Hamilton, Oct. 16, 1901.

man himself personally. Instead of receiving  
any thanks, however, for my zeal, I was  
treated to the severest kind of reprimand for  
the liberty I had taken in delivering the mes-  
sage in such an informal manner. It is need-  
less to say I never repeated the offence.

In the spring of 1850 I was sent to Toronto  
to take charge of the Co.'s business here, &  
to be in a position to recommend such exten-  
sions in the Province of Ontario as might  
seem desirable. During my first year in To-  
ronto I sent & received myself on the instru-  
ments every message which passed over the  
line to & from this point. These messages  
were delivered by one small freckled-faced  
Scotch boy, with a plentiful growth of hair on  
his head, named Robert Easson. I remem-  
ber well how he ran with each message which  
required to be delivered as if his very life de-  
pended upon it. That boy is now in charge  
of our Press News Department, & is here  
to-night.

I had not been long in Toronto before I be-  
gan to suggest to the head office various ex-  
tensions of our lines, & as these suggestions  
were almost invariably adopted, I grew bolder  
& more reckless, until the Head Office began  
to get nervous & frightened. It was finally  
concluded, however, & I was notified by  
Hugh Allan, afterwards Sir Hugh, that I  
should have carte blanche to do as I liked,  
it only being required that I should give notice  
each winter of what lines I proposed to build  
during the ensuing season. During the fol-  
lowing years arrangements were made for  
building a line along the Great Western Ry.,  
& from time to time other railways as they  
were projected & built in Ontario, such as the  
Port Dover & Lake Huron; the Toronto &  
Nipissing; the Northern; the North Simcoe;  
the Port Hope, Peterborough & Lindsay; the  
Midland; the Grand Junction; the Victoria;  
the Hamilton & Lake Erie; the Hamilton  
& North Western; the Lake Simcoe Junc-  
tion; the Welland; the Whitby & Port Perry;  
the Victoria; the Toronto, Grey & Bruce, etc.  
Not only did we arrange to build lines along  
these different railways, some of which were  
consolidated with the Great Western, & final-  
ly with the Grand Trunk, but we also cover-  
ed all the principal highways in the Province.  
I remember well an occasion when a rather  
sarcastic enquiry came from the Secretary of  
the Montreal Co., as to whether I had found  
any more saw mills to which I proposed to  
extend the lines. The policy adopted, how-  
ever, turned out to be a good business policy,  
& to-day the map of wires covering the coun-  
try looks like a thickly-woven spider's web  
through which a fly could scarcely escape.  
There is hardly a town or village in the coun-  
try which is not included in this network of  
lines, to say nothing of the present telephone  
system, so that instantaneous electrical com-  
munication is almost within the reach of  
every man's door.

I trust it may be considered a pardonable  
pride on my part that I have had something to  
do with the extension of an enterprise which  
has done so much towards facilitating the  
business & promoting the happiness of the  
world, & I have always esteemed it a matter

for thankfulness that my attention was turned  
at an early time in my life in this direction.

When I commenced my career as an oper-  
ator there were only two railways in the coun-  
try, a short line of 9 miles between Montreal  
& Lachine, & the other between La Prairie &  
St. Johns. There was not a mile of railroad  
in Ontario or any other part of the Dominion,  
& as illustrative of how one enterprise may  
help another, it is undoubtedly true that rail-  
way traffic is enormously increased by the  
assistance rendered by the telegraph in facil-  
itating the movements of trains, &c.

The tariff on messages in the early days  
was reckoned in English currency, not dol-  
lars & cents as now. On any extensions of  
the lines in any direction, a small additional  
rate was charged on through messages, until  
finally, after a great many extensions had  
been made, the tariff became a complicated  
affair, charges ranging from 1s. to 7s. 6d., &  
it became a question for careful consideration  
as to how so complicated a scale might be  
simplified. My advice was asked in the mat-  
ter, & I at once procured statements from all  
the different stations along the line, showing  
the exact number of messages handled under  
the different rates. From these statements I  
discovered the fact that over 90% of the mes-  
sages sent were under the lower rate, & con-  
sequently between offices the nearest to one  
another. I submitted a report to show that  
the difference between these high rates & a  
uniform rate of 25c. would involve no great  
loss to the Co., even if there were no increase  
in the number of messages, while it would ap-  
pear to the public a very great concession.  
The Co. adopted the suggestion, & a uniform  
25c. rate was ordered. The consequence was  
that business immediately increased between  
remoter points on the line, & the policy pro-  
ved eminently satisfactory to all concerned.

You are all well acquainted with the extra-  
ordinary development in the application of  
electricity, as shown in the telephone, electric  
railway, fire alarm systems, transmission of  
power & in other directions. It has been a  
common saying ever since I entered the busi-  
ness that electrical development was only in  
its infancy; and notwithstanding all that has  
taken place I am still convinced that the say-  
ing is as true to-day as it ever was. Great as  
the development has been in the past, there  
is a vast field in the future yet to be occupied.  
I sometimes hope to live for say 10 or 15 years  
longer that I may see this development per-  
fected which is now in sight & on the way.  
Not only will every waterfall and rapid be  
utilized for the production of electrical energy,  
but the force in every gale of wind will be  
called into use for the same purpose. All  
railways will be run mainly by electric power.  
Our houses will not only be lighted but heated  
by electricity, & we shall require no more  
coal in our houses for this purpose. A horse-  
less age is in sight, with better & cleaner  
streets. Tall & smoky chimneys will disap-  
pear. Every farmer will have an electric  
motor for use in his work of various kinds, &  
this wonderful energy will be available for any  
& every purpose under the sun where power  
is required, by simply touching a button.

Our system of telegraphs is in many re-  
spects precisely the same as when I learnt the  
business 50 years ago. Of course there have  
been many ingenious improvements made in  
the instruments & in the use of the wires.  
One of these improvements is what is known  
as the quadruplex system—that is, the use  
of one wire between two terminal points—To-  
ronto and Montreal for instance—made to an-  
swer the purpose of four—one real wire—  
three phantom wires. Four operators do duty  
at each end of the wire, and work independ-  
ently, precisely as if there were four separate  
wires. Before this method of using the wires  
was discovered such a thing would have  
seemed as impossible as it would now to make  
a single railway track answer the purpose of

four independent lines. These electrical matters are full of wonders. I never get into a trolley car but I think of how wonderful a thing it is that by mere contact with a slender overhead wire the power of 40 horses can be brought into the motor, as well as current that can be utilized to heat & light the car. It is a wonderful thing that a slender wire strung about the city should be made to burst out into a thousand brilliant lights at different points, wherever required, by the simple insertion of a certain amount of resistance at given points on the wire. It is a marvellous thing that by speaking into a simple little instrument which contains a metal disc which corresponds to the drum of the human ear—the tone, pitch & character of our voices can be carried for 100 or 500 miles, & recognized by our friends at the other end of the wire as distinctly as if they were standing but 10 feet away. These are simply wonders which no man can explain. Can you wonder that such a business should be of sufficient interest to keep me in connection with it for 50 years? If I were to fall heir to a million dollars tomorrow, I would ask leave of absence from my work long enough to visit the Pyramids, but only on the condition that I might return to my work again, and continue in it as long as possible. While the business with which I am connected has had its peculiar worries & anxieties, as all other business has, it still retains for me its attraction, & I hope to be allowed to take an active part in it as long as I am able to be of any use or service.

It has been one of the pleasures of my later years to know that so many operators who learnt their business upon our lines are now filling responsible positions with other companies. Upon one occasion in taking a trip over the line of the C.P.R. to British Columbia, in company with my friend, Mr. Nicholls, when we returned over the Union Pacific, at many of the stations along the route both going & coming I was accosted by operators, station-masters & others, who reminded me that they were once operators on our lines, & had kindly recollections of their Canadian associates. And I have reason to know that Canadian operators are looked upon most favorably by their employers in the United States. During the American war some of the most expert field operators were Canadians, & the celebrated Southern raider, Morgan, had on his staff an operator named Ellsworth, who became celebrated during the war, & who learnt his business in our Whitby office.

Fifty years is a long time to look forward to, & is something which is rarely done. I remember when a boy having a vague idea that a man 50 years of age was pretty well advanced in life. As I grew older I set the date forward, & have been setting it forward ever since. Fifty years, however, is not a very long time to look back upon, & I can hardly realize that I have spent 50 years in the telegraph service; neither can I realize that to-morrow I shall be 69 years of age. I am now confidently of the opinion that a man of 70 years is not to be counted as old. When a man reaches 80 perhaps he may begin to think he is getting old, but certainly not until then. If I were to give my advice as to how a man might best retain his youthful feelings & ambitions, I should say: spend at least a month in the woods every year. If this does not have the desired effect, then I know of nothing that will. Doctors & drugs will not do it.

During the time of early telegraph extensions in various parts of the country I was of course travelling about from place to place, fixing upon routes, opening offices & appointing operators, & during these journeys invariably enquiring as to the location of different trout streams, which I duly noted. Afterwards, whenever I could manage to do so, in company with my friend, Tom Townsend—

who is here to-night, & who has been my companion in fishing & hunting trips for the last 40 years or more—we often visited these streams. As the country became better settled, during the last 20 or 25 years we have had to find other & more remote territory where we can indulge our favorite sport. I am glad to see here to-night so many friends who have first or last been my companions in the north woods, camping on Island Lake, Cedar Lake, Long Lake, Kiaskoka, Manitou, & numberless streams, rivers & waterfalls in Ontario, & on some salmon rivers in New Brunswick, where we have enjoyed holidays with a relish little understood by those who have had no such experience. I challenge my friends here who frequent New York to produce a Delmonico or Waldorf chef the equal of a "smoky Indian that we know," who cooks our bacon & trout freshly taken from the rapids of the Eau Clair or Manitou. There is a poem by Kipling in a recent number of Scribner's Magazine, which I would recommend to any of you who have not yet read it. On first reading you will probably not make head or tail of it, but after reading it carefully over again you will begin to smell the camp fire, and feel moved to take down your trout & salmon rods and reels; examine your Jock Scots & Silver Doctors, & note carefully whether they are ready for earliest possible use in the spring. I have records and memos of these trips of ours for the past 30 years, & I think I would sooner lose all the business records with which I have anything to do than these diaries of my hunting & fishing trips in our north woods. Those of you here to-night who only know something of this Dominion by noting the weekly increase in railway traffic, & other such information, & have not camped in those north woods & along those trout streams & salmon rivers, do not begin to realize what a grand country we live in.

#### Expansion Allowance in Laying Rails.

A railway superintendent writes us: Although a great deal has been written on the subject of space to be left between ends of rails in track laying, yet in every-day practice this important matter is very little understood, with the result that rails are ruined in track by too great opening at the ends. On many roads elaborate instructions are given as to the allowance for various temperatures, but as a matter of fact the track-laying foreman jams a piece of a spike box between the ends of the rails & lets them go at that. From extensive measurements made of rails at 30° below zero & 100° above, the extreme expansion of a rail was found to be about 3-32", & in designing rails & fastenings the holes in the rails & angle bars & size of the bolts should be such that the maximum expansion could not exceed this.

Many discussions have taken place as to the difference in expansion of light & heavy rails. As an experiment, I had a light & a heavy rail dipped in cold water & a foot cut off each & placed in a furnace, with the result that they both expanded alike, but in practice the heavier section of rail does not expand as much as the lighter section, for the reason that it takes so much longer for the sun's rays to thoroughly heat the heavier section.

I have made exhaustive experiments in laying heavy rails—72 to 80 lb. sections—and now always place them tight when laying in summer, which is the season rails are generally laid, & in the fall when the days are cold leave 3-16" at opening between rails. Rails laid tight show much better wear than those of same make laid open.

Accidents have occurred through rails kicking out, & the average trackman invariably attributes this to lack of expansion, where nine times out of ten the cause is due to creeping track.

#### The Algoma Central Railway, Etc.

Principal Grant, of Queen's University, Kingston, has contributed to the October Canadian Magazine an article on "The Jason of Algoma," Jason in this case being F. H. Clergue, who is discovering & capturing the Golden Fleece of Algoma. The various industries which Mr. Clergue has & is establishing at Sault Ste. Marie are described in a very interesting way. The railway & steamship branches of Mr. Clergue's enterprises are referred to as follows:—

"Additional industries are gathering round the canals, factories & mines, all contributing to the main object. When the Helen mine of iron ore was discovered near Michipicoton & a short railway brought it to a harbor ready for the market, transportation to the Midland blast furnace & other points became an immediate necessity. But the ship-brokers could not supply steamers or barges. All were pre-engaged. What was to be done? Wait on the pleasure of Mr. Rockefeller, who could put on the screw when it suited & as often as he liked? No. The right men were at once despatched to Britain, to purchase four steamers with the largest carrying capacity compatible with getting through our system of locks. While I was at the Sault in Aug., the last of the four arrived at the dock, near the new offices, with a cargo of 1,500 tons of Portland cement, bricks & other stuff, brought from England right up into the heart of the continent, without breaking bulk! Is there another such system of inland navigation elsewhere in the world? These steamers are to be carriers all the year round. On the approach of winter, they will run down to the ocean & engage in the Atlantic Coast carrying trade. Barges too are under way, for the outfit must be complete.

"We might be sure that railways as well as steamers would be planned. Three main lines, not counting branches, are now being constructed, located or contemplated, by the same intelligence which saw the possibilities of the Lake Superior mill-pond, & has ever since been engaged in turning the possible into the actual. The first is the Algoma Central, to run back to Missanabie on the main line of the C.P.R. The second will extend the Algoma Central to the salt water of James Bay, the pocket of Hudson's Bay which bends down to within 300 miles of Missanabie. The third will connect the Sudbury region with the great Manitoulin Island, crossing the north Channel of the Georgian Bay at Little Current. Each of these promises to impart new life to large & hitherto hermetically sealed districts of the Province. The first 10 miles of the Algoma Central are completed already. I had a run over them in their unballasted condition, on a truck, in company with three or four American gentlemen who had come up from New York & Philadelphia to see the holes in the ground where their money was being sown. May they reap a good harvest! To my astonishment the line ran through a fairly-well wooded & well-settled rolling country. I had in my own mind previously given up the whole of that northern shore region as a hopeless barren, & the day before I had been informed by an intelligent person in the Sault that it was simply that & never would be anything more. Most ignorant are we of what we are most assured. Well, settlers had filtered in, men with hearts of oak, & that they had prospered, the fences, fields & buildings all along the line bare testimony. And now the sun had arisen on them. The railway was at their doors to carry their stock & garden stuff, their butter, eggs & chickens to as hungry a market as the heart of farmer could desire. The Co. believes that there are fertile little valleys & patches of good land all the way to Missanabie, & so they have agreed with the Government of the Province to place on their lands, or the lands

# ENAMELED IRON TELEGRAPH SIGNS.

*The only signs that are absolutely impervious to the weather.*



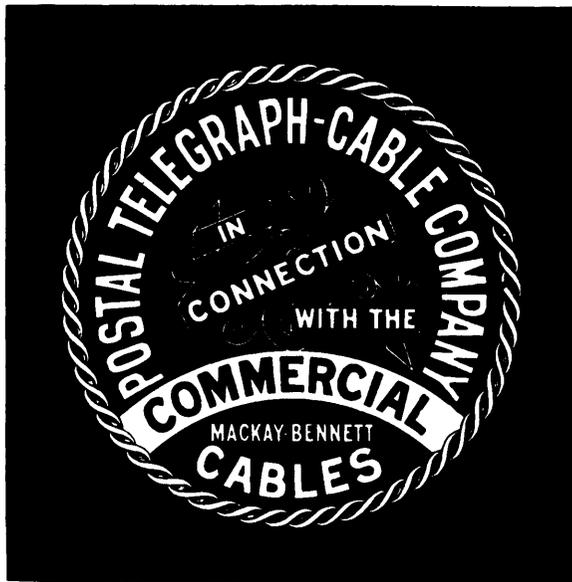
No. 1.—Double, 19 x 13 ins., including flange, white letters on blue ground.



No. 3.—Double, 21½ x 10 ins., including flange, white letters on blue ground.



No. 4.—Double, 22 x 8 ins., including flange, white letters on blue ground.



No. 2.—Single, 30 x 30 ins., white letters on blue ground.



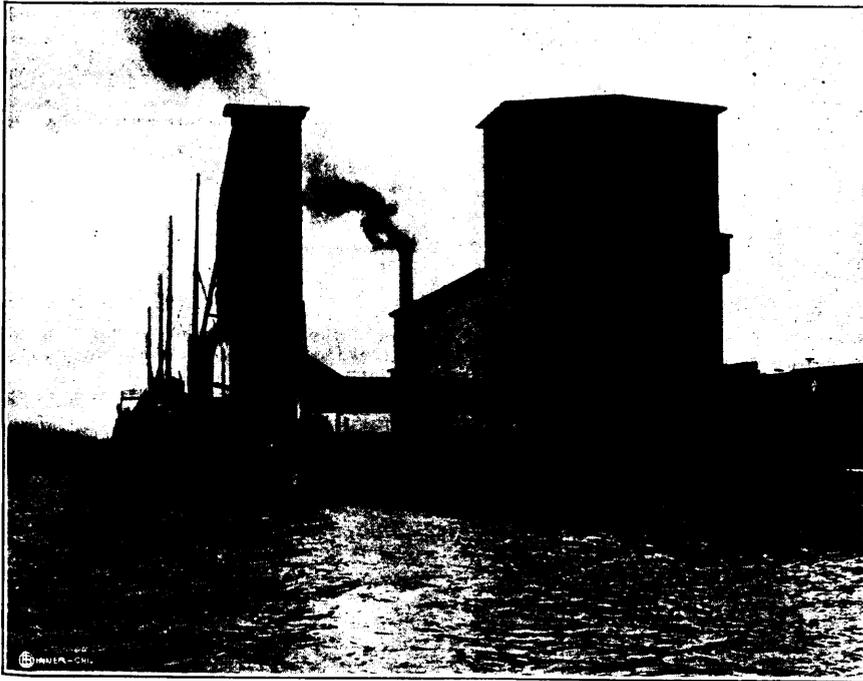
No. 5.—Single, 24 x 12 ins., white letters on blue ground.

Enamelled Iron Signs can be made in any shape, size or colors. Blue and white make the most striking contrast.

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## The Acton Burrows Co., 29 Melinda Street, Toronto.

Sole Agents for Canada for The Imperial Enamel Co. of Birmingham, England.



CANADA ATLANTIC RAILWAY ELEVATOR, DEPOT HARBOR, ONT.

of the Crown adjacent to their line, 1,000 male settlers annually for the next 10 years. In consideration of this & other covenants, they are to receive, in fee simple, 7,400 acres of land for every mile of the 200 they are constructing to Missanabie.

"The necessity for building the line to Missanabie is apparent. But where is the need, & what is the object of pushing it 300 miles farther north? I am informed that the areas of pulp-wood & of mineral-bearing rock are more promising on Hudson's Bay than on the Lake Superior watershed; & besides, the sea is there, & that means fisheries, at a distance of 500 miles from the Sault, whence fish can be shipped to Chicago on one side & St. Paul & Minneapolis on the other. Salt water fish are now carried to these markets over 2,000 & 3,000 miles of rail. How can Atlantic fish compete with their Hudson's Bay kith & kin, once the 500-mile iron bridge has been built?

"The Manitoulin line is perhaps the most promising of the three. This great & fertile island, the largest in the world surrounded by fresh water, has hitherto had no market for its products & has been isolated for weeks from the rest of the world twice a year. Population has, therefore, been attracted to it but slowly, in spite of its stock-raising capabilities. No wonder that promises of a railway are demanded & freely made to do duty every time an election comes round. A friend writes me: 'Were it not for Mr. Clergue's connection with it, the present renewal of the project would be universally regarded by our people as a mere election dodge. We now feel sure. The Sudbury end of the line will be built first, & I believe that it will then be pushed across the channel to Manitoulin. The line will open up a very rich region on the north shore, a district rich in copper, silver, nickel & iron, also in timber & pulp-wood. From the mouth of the Whitefish River to Little Current, there are few natural difficulties to overcome in building the line or in crossing. There is only one navigable channel & it is narrow & runs right past the town. The rest of the channel at this point is filled with a series of low-lying islands, composed of flat rock, of limestone formation, with scarcely any soil. Ultimately, the line will be pushed across the island to a point on the south or Lake Huron shore, where I believe there are one or two good harbors. The advantages

to us I need not dilate on. For one thing, we dread the two periods annually of complete isolation, when the ice is forming & when it is breaking up.' Any one who has spent a winter in Prince Edward Island will sympathize with that feeling. How 'the' Island would rejoice if its isolation were only for a month, & what would it not give for a bridge or a tunnel!"

**Canada Atlantic Railway Elevators.**

The illustrations on this page show the C.A.R. Co.'s elevators at Depot Harbor, Ont., & Coteau Landing, Que. The one at Depot Harbor on Parry Island, on the east side of Georgian Bay, takes grain from boats which have been loaded at any of the great lake ports, such as Fort William, Duluth, Chicago, etc., & loads it into cars. For physical

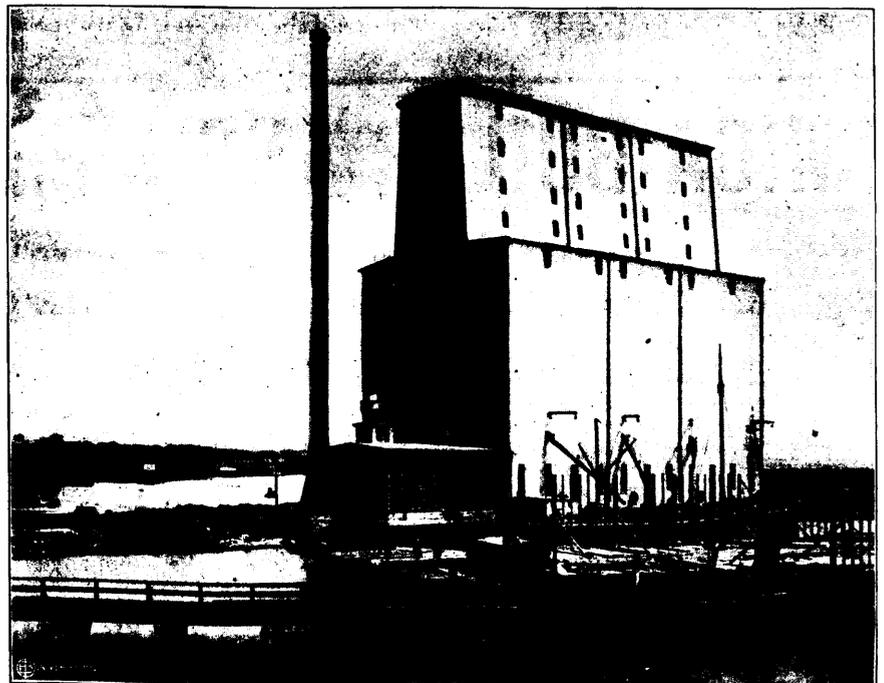
reasons the marine tower was built separate from the main house with which it is connected by a belt conveyer. Following are the principal dimensions, etc.:

Total capacity in bushels.....	1,000,000
Length, in feet.....	290
Width, in feet.....	80
Total height, in feet.....	158
Number of bins.....	98
Depth of bins, in feet.....	53 to 71
Capacity of bins, in bushels.....	1,400 to 12,000
Number of elevator legs.....	4
Capacity per hour each, in bushels.....	10,000 to 15,000
Capacity of scales, in pounds.....	72,000
Capacity of scale hoppers, in bushels.....	1,200
Number of distributing trolley spouts.....	2
Capacity from boats in 10 hours, in bushels.....	150,000
Into cars in 10 hours, in bushels.....	90,000
Length of power house, in feet.....	79
Width of power house, in feet.....	56
Number of boilers (horizontal tubular).....	6
Style of engine & number.....	Two horizontal Corliss
condensing	
Kind of condenser.....	Jet
Size & style of electric engine.....	10 x 18 horizontal
Size of dynamo.....	35 KW

The grain which goes through the Depot Harbor elevator is loaded on cars & taken over the C.A. tracks to Coteau Landing, on the St. Lawrence River, about 37 miles up stream from Montreal. After passing through the Coteau Landing elevator the grain is loaded into barges & taken by river & canal to Montreal, where it is transferred to ocean steamships. Following are particulars of the Coteau Landing elevator:

Total capacity, in bushels.....	500,000
Length, in feet.....	143
Width, in feet.....	90
Total height, in feet.....	158
Number of bins.....	82
Depth of bins, in feet.....	65
Capacity of bins, in bushels.....	2,200 to 7,900
Number of elevator legs.....	6
Capacity per hour each, in bushels.....	8,000
Number of scales.....	6
Capacity of scales, in pounds.....	72,000
Capacity of scale hoppers, in bushels.....	1,200
Number of power shovels.....	6
Number of distributing trolley spouts.....	12
Capacity from cars in 10 hours, in bushels.....	100,000
Into cars in 10 hours, in bushels.....	150,000
Into boats in 10 hours, in bushels.....	400,000
Length of power house, in feet.....	53
Width of power house, in feet.....	41
Number of boilers (horizontal tubular).....	12
Horsepower of each boiler.....	125
Style of engine & number.....	1 horiz'l Wheelock condensing
Horsepower.....	250
Kind of condenser.....	Jet
Size & style of electric engine.....	8 x 10 horizontal
Size of dynamo.....	25 KW
Capacity of fire pump, gallons per minute.....	350

Both these elevators were built from plans drawn by John S. Metcalf Co., Chicago, Ill.



CANADA ATLANTIC RAILWAY ELEVATOR, COTEAU LANDING, QUE.

**G.T.R. SEMI-ANNUAL MEETING.**

The semi-annual meeting was held at the Cannon St. Hotel, London, Eng., Oct. 9, the President, Sir C. Rivers Wilson, in the chair. The report for the ½ year ended June 30 was presented as follows:—

The following summary shows a comparison of the ½ year's revenue account with that of the corresponding ½ year, ended June 30, 1899:—

June 30, 1899.		June 30, 1900.	
£1,983,217	Gross receipts.....	£2,139,691	11 10
	Deduct—		
1,298,244	Working expenses, being at the rate of 67.42% as compared with 65.46% in 1899.	1,442,549	4 8
684,973	Net traffic receipts.....	697,142	7 2
	Add—		
12,430	Received from International Bridge Co.....	12,930	12 9
5,958	Interest on Toledo, Saginaw, & Muskegon bonds.....	6,898	8 3
3,088	Interest on bonds of Central Vermont Ry.....	3,087	10 8
64,781	Interest on securities of controlled lines & on St. Clair Tunnel bonds acquired by issue of G. T. 4% debenture stock.....	62,214	13 3
10,449	Balance of general interest account.....	20,497	14 0
£788,179	Net revenue receipts.....	£802,771	6 1

Following are the net revenue charges for the ½ year:—

Rents (leased lines).....	£ 73,174	8 3
Interest on debenture stocks & bonds of the Co.....	445,578	18 8
Interest on debenture stock & bonds of lines consolidated with the G. T. Co.....	70,485	5 7
Interest on Michigan Air Line bonds.....	7,750	.. ..
Amount advanced to the Chicago & G. T. Co. under traffic agreements towards payment of interest on its 2nd mortgage bonds, ½ year to June 30, for which interest coupons are held.....	30,821	18 4
Amount advanced to the Detroit, Grand Haven & Milwaukee Co., towards payment of interest on its bonds, under agreements, ½ year to June 30.....	22,894	15 1
	53,716	13 5
	£630,705	5 11
Leaving a surplus of.....	152,066	0 2
	£802,771	6 1

Adding the balance of £3,918 13s. 3d. at the credit of net revenue account on Dec. 31, 1899, to the above surplus for the past ½ year

of £152,066 os. 2d., the amount available for dividend is £155,984 13s. 5d.

The directors recommend the payment of the ½ year's dividend on the 4% guaranteed stock, amounting to £104,395 17s. 6d., & a dividend of 1½% on the first preference stock, amounting to £51,252 9s. od., leaving \$336 6s. 11d. to be carried forward to the next ½ year's accounts.

The net revenue surplus for the ½ year ended June 30, 1899, amounted to £136,404 8s. 10d. The result of the past ½ year's operations shows, therefore, an improvement of £15,661 11s. 4d.

There has been a decrease of 8 miles in the length of lines worked by the Co., caused by the taking up of 5¼ miles of the Chemong Branch, & by a re-adjustment of the mileage of the system. The increase of 1¼ miles "Leased & rented" is in the lines on the Montreal wharf, the property of the Harbor Board.

Following is a comparison of receipts for the ½-years ended June 30, 1900 & 1899:

Description.	1900.	1899.	Increase.
Passengers.....	£ 526,951	£ 493,247	£ 33,704
Mails & express.....	100,117	92,479	7,638
Freight & live stock.....	1,437,016	1,329,568	107,448
Miscellaneous.....	75,607	67,923	7,684
	£2,139,691	£1,983,217	£ 156,474

**TRAFFIC STATISTICS.**

	1900.	1899.	Increase.
Passengers carried.....	3,001,414	2,870,982	130,432
Average fare per passenger.....	3s. 6d.	3s. 5½d.	½d.
Tons of freight & live stock.....	5,217,131	4,878,256	338,875
Average rate per ton.....	5s. 6d.	5s. 5½d.	½d.
Tons carried one mile.....	1,162,433,186	1,106,187,159	56,246,027
Earnings per train mile.....	55.50d.	53.60d.	1.90d.

The average rate per ton per mile on the entire freight business was 0.60 of a cent, compared with 0.58 of a cent in the corresponding half-year.

The working expenses, including taxes, amounted in the ½-year to £1,442,549, or 67.42% of the gross receipts, as compared with £1,298,244, or 65.46%; an increase in amount of £144,305, & in the proportion to the gross receipts of 1.96%.

Following is a comparison of the revenue

expenditure, excluding taxes, for the ½-years ended June 30, 1900 & 1899:—

Description.	1900.	1899.	Increase.
Maintenance of way, & structures.....	£ 203,425	£ 195,205	£ 8,220
Maintenance of equipment.....	307,420	244,467	62,953
Conducting transportation.....	860,000	792,264	67,736
General expenses.....	59,004	53,848	5,156
Total.....	£1,429,849	£1,285,784	£ 144,065
Percentage of gross receipts.....	66.82	64.83	1.99
Expenditure per train-mile.....	37.09d.	34.75d.	2.34d.

The train mileage of the ½-year compares with that for the ½-year ended June 30, 1899, as follows:—

Description.	1900.	1899.	Increase.
Passenger.....	3,210,759	3,133,197	77,562
Freight.....	5,497,063	5,206,913	290,150
Mixed Trains.....	544,137	549,166	5,029
Total.....	9,251,959	8,889,276	371,683

The G.T. gross receipts for the ½-year show an increase of £156,474, or 7.89%; the working expenses, including taxes, an increase of £144,305, or 11.11%, caused partly by increased train mileage, but chiefly by the larger number of engines rebuilt during the past ½-year, & the enhanced payments for wages & the increased cost of fuel and material generally. The train mileage shows an increase of 371,683, or 4.10%.

No additions to locomotives & cars have been made at the expense of capital during the ½-year. Ten passenger coaches, 6 baggage, 585 freight & 5 caboose cars were built in the Montreal shops during the ½-year by way of renewals in replacement of cars out of service. On June 30, 1900, there were 5 locomotives in excess of the official stock, & there remained at that date £19,730 2s. 9d. at the credit of the engine renewal fund, & of £117,029 19s. 11d. at the credit of the car renewal fund, available for future replacements & renewals.

The outlay on capital account for the ½-year was £157,800 14s. 2d.; the principal items being £49,029 17s. 7d. on account of double tracking between Hamilton & Niagara Falls, & of other portions of the line; £55,031 14s. 3d. for the further equipment of engines & freight cars with air-brakes & automatic couplers, in compliance with the U. S. Safety Appliance Act; & £53,293 12s. 9d. for

# MICA BOILER AND PIPE COVERING.

Used after exhaustive competitive tests by the  
**BRITISH ADMIRALTY on H. M. THE QUEEN'S YACHT.**

The following Railways use it extensively:

C. P. Ry., M. C. Ry., L. E. and D. R. Ry., and C. O. Ry. in CANADA.  
G. E. Ry., G. C. Ry., S. E. Ry., and L. & Y. Ry., in ENGLAND.

For full particulars, prices, etc., apply to the Company's Head Office in Canada.

**The Mica Boiler Covering Co., Limited, 86-92 Ann St., Montreal.**



**C.P.R. Earnings & Expenses.**

The following statement of the revenue account for the half-year ended June 30, which was promised because of the change in the Co.'s fiscal year, has been issued over the signatures of the President & the Comptroller:—

Gross earnings for 6 months to June 30.....	\$14,167,797.89
Working expenses.....	8,889,851.06
Net earnings.....	\$ 5,277,946.83
Interest on deposits & loans.....	\$157,651.78
Interest from Duluth, South Shore & Atlantic R. Co. on consolidated bonds held.....	135,000.00
Interest from Minneapolis, St. Paul & Sault Ste. Marie Ry. Co. on bonds held.....	79,860.00
Amount repaid by M. St. P. & S. Ste. M. R. Co., being balance in full of interest advanced.....	638,846.89
	\$1,011,358.67
	\$6,289,305.50
Deduct fixed charges 6 months.....	3,434,244.67
	\$2,855,060.83
Deduct 6 months' interest on preference stock.....	599,086.67
	\$2,255,974.16
From this there has been declared a half-yearly dividend of 2½%.....	1,625,000.00
Leaving balance.....	\$ 630,974.16

Gross earnings, working expenses, net profits and increases or decreases over 1899, from Jan. 1, 1900:

Earnings.	Expenses.	Net Profits.	Increase or Decrease.
Jan., \$2,152,071.32	\$1,460,501.71	\$ 691,569.61	\$ 74,035.75+
Feb., 1,954,087.59	1,331,355.34	622,732.25	23,030.77+
Mar., 2,294,786.97	1,495,685.73	799,101.24	29,794.33+
Apr., 2,491,194.47	1,464,126.85	1,027,067.62	106,764.13+
May, 2,662,897.81	1,583,227.32	1,079,670.49	46,911.88+
June, 2,612,759.73	1,554,954.11	1,057,805.62	34,745.42+
July, 2,471,169.64	1,586,795.74	884,373.90	88,587.73-
Aug., 2,637,983.61	1,583,508.01	1,054,475.60	35,643.88+
	\$19,276,951.14	\$12,060,154.81	\$7,216,796.33
			\$202,749.77+

+ Increase. - Decrease.

Approximate earnings for Sept., \$2,613,000, against \$2,600,000 in Sept., 1899, increase \$13,000.

**SUBSIDIARY LINES.**

**DULUTH, SOUTH SHORE & ATLANTIC.**—Approximate earnings for Sept., \$222,083; increase over Sept., 1899, \$655.

Net earnings for 7 months to July 31, \$570,988, against \$469,357 for corresponding period.

**HANCOCK & CALUMET.**—Approximate earnings for Sept., \$23,720, decrease from Sept. 1899, \$505.

**MINERAL RANGE.**—Approximate earnings for Sept., \$29,650, increase over Sept. 1899, \$7,425.

**MINNEAPOLIS, ST. PAUL & SAULT STE. MARIE.**—The accounts for the year ended June 30, recently submitted, show a surplus of \$660,880, after meeting all fixed charges. Of this \$638,846 has been applied to the extinction of the balance due to the C.P.R., under its guarantee of interest, leaving \$22,034 to be carried forward.

Approximate earnings for Sept., \$374,478, decrease from Sept. 1899, \$124,983.

Net earnings for 6 months to June 30, \$1,109,323, against \$774,248 for corresponding period.

**Canadian Pacific Railway Land Sales.**

	Acres.		Amount.	
	1900	1899	1900	1899
Jan.....	31,486	14,718	\$100,857.85	\$ 46,411.35
Feb.....	23,613	13,747	75,771.19	43,371.69
Mar.....	31,183	24,045	97,777.79	75,460.76
April.....	58,457	36,626	181,775.78	116,835.84
May.....	69,057	26,584	214,851.09	88,928.98
June.....	57,831	54,225	188,779.64	169,192.74
July.....	40,715	47,401	129,461.42	110,705.50
Aug.....	32,178	35,214	103,480.78	69,012.54
Sept.....	21,807	25,517	69,012.54	83,719.70
	363,327	278,077	\$1,161,788.08	\$884,173.04

**Grand Trunk Earnings, Expenses, &c.**

The following statement of earnings, supplied from the Montreal office, includes the G. T. of Canada, & the Detroit, Grand Haven & Milwaukee Rys., the earnings of the Chicago & G. T., which is in the hands of receivers, being omitted:

	1900.	1899.	Increase.	Decrease.
July.....	\$1,844,458	\$1,799,945	\$44,513	.....
Aug.....	2,088,602	2,064,269	24,333	.....
Sept.....	2,117,690	2,178,303	60,613	.....
	\$6,050,750	\$6,042,517	\$8,233	.....

The following figures are issued from the London, England, office:

**GRAND TRUNK RAILWAY.**

Revenue statement for August, 1900:

	1900.	1899.	Increase.	Decrease.
Gross receipts.....	£409,000	£402,500	£6,500	.....
Working expenses.....	267,900	261,700	6,200	.....
Net profit.....	£141,100	£140,800	£300	.....

Aggregate from July 1 to Aug. 31, 1900:

	1900.	1899.	Increase.	Decrease.
Gross receipts.....	£769,400	£752,647	£16,753	.....
Working expenses.....	510,500	496,815	13,685	.....
Net profits.....	£258,900	£255,832	£3,068	.....

**DETROIT, GRAND HAVEN & MILWAUKEE RY.**

Revenue statement for August, 1900:

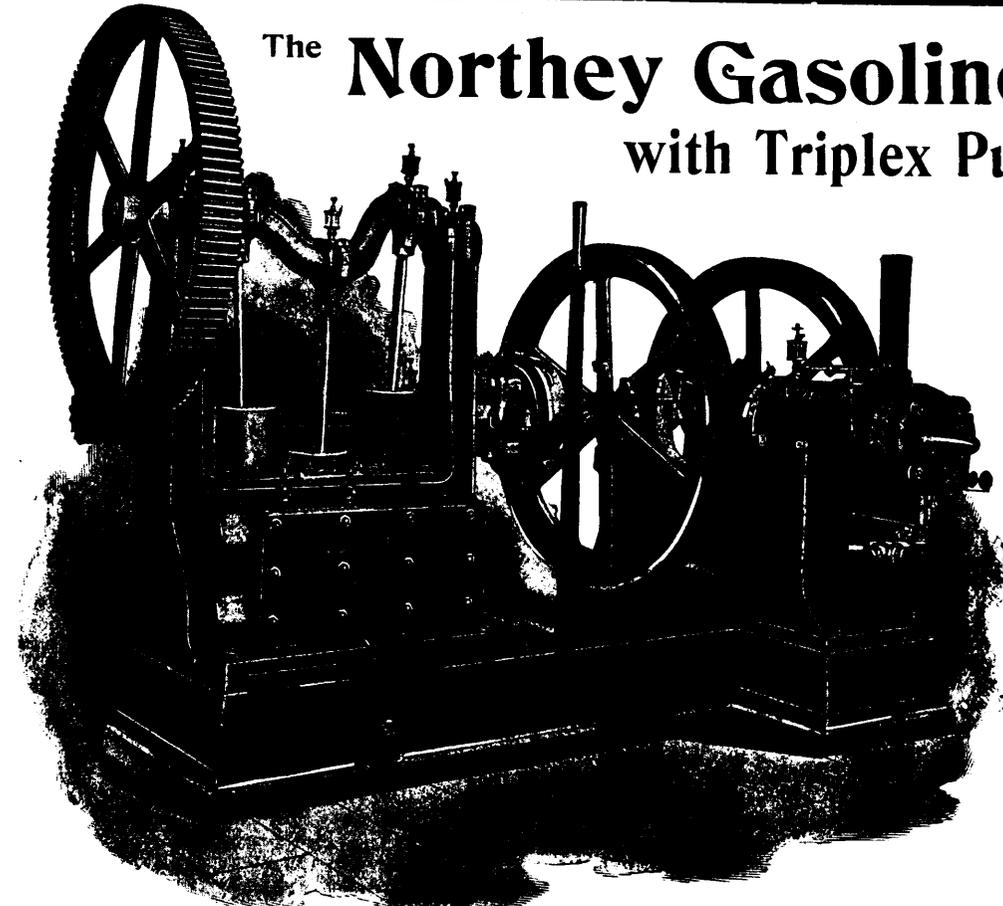
	1900.	1899.	Increase.	Decrease.
Gross receipts.....	£20,100	£21,600	.....	£1,500
Working expenses.....	17,500	13,800	3,700	.....
Net profit.....	£ 2,600	£ 7,800	.....	£ 5,200

Aggregate from July 1 to Aug. 31, 1900:

	1900.	1899.	Increase.	Decrease.
Gross receipts.....	£38,600	£41,304	.....	£2,704
Working expenses.....	30,800	26,611	4,189	.....
Net profit.....	£ 7,800	£14,693	.....	£6,893

# The Northey Gasoline Engine with Triplex Pump, for

## TANK and FIRE DUTIES.



We here illustrate a complete, space saving pumping plant, including the Northey Triplex Power Pump and Gasoline Engine. This arrangement is admirably adapted for prompt service, as the engine is ready for work at a moment's notice, can be run by any one, and will operate for hours without attention.

The Triplex style of pump with cranks placed 120 degrees apart gives a practically constant flow of water. Both machines are strongly built, and have an ample margin of strength for heavy continuous duty. We have recently installed two such plants at Coteau Junction for the Grand Trunk and Canada Atlantic Railways, and are now filling a large order for the Canadian Northern Railway.

Booklet and Catalogues on request.

**The Northey Co., Limited,**  
1032 King St. Subway,  
TORONTO, CANADA

TRAFFIC RECEIPTS OF THE SYSTEM.

Traffic receipts, July. 1 to Sept. 30, 1900 :				
	1900.	1899.	In-crease.	De-crease.
Grand Trunk....	£1,185,326	£1,180,237	£ 5,089	.....
D., G. H. & M..	57,998	61,377	.....	3,379
Total.....	£1,243,324	£1,241,614	£1,710	.....

CHICAGO & GRAND TRUNK FINANCES.

E. W. Meddaugh & H. B. Joy, as receivers, have filed their second quarterly report. It covers the period between March 31 & July 1, 1900, the disbursements having exceeded the receipts by nearly \$70,000. Besides this, the condition of the road, according to its engineer, demands the outlay of \$100,000 for 20 miles of new rails to put it into a safe condition for winter travel. The receivers hope to secure this amount from the next quarter's profits.

Canadian Northern Railway.

In our July issue we published an abridged prospectus issued by this Co. in connection with the issue of £1,191,500 4 1/2 per cent. 30 year (Ontario Division) 1st mortgage debenture bonds. On returning to Canada in Aug. from England W. Mackenzie stated to a reporter that he had succeeded in floating these bonds very successfully. Following are some additional particulars from the complete prospectus issued in England :

The Co.'s main line is for convenience divided into three divisions—the Ontario, the Winnipeg and the Saskatchewan divisions. The Co. has issued on its Winnipeg & Saskatchewan divisions, 4% 30-year gold bonds, at the rate of \$8,000 a mile, which may be increased to \$10,000 a mile, which bonds are guaranteed, principal & interest, by the Government of Manitoba. Thus the present bonded indebtedness of the Co., including the present issue, amounts to \$12,531 per mile (of main line), & the interest thereon is \$539 per annum per mile, as shown in the following table :

Ontario Division, about 290 miles at \$20,000 a mile at 4%.....	\$261,000
Winnipeg Division, about 266 miles at \$8,000 a mile, at 4%.....	85,120
Saskatchewan Division, about 212 miles at \$8,000 a mile, at 4%.....	67,840
Total annual charges.....	\$413,960

This low rate of fixed charges results largely from the liberal aid granted to the Co. towards construction by the parliaments of the Dominion & of the provinces of Ontario & Manitoba.

In addition to the guarantee of the Manitoba Government, the Dominion Government gave the Co. a land grant of 6,400 acres a mile on the main line in Manitoba, & of 12,800 acres a mile on the main line in Saskatchewan. The Dominion also made a grant of \$6,400 a mile towards construction on 208 miles of the Ontario Division, & \$3,200 a mile on 63 miles thereof, & the Government of Ontario made a grant of \$4,000 a mile for the same purpose on 271 miles passing through that province.

The Co. has the right to construct 100 miles for its main line, at or near the boundary of Manitoba & Saskatchewan, towards Prince Albert, with a cash subsidy from the Dominion of \$3,200 per mile.

The Dominion Government has entered into contracts with the Co. for the transport of mails, materials, men & supplies, by which the Government agrees to pay the Co. for 20 years \$80,000 a year. Such mails, materials, men & supplies are to be carried by the Co. at fixed rates & charges, & accounts thereof & of the payments made by the Government as above, are to be kept & rendered yearly, & interest at 4% per annum allowed on the balance on either side. Any balance at any time due by the Government to the Co. is to be paid annually, but the Co. is only called upon to pay the Government any balance that may be

against the Co. at the expiration of the period of 20 years. The Government retain 533,333 acres of its land grant as security for the performance of these contracts. Such land may be sold either by the Government or the Co. at prices to be fixed by both parties jointly, but the price shall in no case be less than \$1.50 an acre, & the proceeds of sales shall be received by the Government & taken into the account as above.

When the main line is completed to the Saskatchewan River, the Co. will have earned on it & on its branches now constructed a land grant from the Dominion of 2,455,466 acres. These branches are the Winnipegosis branch, 23 miles completed; the Gilbert Plains branch, 6 miles completed & the remaining 12 miles graded; & the Stanley Jct. branch, 66 miles. Out of the 2,455,466 acres of land, 533,333 acres are retained by the Government as above, & 1,365,333 acres have been mortgaged to secure \$2,000,000 of 4% of 20-year land grant bonds, & the interest on these bonds is provided by the assignment of the above mail & transport contracts. There will remain of the grant upwards of 550,000 acres which have not been incumbered, & on these the bonds will be a first charge. The land grant bonds are a charge upon the lands pledged at the rate of \$1.50 per acre, & the lands are now selling rapidly at an average price of \$3.35 per acre, which, it is expected, will increase from year to year, as in the case of the Canadian Pacific land grant. The lands are situated in proximity to the railway, & an area several times larger than the actual acreage required has been reserved by the Government for the Co., & the Co. has the advantage of choosing only such lands as are "fairly fit for settlement."

All monies received on account of sales of land are payable to the trustees of the land grant bonds, & with accumulated interest thereon are to be applied in the repayment of the land grant bonds, & when these bonds are paid off, will either be accumulated in the hands of the trustees for the redemption of the bonds of the present issue, or, at the option of the Co., may be applied to the purchase of bonds of the present issue in the open market. The 550,000 acres above mentioned, & the equity of redemption in the lands covered by the land grant bonds, form part of the security of the present issue.

The Co. has hitherto earned, as shown in the following statement, its fixed charges on the railway, from the opening of each section as completed :

	Years ended		
	Dec. 31, 1897.	Dec. 31, 1898.	Dec. 31, 1899.
Miles open. ....	100	125	220
Earnings.....	\$70,119.28	\$106,698.72	\$195,607.04
Expenses.....	39,058.30	54,594.40	100,652.93
Net earnings.	\$31,060.98	\$52,104.32	\$94,954.11

It is expected that the net earnings for 1900 (on the 220 miles now open) will amount to not less than \$150,000. In addition to this there will be considerable earnings from the 200 miles shortly to be opened & from the further 200 miles to be completed this year.

Up to Dec. 31, 1899, 35,000 acres have been sold to settlers, at an average price of \$3.35 per acre, of which by far the larger part was sold since the spring of 1899.

The Dominion & Provincial subsidies are made payable to the contractors, Mackenzie, Mann & Co., in 10 mile sections, only on the completion thereon to the satisfaction of the Government's Chief Engineer. The proceeds of the present issue will be held by the trustees & paid over in a similar manner on the passing of each section by the Dominion Government.

J. E. Hudson, President of the American Bell Telephone Co., of Boston, died suddenly Oct. 1, at the Beverly Farms station of the Boston & Maine Ry., while waiting for a train,

United States Railway Earnings.

Railway gross earnings for Sept. continue to show increase, though the total increase & rate per cent. are much smaller than for recent months, & the number of railroads reporting decreases is considerably augmented. The Chronicle's figures cover 107 roads aggregating 101,068 miles, against 97,678 miles a year ago. Their gross earnings were \$60,761,204, which was an increase of \$1,316,472, or only 2.21%. This is in comparison with \$6,081,159, or 11.08% increase in 1899, \$2,790,805, or 6.04% in 1898, & \$6,385,823, or 14.14% gain in 1897. Decreases are reported on 36 of the roads, & 14 of these in amounts over \$30,000. Among these are the Great Northern system, with a loss of \$236,422, the Northern Pacific \$173,475, the Chicago, Milwaukee & St. Paul \$150,940, & the Minneapolis, St. Paul & Sault Ste. Marie \$124,984. The Illinois Central leads the list of roads reporting gains with \$300,668. The Chesapeake & Ohio reports gains of \$226,917, the Baltimore & Ohio \$192,308, the Choctaw, Oklahoma & Gulf \$151,000, The Mexican Central \$146,055, the Norfolk & Western \$140,602, the New York Central \$137,680, & the Missouri Pacific \$137,336. A number of causes have contributed to the falling off, chief of which were the lessened activities in cotton & grain movements & the floods in Texas. The anthracite coal strike began Sept. 17, & has had its effect. But none of the companies are included in the statement. Bituminous coal roads like the Chesapeake & Ohio & the Norfolk & Western exhibit gains in earnings because of the increased demand for soft coal. The failure of the spring wheat crop is having some effect on certain roads. There was a slight increase to be sure in the wheat receipts for 4 weeks at 10 western centres, from 29,746,400 bush. a year ago to 29,861,105 this year, but this gain has been in the winter wheat. At Minneapolis the deliveries were 7,400,100 bush. this year, against 9,600,140 a year ago, & at Duluth there were only 2,827,043 bush. delivered this year, against 10,614,282 last year. There has been a marked falling off also in corn receipts, from 26,244,602 bush. a year ago, to 17,524,363 this year. Of the groups of roads only one, the Northwestern & North Pacific, shows a falling off. These 12 roads report gross earnings for Sept., 1900, of \$14,954,535, against \$16,122,116 a year ago.—Railroad Gazette.

Grand Trunk Subsidiary Companies.

Below are particulars of annual meetings held recently, with lists of officers elected, &c.

CHICAGO & GRAND TRUNK RV., at Chicago, Oct. 2. President, C. M. Hays; other directors, E. W. Meddaugh, W. J. Spicer, F. A. Howe, H. B. Joy, D. F. Skinner, A. Dickson; Secretary, C. Percy; Treasurer, J. H. Muir.

CHICAGO, DETROIT & CANADA GRAND TRUNK JCT. RV., at Detroit, Oct. 1. President, C. M. Hays; Vice-President, J. Bell; Secretary-Treasurer, C. Percy; other directors, W. J. Spicer, E. W. Meddaugh.

CINCINNATI, SAGINAW & MACKINAW R.R., at Detroit, Oct. 1. President, A. W. Wright; Vice-President & General Manager, C. M. Hays; other directors, G. M. Stark, W. R. Burt, S. O. Fisher, E. W. Meddaugh, F. H. McGuigan; Secretary-Treasurer, J. H. Muir.

DETROIT, GRAND HAVEN & MILWAUKEE RV., at Detroit, Oct. 1. President, C. M. Hays; other directors, E. W. Meddaugh, J. Hobson, C. Percy, J. Pidgeon, Jr., F. H. McGuigan, W. J. Spicer, J. W. Loud, R. Gillis.

GRAND TRUNK JCT. RV., at Chicago, Oct. 2. President, C. M. Hays; other directors, E. W. Meddaugh, F. A. Howe, H. B. Joy, W. J. Spicer; Secretary, C. Percy; Treasurer, J. H. Muir.

**INTERNATIONAL BRIDGE**, at Buffalo, Sept. 29. President, C. M. Hays; Vice-President, J. Bell; Secretary-Treasurer, C. Percy; other directors, H. W. Sprague, E. W. Meddaugh, G. F. Brownell, F. H. McGuigan.

**MICHIGAN AIR LINE**, at Detroit, Oct. 1. President, C. M. Hays; other directors, J. H. Muir, W. J. Spicer, E. W. Meddaugh, J. Bell; Secretary-Treasurer, C. Percy.

**ST. CLAIR TUNNEL**, at Detroit, Oct. 1. President, C. M. Hays; Vice-President, J. Bell; Superintendent, F. H. McGuigan; other directors, W. J. Spicer, A. Vidal, E. W. Meddaugh, J. Hobson; Secretary-Treasurer, C. Percy.

**TOLEDO, SAGINAW & MUSKOGON RY.**, at Detroit, Oct. 1. President & General Manager, C. M. Hays; other directors, E. W. Meddaugh, J. W. Loud, C. J. Church, F. H. McGuigan, W. Cotter; Secretary-Treasurer, J. H. Muir.

### The International Limited's Time.

The following comparison between the time of the G.T.R. International Limited & one of the well-known fast trains between Buffalo & Chicago, is of interest. The figures between Buffalo & Chicago are used, as the distance, 540 miles, correspond approximately with the distance Montreal to Windsor, which is 558 miles:—

Lake Shore Limited—Leave Buffalo, 3.20 a.m.; arrive Chicago, 4.30 p.m. Actual time, 13 hours, 10 minutes; miles, 540; miles per hour, 41. Stops en route, 19.

International Limited—Leave Montreal, 9.00 a.m.; arrive Windsor, 10.00 p.m. Actual time, 13 hours; miles, 558; miles per hour, 43. Stops en route, 23.

The "dead time" consumed while the train is not in motion is:—Lake Shore Limited, 19 minutes; International Limited, 31 minutes. Each stop of a train running at such a high rate of speed is equal to a loss of about 4 minutes; that is, allowing for the time when the train begins to slow up until it again attains its maximum speed after making stops the train loses by each stop 4 minutes compared with time it would make if it continued on at full speed without making the stop. The comparison, after deducting the "dead time" & 4 minutes for each stop, is still more favorable to the International Limited, as under:—Lake Shore Limited, net time 11 hours, 35 minutes, or 46.6-10 miles an hour; Inter-

national Limited, net time 10 hours, 57 minutes, or 55.8-10 miles an hour.

The Lake Shore Limited carries one or two more cars than the International Limited, but allowing for this fact the comparison is highly creditable to the G.T.R. service.

### RAILWAY APPOINTMENTS, ETC.

**Algoma Central.**—H. Dreany, for several years Passenger Conductor on the Sault Ste. Marie branch of the C.P.R., has been appointed General Agent of the Michipocoton division at Michipocoton Harbor. All employees of the Michipocoton division will take their instructions from him.

C. Kyle has been appointed Master Mechanic, with headquarters at Sault Ste. Marie, Ont., succeeding W. L. Kerr, transferred.

R. Shanks, heretofore Roadmaster of the C.P.R. at Mattawa, has been appointed Roadmaster, with headquarters at Sault Ste. Marie, Ont.

P. Robinson has been appointed Dispatcher, with headquarters at Sault Ste. Marie, Ont.

W. Z. Earle has been appointed Assistant Engineer, succeeding R. C. Smith.

T. Williams, heretofore of the Bank of Toronto, London, has been appointed Paymaster for the Sault Pulp & Paper Co., & for the Lake Superior Power Co., & will also act as Paymaster for the A.C.R. for the present.

**Canadian Pacific.**—A slight change has been made in the dividing points between the eastern & western lines. Heretofore Fort William was the western terminus of the eastern lines, & the eastern terminus of the western lines. As the business of the Lake Superior terminals is most intimately connected with the western lines, the dividing point between the two main divisions of the system has been shifted from Fort William to Port Arthur, the jurisdiction of W. Whyte, Manager of the western lines, having been extended to & including Port Arthur. As the round houses & other terminal facilities are situated at Fort William, the eastern division engines & crews will run through to Fort William from the east, & will start from Fort William going east.

In reference to the announcement of changes in roadmasters on the eastern division, made in last month's issue, it may be mentioned that J. Hennesy, who has been ap-

pointed Roadmaster of the Quebec section at Three Rivers, succeeded W. Cooper, who died Aug. 15, of syncope of the heart. N. Delaire, appointed Roadmaster of Montreal terminals, succeeded J. Hennesy. P. Houston, appointed Roadmaster of the Montreal & Ottawa section, & of the Prescott & Sussex St. branches, with headquarters at Ottawa, succeeded J. M. Guenette, resigned. R. Clarke, appointed acting Roadmaster of the North Bay section, at Mattawa, succeeded R. Shanks, who resigned to enter the service of the Algoma Central.

J. W. Dawsey, heretofore Station & Weighing Inspector on lines east of Fort William, has been appointed Local Freight Agent at Montreal, vice J. F. Mundle.

**Chicago, Milwaukee & St. Paul.**—F. A. Miller, heretofore Assistant General Passenger Agent at Chicago, has been appointed General Passenger Agent, vice G. H. Heaford, resigned to engage in other business.

**Fitchburg.**—M. Williams has been elected President, succeeding E. D. Codman, resigned.

**Grand Trunk.**—X. H. Cornell has been appointed trainmaster of the 25th district, with headquarters at Durand, Mich., vice C. S. Cunningham, appointed Superintendent of St. Clair tunnel & terminals. Previous to this appointment Mr. Cornell was in the service of the Indiana, Illinois & Iowa R.R.

**Great Northern of Canada.**—N. J. Fraser has been appointed General Freight & Passenger Agent. He has recently been Montreal Manager for the Johnston Steamship Co., & was formerly in the Freight Department of the G.T.R.

**Intercolonial.**—In our last issue we noted the appointment of N. L. Rand as Acting Road foreman of locomotives from Campbellton east, & of J. Murphy, from Campbellton west. The circular says:—"All drivers & firemen are to take orders from them in every matter regarding the running & repairing of locomotives, & all round-house foremen will carry out their requests relating thereto."

**Midland of Nova Scotia.**—H. V. Harris has been appointed General Manager, with headquarters at Windsor, N.S.

**Missouri Pacific.**—J. M. Herbert, who recently resigned the Superintendency of the eastern division of the G.T.R., has been appointed Superintendent on the M.P. system at Ossawatimie, Kansas.

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Where accurate Weighing is required use

## GURNEY STANDARD SCALES.

WE MAKE SCALES FOR ALL PURPOSES. ALSO THE REED RECORDING ATTACHMENT FOR RAILROAD TRACK SCALES.

Write For Descriptive Circular.

# The Gurney Scale Co.,

HAMILTON, ONT., CANADA.

**New York & Ottawa.**—The completion of the bridge over the St. Lawrence River between Cornwall, Ont., & Hogansburg, N.Y., enables the Ottawa & New York Ry., & the New York & Ottawa R.R., to be operated as one line. For the purposes of operating & for the convenience of transacting business, the line will be known as the New York & Ottawa. The following officers with offices at Ottawa, Ont., will have charge:—G. B. Colpas, Auditor; G. H. Phillips, General Freight & Passenger Agent; G. A. Brown, Assistant General Freight Agent; H. K. Gays, Assistant General Passenger Agent; M. G. De Shaw, Superintendent; M. Keefe, Roadmaster; M. Goodrich, Master Mechanic, office, Santa Clara, N.Y.

**Northern Pacific.**—General Superintendent Kimberly, who has been absent for several months on account of ill health, has been relieved of the arduous duties of General Superintendent, & has been made Assistant General Manager. Assistant General Superintendent Law, who has had charge of the operating department during Mr. Kimberly's absence, has succeeded to the General Superintendency.

**Quebec Southern.**—The Quebec Southern Ry. Co. assumed the control & management of the East Richelieu Valley R.R., & the United Counties Ry., on Sept. 1, with operating headquarters at St. Hyacinthe, Que. The

W. D. V. Earl, Local Manager of the Bell Telephone Co. at Brockville, was recently married to Miss Moody, of Terrebonne, Que.

Duncan Campbell, Superintendent of Construction on the Gilbert Plains branch of the Canadian Northern Ry., is suffering from typhoid.

Wm. Mackenzie, of Mackenzie, Mann & Co., has been making a trip from Toronto to the Pacific coast, accompanied by his three daughters.

W. Phillips, formerly Manager of the Niagara Falls Park & River Ry., has received an appointment on the Winnipeg Electric Street Ry.

Miss Ethel S. Grundy, daughter of the General Manager of the Quebec Central Ry., was married at Sherbrooke, Que., Oct. 17, to W. E. Paton, of the Paton Mfg. Co.

Jas. Jenkins, who died recently at Little River, P.E.I., aged 86, was for over 20 years engaged in ship building, when it was an important industry in Prince Edward Island.

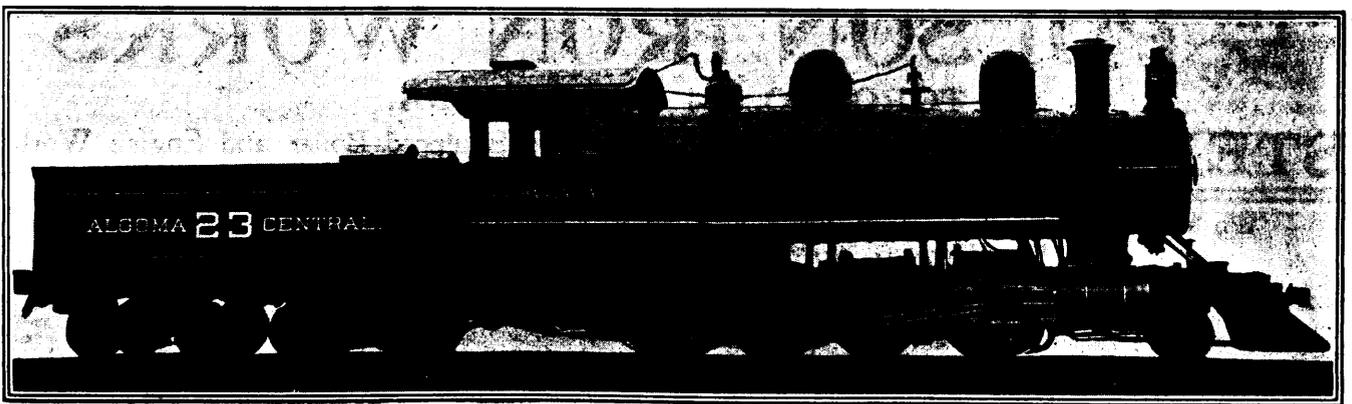
Lyman Dwight, Superintendent of the G.N.W. telegraph lines in Manitoba, returned to Winnipeg at the end of Sept., after several months' absence on account of ill health.

G. H. Phillips, who has been appointed General Freight & Passenger Agent of the New York & Ottawa Ry., was for a number of

syndicate is considerably embarrassed by the fact that neither the United States nor the provisional government is prepared to grant the franchises necessary or confirm the old concessions which have been purchased from the persons to whom they were granted by the Spanish authorities before the war.

The old seventh form of Upper Canada College, Toronto, in 1852, consisted of N. Walker of Port Dover, head boy, now an M.D. of the same place; N. Kingsmill, of Niagara, now a Q.C. of Toronto; J. E. O'Reilly, of Hamilton, now Master in Chancery there; C. W. Robinson, of Toronto, now a General in the British army, resident in England, & C. F. Gildersleeve, of Kingston, now General Manager of the Richelieu & Ontario Navigation Co. of Montreal. On the occasion of General Robinson (who is a son of the late Sir [Beverly Robinson, Chief Justice) making a visit to this country recently, Mr. Kingsmill conceived the happy idea, & brought the old form together, with some of their contemporaries, at dinner at his residence, 48 years after they had separated as boys. Such a reunion, with unbroken ranks after half a century of life's vicissitudes, is a remarkable occurrence.

The **Souvenir of the Victoria Jubilee Bridge**, recently issued by the G.T.R. System, is one of the most unique works we have ever



BALDWIN CONSOLIDATION LOCOMOTIVE FOR ALGOMA CENTRAL RAILWAY.

officers are as follows:—President, H. A. Hodge, Rutland, Vermont; Vice-President & Treasurer, F. D. White, Rutland; Auditor, M. M. Thomson, Rutland; Traffic Manager, A. H. Harris, 141 St. James St., Montreal; Superintendent, R. A. Trudeau, St. Hyacinthe, Que.

**Rutland.**—E. G. Russell, who recently resigned the General Superintendency of the Delaware, Lackawanna & Western, has been appointed General Manager. Headquarters, Rutland, Vt.

**White Pass & Yukon.**—J. S. Wilson, heretofore General Agent, has been appointed Claim Agent. Office, Skagway, Alaska.

#### Mainly About People.

T. Ahearn, of Ottawa, has returned from a trip to Europe.

Hugh Sutherland, of Mackenzie Mann & Co., is again residing in Winnipeg.

C. Fargo, Second Vice-President of the American Express Co., died in Chicago, Oct. 13. He was born there in 1831.

G. R. Joughins, Mechanical Superintendent of the Intercolonial Ry., returned to Moncton, N.B., early in October from Europe.

R. Atkinson, Superintendent of the C.P.R. Rolling Stock, has been making a trip of inspection over the western lines of the Co.

years Travelling Freight Agent for the Canada Atlantic.

The Northwest Railway Club recently elected E. A. Williams, Mechanical Superintendent of the "Soo" Line, as President, & T. A. Foque, Assistant Mechanical Superintendent of the same line as Secretary-Treasurer.

R. D. Marchand, for some years expert for the Westinghouse Co., in connection with the long distance transmission of electricity, has been appointed to a similar position with the Montreal Street Ry. & the Chambly Manufacturing Companies.

C. R. Hosmer, of the C.P.R. directorate, recently entertained a number of the members of the Montreal Hunt Club & other friends at breakfast at the Forest & Stream Club, Dorval. They were conveyed from Montreal by a special G.T.R. train.

D. A. McDonell, ex-Superintendent of the Cornwall Canal, died Oct. 4, aged 84. He was appointed Superintendent of the Beauharnois Canal in 1846, & in 1849 was appointed Superintendent of the Cornwall Canal, occupying the position for 41 years & retiring in 1889.

A New York press despatch says:—Sir Wm. Van Horne spends most of his time in New York nowadays looking after the interests of the syndicate which purchased the railways of Cuba, and he expects to extend them to all parts of the Island. The

seen got out by a railway company. A history & description of the original tubular bridge, built in 1860, & of the new bridge, completed in 1899, is printed on pages of card, each of which is separately fastened by cloth to secure permanent binding. It is profusely illustrated with high-class half-tones, beautifully printed in tints, & is bound in a chastely executed aluminum cover. In addition to being of present interest & historical value, it is a most perfect specimen of book work.

**Canada's Railway Facilities.**—The Sioux City, Ia., Daily Tribune, says:—"Possibly many in the United States who imagine themselves fairly well posted regarding all the nations of this continent will be surprised to learn that Canada has such great advantages in the matter of transportation facilities. They will hardly credit the statement that Canada has \$180 per head of her population invested in railways, while, according to the latest reports of the Interstate Commerce Commission, the United States has \$150 per head so invested. The efficiency of the 17,400 miles of railway in Canada is illustrated by the fact that when the British government recently made enquiry about the carrying power of the Canadian Pacific Railway, in order to ascertain at what rate per diem troops could be transported from the Atlantic to the Pacific on the way to China, the reply was, 5,000 troops a day, & the time 100 hours for each shipment of troops."

**Railway Equipment Notes.**

The G.T.R. is said to have ordered 300 box cars in the U.S.

The net income of the Westinghouse Air Brake Co. for the past fiscal year was \$3,528,199.

The P.E.I. Ry.'s 2 locomotives, described in our last issue, have been delivered at Charlottetown.

The C.P.R. is building in its Montreal shops 2 standard wing snow plows & 2 double-track snow plows.

The Lehigh Valley is using a system of lettering on its locomotives which indicates the pulling capacity of each class.

It is probable that an order will soon be placed for building 10 first-class passenger cars in the C.P.R.'s Montreal shops.

The G.T.R. shops at Montreal are working on an order for 1,000 standard box cars, 33 ft. long, 60,000 lbs. capacity. About 100 were completed by Sept. 30, & they are being turned out at the rate of 36 a week.

The Algoma Central is obtaining 4 consolidation locomotives from the Baldwin Locomotive Works, the general dimensions of which

were given in our last issue. An illustration of one of them is given on page 299.

The Intercolonial has placed an order with Rhodes, Curry & Co., Amherst, N.S., for 1,000 box cars of 60,000 lbs. capacity. Orders have also been placed with other firms for 225 box cars of similar capacity & 200 platform cars.

An order was recently placed for the construction of the following equipment at the C. P.R. shops at Perth, Ont.—138 box cars, 100 gondola cars with hopper bottoms, 20 refrigerator cars, 100 ore cars for the Kootenay District, B.C. All of the above mentioned will be of 60,000 lbs. capacity.

The New York & Ottawa's equipment consists of 8 locomotives, 12 passenger cars, 1 baggage car, 3 combination cars, 320 freight cars & 4 cabooses. As the Co. will not have through New York service this winter it has not been found necessary to purchase the 2 locomotives mentioned in our last issue.

The Great Northern of Canada's equipment, most of which has been purchased recently in the U.S. by Vice-President McNaught, of New York, comprises 12 locomotives, mostly new; 14 passenger cars, 2 combination cars, passenger, mail & express; 4 baggage & ex-

press cars, 600 box cars, 140 platform cars, 69 gondolas, & 6 cabooses.

The Minneapolis, St. Paul & Sault Ste. Marie's Baldwin compound decapod locomotive was illustrated in our last issue. As stated, it was guaranteed to haul 2,000 tons, exclusive of the tender & caboose, on a compensated grade of 42 ft. per mile. This has been satisfactorily accomplished, with a low fuel consumption, as shown by the following particulars of its performance on Aug. 21, 22 & 26:

	Aug. 21 Ex East.	Aug. 22 Ex West.	Aug. 26
Distance.....	111	111	111
Tonnage, net.....	1,205.09	1,208.8	1,227.7
"    tare.....	790.7	937.47	785.05
"    total.....	1,996.6	2,236.27	2,012.75
Cars, loads.....	58	60	58
"    empties.....	0	6	0
Ton miles.....	221,622.6	222,782.8	223,415.25
Tons coal used.....	11.1150	11.425	10.1450
Lbs. coal per 10,000 ton miles.....	1,044	1,007	960

There are 7 miles omitted on trip of Aug. 26, on account of doubling over a piece of track with a 68 ft. grade.

The White Pass & Yukon used last winter a regular standard gauge rotary snow plow, the only change made before putting it into service being to push the wheels in to narrow gauge. The trucks thus changed gave some

F. B. POLSON

J. B. MILLER

# The POLSON IRON WORKS

TORONTO, - - CANADA.

**STEEL BOILERS**

The Best Equipped Boiler and Engine Works

\* \* \* in Canada. \* \* \*

We Manufacture——

*The Brown Automatic Engine*  
*Single, Compound and Triple Marine Engines*  
*Hoisting and Mining Engines*  
*Steel Steam Vessels of every description*  
*Steam Yachts and Launches*

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## The Haliburton Lumber Company, LIMITED.

All Kinds of Hard and Soft Timber and Lumber,  
Shingles, Slabs and Tan Bark.

PINE, SPRUCE, HEMLOCK AND BIRCH BILL STUFF CUT TO ORDER.

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---

Head Office, Henderson Block, Corner Queen and Yonge Sts., TORONTO.

trouble, due to the wheels being too far from the load in the axle. A change has been made in the truck to do away with this trouble. In ordering another rotary a special specification has been made for the truck so that it can be quickly changed to the narrow gauge. The work of a rotary on the W.P. & Y. is probably as hard as can be found anywhere, if not harder, & there were several breakdowns last winter, the most serious one being the knocking out of a back cylinder head & with it about half the back cylinder flanger, the break extending into the steam port. This was caused by the rod bolts letting go. A break was also found in the bed plate of the rotary, which has been repaired. On several occasions last winter as many as 4 engines were pushing the rotary in the very hardest kind of snow.

The G.T.R. recently placed an order, divided between two locomotive works in the U.S., for 12 mogul locomotives, to be used on the 1st district extending through the New England States to Portland, Me. These locomotives will be of the same character & design as the moguls now being built at the Co.'s Montreal shops, which have already been described in these columns. Following are the general dimensions:

Cylinders, diameter and stroke, 20 x 26 in.  
 Driving wheels, 62 in. diameter.  
 Wheel base, drivers, 15 ft. 8 in.  
 Wheel base, total, 24 ft. 1 in.  
 Weight on drivers, 138,176 lbs.  
 Weight on truck, 23,800 lbs.  
 Total weight of engine, 161,976 lbs.  
 Weight of tender with coal and water, 112,000 lbs.  
 Tender capacity, 5,000 U.S. gallons.  
 Boiler, 62 in. diameter.  
 Fire box, 120 x 40 1/2 ins.  
 Tubes, 283, 2 in. diameter, 11 ft. 11 in. long.  
 Boiler pressure, 200 lbs. per sq. in.  
 Fuel, bituminous coal.  
 Heating surface, tubes, 1,803 sq. ft.; firebox, 188.1 sq. ft.; total, 1,991.1 sq. ft.  
 Grate area, 33.43 sq. ft.

Orders have recently been placed in the United States for 5 consolidation locomotives & 1 ten-wheeled passenger locomotive for the Intercolonial, to be delivered in Feb., 1901. Following are the general dimensions:

CONSOLIDATION LOCOMOTIVES.

Cylinders, Cleveland patent, 21 in. x 28 in.  
 Driving wheel diameter, 56 in.  
 Wheel base drivers, 15 ft. 0 in.  
 total, 26 ft. 1 in.  
 Weight on drivers, in working order, 150,000 lbs.  
 truck, 25,000 lbs.  
 Total weight of engine, 175,000 lbs.  
 Weight of tender with coal and water, 100,000 lbs.  
 Tender capacity, 3,500 imperial gallons.  
 Boiler, smoke box end, 66 in.  
 Firebox, 114 in. x 41 in.  
 Tubes—no. 269; diameter, 2 in.; length, 14 ft. 0 in.  
 Boiler pressure, 200 lbs.  
 Fuel, bituminous coal.  
 Heating surface—tubes, 1,972 sq. ft.  
 firebox, 192 sq. ft.  
 total, 2,164 sq. ft.  
 Grate area, about 32 1/2 sq. ft.

TEN-WHEEL PASSENGER ENGINE.

Cylinders, Cleveland patent, 20 in. x 26 in.  
 Driving wheel diameter, 72 in.  
 Wheel base drivers, 13 ft. 1 in.  
 total, 26 ft. 2 in.  
 Weight on drivers, 108,000 lbs.  
 Weight on truck, 42,000 lbs.  
 Total weight of engine, 150,000 lbs.  
 Weight of tender with fuel and water, 100,000 lbs.  
 Tender capacity, 3,500 imperial gallons.  
 Boiler, extended wagon-top, 60 in. diameter.  
 Firebox, 108 in. long and 41 in. wide.  
 Tubes—no. 272; diameter, 2 in.; length, 14 ft.  
 Boiler pressure, 200 lbs.  
 Fuel, bituminous coal.  
 Heating surface—tubes, 2,200 sq. ft.  
 firebox, 185 sq. ft.  
 total, 2,385 sq. ft.

The Canadian Transfer Co., Ltd., which has recently taken over the business of the Montreal Transfer Co., Ltd., in Montreal, & of the Verrall Transfer Co., in Toronto & Hamilton, was incorporated under the Dominion Companies' Act in Feb., 1898, the capital and stock being placed at \$100,000, & the head office located in Montreal. The letters patent passed out of the hands of the incorporators, & the present officers are, President, Lt.-Col. F. C. Henshaw; other directors, H. Paton, C. Cassils, J. Tough, G. R.

Starke; Secretary-Treasurer, F. M. McRobie; Outside Superintendent at Montreal, J. Miller; Superintendent at Toronto, G. W. Verrall. The Co. has contracts with the C.P.R., the G.T.R., the I.C.R., the R. & O. Navigation Co., & the Niagara Navigation Co. At present its operations are confined to Montreal, Toronto, & Hamilton, but it will probably extend to other cities, & Ottawa is likely to be one of the first to be added.

Minneapolis, St. Paul & Sault Ste. Marie Ry.

Following is the report of this subsidiary company of the C.P.R. for the year ended June 30 last:—

This being the first printed report the Co. has issued it is proper to give a brief history of the organization. The Minneapolis, Sault Ste. Marie & Atlantic Ry. Co. was organized in 1883, under the general incorporation laws of the State of Wisconsin, & during the years from 1884 to 1887, constructed & operated the line extending from Minneapolis to Sault Ste. Marie, 494 miles; the Minneapolis & Pacific Ry. Co. was organized in 1884, & the Minneapolis & St. Croix Ry. Co. in 1885, under the laws of Minnesota; & the former Co. constructed the line from Minneapolis to Boynton, N.D., in 1886 & 1887, about 288 miles. The Aberdeen, Bismarck & Northwestern Ry. Co. was organized in 1883, under the general incorporation laws of the Territory of Dakota; this Co. graded & bridged a line from Aberdeen to Bismarck & acquired terminal properties in both places, but never laid any track.

In 1888 the above companies were consolidated, & all their rights, properties & franchises united & vested in one single corporation, the Minneapolis, St. Paul & Sault Ste. Marie Ry. Co., under the statutes & general laws of the states above referred to. The consolidated company thus acquired about 800 miles of road in operation. Its stock was issued to the extent of 140,000 shares common & 70,000 preferred, in exchange for the stock of the several constituent companies. The Minneapolis & Pacific Ry. Co. had issued \$4,290,000 & the Minneapolis, Sault Ste. Marie & Atlantic Ry. Co. \$10,000,000 5% bonds. The consolidated company executed a mortgage providing for the issuance of \$21,000,000 of bonds on the 800 miles of road already constructed & \$20,000 a mile on each additional mile thereafter constructed; sufficient of the bonds were reserved to retire at par value the bonds of the constituent companies. In 1890 an arrangement was effected whereby the holders of the outstanding consolidated bonds surrendered 15% of the same & received in lieu thereof income certificates to the amount of \$771,000, due in 1900, & at the same time a reduction of the rate of interest from 5 to 4%, the C.P.R. Co. guaranteeing the latter amount; the same privilege, i.e., the C.P.R. Co.'s guarantee of 4% was extended to the holders of the M. & P. & M., S. Ste. M. & A. bonds, & finally the entire issue of bonds was thus reduced to a 4% basis.

Since the consolidation the Co. has extended its lines in Dakota to the Canadian boundary, where it connects with the C.P.R. at Portal, thus making a through Pacific Coast route from the Twin Cities, & has also extended the Boynton line towards Bismarck to Braddock, a portion of the old grade of the Aberdeen, Bismarck & Northwestern being thus utilized; additional mileage has been added in Wisconsin & Michigan, so that the Co. now owns 1,278 miles of road, all in excellent condition. Sufficient mileage has been constructed to entitle the Co. to issue \$1,128,000 of its first consolidated mortgage bonds & which are available for extensions or improvements when required.

The gross earnings as compared with the

previous year show an increase of 18.4%; operating expenses, 3.7%; net earnings, 37.7%; fixed charges, taxes & terminal rentals, 13.6%; surplus earnings, 134.9%; passenger earnings, 32.3%, & freight earnings, 16%.

The fixed charges were increased during the year by the issuance of \$3,500,000 of 4% 2nd mortgage bonds; the proceeds of these were used to retire income & interest dividend certificates, aggregating \$970,241.58, payment of the amount advanced by the C.-P.R. Co. for construction & equipment account, payment of car trust notes, purchase & improvement of the Minneapolis terminals, purchase of additional equipment, etc.

During the year the line from Rapid River north to Trenary, 24 miles, was completed.

The Co. purchased grounds for freight terminals at Minneapolis, & a freight house, 50x500, with 2-story office at one end, is now building; also a passenger station for the accommodation of local trains. The grounds are centrally located & as convenient & desirable as any in the city; they will contain 3 miles of tracks, including main line & storage tracks, which will be ample to take care of the business at that point; the grounds are now being graded & the entire plant will be ready for occupancy by Oct. 1. A considerable saving of terminal rental will thus be effected.

During the year 40 miles of 60 lb. steel rails were re-laid with 72 lb. steel, & an additional 33 miles are now being replaced with 80 lb. rails; when completed the Co. will have 200 miles of heavy steel between Minneapolis & Gladstone; the line from Valley City to Portal, N.D., 262.86 miles, was provided with 72 lb. rails when constructed; the balance of the line is laid with 60 lb. rails.

During the year 2,641 lineal ft. of wooden bridges were filled with earth, & eight wooden span bridges were replaced with steel spans, thus making further repairs unnecessary; the cost of the wooden spans was charged to operating expenses. One hundred miles of road was ballasted with gravel.

The equipment is in excellent condition, & was increased during the year by the purchase of 200 freight cars of 60,000 lbs. capacity each, equipped with air brakes & automatic couplers; also 40 new refrigerator cars.

The Co.'s large, general shops at Shoreham received general repairs, including new roofs & 4 new steam boilers; also, extensive repairs were made to the coal, merchandise, flour & ore docks at Gladstone, Mich., thus insuring decreased maintenance expenses; the high standard of the balance of the buildings has been maintained, & in fact, the road-bed, buildings & other fixtures were never in better condition & repair than at present.

The work of the Industrial Development Department during the past few years is apparent in the substantial increase in settlers & farm acreage & the establishment of numerous industries along the line, all of which have contributed toward the increased earnings of the year.

The average rate per ton per mile was 6.58 mills as compared with 5.80 mills during the preceding year. The average miles operated during the year was 1,285.74; the gross earnings per mile were \$4,006.39 as compared with \$3,470.07 per mile during the previous year, & \$2,446.32 during 1894 on an average of 1,188.71 miles.

EARNINGS AND EXPENSES.

Passenger.....	\$ 822,908 78
Freight.....	3,974,398 70
Express, mail & miscellaneous.....	353,880 43

Maintenance of way & structures.....	\$5,151,187 91
Maintenance of equipment.....	537,647 15
Conducting transportation.....	445,792 52
General expenses.....	1,459,516 97
	111,626 35

Net earnings.....	\$2,596,604 92
Interest on bonds.....	\$1,320,360 00
Taxes & revenue.....	241,809 26
Rental of terminals.....	129,158 94
Other interest charges & accounts charged off.....	24,404 91
	\$1,715,733 11
Surplus earnings.....	\$ 880,871 81

TRAFFIC AND MILEAGE STATISTICS.

Train Mileage.	
Freight revenue trains.....(miles)	1,618,312
Passenger revenue trains.....	845,602
Mixed revenue trains.....	386,270
Non-revenue trains.....	105,591
Total train mileage.....	2,955,775
Freight Traffic.	
Tons carried.....	3,102,244
"    "    one mile.....	603,856,370
"    "    per mile of road.....	469,656
Average distance haul of one ton.....(miles)	194.65
"    amount received for each ton of freight.....	\$1 28
Average rate per ton per mile.....	6.58 mills
Freight earnings per mile of road.....	\$3.005 17
"    earnings per train mile.....	\$1 98½
Passenger traffic.	
No. of passengers carried earning revenue.....	436,813
"    "    "    one mile.....	37,543,998
"    "    "    per mile.....	29,200
Average distance carried.....(miles)	85.95
"    amount received from each passenger.....	\$1 88
Average rate per passenger per mile (cents).....	2.19
Passenger earnings per mile of road.....	\$888 96
"    "    train mile.....(cents)	92.78
Miscellaneous.	
Gross earnings per mile of road.....	\$4,006 39
Operating expenses per mile of road.....	\$1,986 86
Mileage of passenger cars.....	5,867,640
Average no. of passenger cars per train.....	4.76
"    passengers per train.....	30
Mileage of loaded freight cars—North or East.....	19,340,001
Mileage of loaded freight cars—South or West.....	20,562,326
Mileage of empty freight cars—North or East.....	5,886,641
Mileage of empty freight cars—South or West.....	5,649,500
Average no. of freight cars in train.....	25.66
"    "    loaded cars.....	19.91

Average no. of tons freight in train..... 301.24  
 "    "    "    in each loaded car..... 15.13  
 Average mileage operated during year..... 1,285.74

Following are the officers, &c.:—President, T. Lowry, Minneapolis; Vice-President, J. Martin, Minneapolis; other directors: W. D. Washburn, J. S. Pillsbury, C. H. Pettit, F. H. Peavey, Minneapolis; Sir Wm. Van Horne, T. G. Shaughnessy, R. B. Angus, Montreal; W. H. Bradley, Tomahawk, Wis.; W. B. Dean, St. Paul; General Manager, E. Pennington; Sec.-Treas., C. F. Clement; Auditor, C. W. Gardner.

Central Vermont Railway Meeting.

The annual meeting of this subsidiary Company of the G.T.R. was held at St. Alban's, Vt., Oct. 9. Following are extracts from the first annual report:—  
 Your Co. took possession of the re-organized C.V.R., May 1, 1899. The directors, therefore, submit a report of the business & operations of the Co. for the 2 months May 1 to June 30, 1899, as well as for the fiscal year ended June 30, 1900.

TRACK OWNED SOLELY BY THIS COMPANY.

Main Track.	
St. John's to Windsor.....	177.9 Miles.
Essex Junction to Burlington.....	8. "
Rouse's Point to Swanton Jct.....	17.7 "
Second Main Track.	
Swanton Jct. to St. Albans.....	6.2 Miles.
Branch Lines.	
S., S. & C. Jct. to Waterloo.....	40.4 Miles.
Montpelier Jct. to Williams-town.....	14.9 "
Essex Jct. to Cambridge Jct.....	26. "
St. Albans to Richford.....	28. "
Total.....	109.3 "
Yard tracks, sidings & spur tracks.....	105.3 "
LEASED LINES.	
Main Track.	
Brattleboro to New London, (New London Northern R.R.).....	121. "

Branch Lines.

Brattleboro to South Londonderry (narrow gauge).....	36. Miles.
St. Lambert to Farnham, (Montreal & Province Line Ry.).....	32. "
Marieville to St. Cesaire, (M. & P. L. Ry.).....	8.6 "
Montville to Palmertown.....	2.5 "

Total.....	79.1 "
Yard tracks, sidings & spur tracks.....	44.5 "
Total miles track.....	669.0 "
Deducting and main track, yard tracks, sidings & spur tracks, leaves 513 miles operated.	

The financial results are as follows:

MAY AND JUNE, 1899.

Gross earnings.....	\$ 518,131 19
Operating expenses, including taxes.....	424,635 22
Net earnings.....	123,495 97
Total income.....	123,495 97
Fixed charges.....	
Interest on bonds.....	73,333 33
Rental of leased lines (New London, Northern, & Montreal & Province Line).....	36,366 65
Balance above all charges.....	13,795 99

YEAR ENDED JUNE 30, 1900.

Gross earnings.....	\$3,282,723 72
Operating expenses, including taxes.....	2,599,284 62
Net earnings.....	783,439 10
Income from other sources.....	10,845 88
Total income.....	794,284 98
Fixed charges.....	
Interest on bonds.....	447,235 03
Rental of leased lines (New London, Northern, & Montreal & Province Line).....	218,200 00
Balance above all charges.....	128,849 95

The percentage of operating expenses for the year was 73.83%.

Your directors have taken advantage of the favorable earnings to make liberal expenditures in connection with the renewal & maintenance of the property. There have been 102 miles of new 75 & 80 lb. steel rail laid in the main tracks, while the rail released has been relaid on the less important lines, thus bringing up the standard of the track on all portions of the system. In addition to a liberal renewal of cross ties, the number of ties per mile has been increased. With the com-

# Lubricating Oils

MARINE VALVE, RENOWN ENGINE, ELDORADO ENGINE OILS and ARCTIC CUP GREASE.

Durability—Reliability—Uniformity

Are points of excellence in favor of these oils and greases, which have stood the severest test for years.

These brands with a full line of oils manufactured by the Imperial Oil Company FOR SALE AT ALL LAKE PORTS.

The best goods are most economical The names of the best are well known to all marine engineers of experience.

## A Popular Route to New York

Canadian Pacific, and Toronto, Hamilton and Buffalo Railways in connection with the New York Central & Hudson River Railroad.

Leaving Toronto in the evening at 5.20 p.m. in one of the through sleeping cars of the Wagner Co., you are landed at Grand Central station, in the very heart of the City of New York, 4th Avenue and 42nd Street, at 8.15 next morning, adjacent to all hotels and business houses and avoiding the annoyance of transfer.

This is also the route of the famous "EMPIRE STATE EXPRESS" Fastest Train in the world.

Call on nearest ticket agent of the C.P.R. or T.H. & B. for further information, or address

GEORGE H. DANIELS, Genl. Passr. Agent, Grand Central Station, NEW YORK.  
 LOUIS DRAGO, Can. Passr. Agent, TORONTO, ONT.  
 H. PARRY, Genl. Agent, BUFFALO, N. Y.

THE HUNTER, ROSE CO., All kinds of... Limited. PRINTING, BOOKBINDING, OFFICE STATIONERY and ACCOUNT BOOKS Temple Building, Toronto.

pletion of the construction of new steel bridges now under contract, all of the wooden & combination bridges on the main line will have been removed. There have been general repairs, renewals & painting done to the station buildings, machine shops, etc. For the period covered by this report there were included in operating expenses extraordinary expenditures for improvements & betterments to the amount of \$426,766.17.

We have purchased 200 shares of the Ogdensburg Car Co., for \$87,000, which, with the 100 shares acquired with the property, gave us the entire stock of the Co., \$300,000. The charter has been surrendered, the affairs of the Co. wound up, & the rolling stock, consisting of 493 cars, added to the C.V. equipment.

The Commission appointed by the Supreme Court of Vermont to consider the matter of the desired crossing of our tracks at Burlington by the Rutland-Canadian Ry., decided that the public & all concerned would be best served by a connection between the R.-C. Ry. & the C.V.R., with a joint use of the tracks & station, & granted to the R.-C. R. a right of way for a single track from the Northern boundary of our property to a connection with our main line near the engine house at Burlington, all expense of construction of the new track to be borne by the R.-C. R., & a rental of \$7,000 a year to be paid by that Co. to the C.V.R. Co., for the use of its tracks, lands & passenger station, & for services at the passenger station. The R.C. R. has about completed its line to a connection with our tracks.

An agreement has also been reached with the R.C.R. Co. for the crossing of our tracks at Alburgh with its Canadian branch, the construction of its main line to Rouse's Point, south of our track, & for the joint ownership & use of the bridge across Lake Champlain. Under this agreement we obtain a right of way over its line to a connection with the tracks of the G.T.R. at Rouse's Point.

Satisfactory arrangements have been made with the Delaware & Hudson & Grand Trunk companies for joint use of their yard & station facilities at Rouse's Point.

An agreement has been made with the Boston & Maine R.R. for the joint use of the C.V. & B. & M. tracks between South Vernon & White River Jct., effective Oct. 1, which will enable us to run our trains through between St. John's & New London.

The contract with the Canada Atlantic Ry. for the joint use of the line between Swanton & East Alburgh has been renewed.

Legislation was obtained at the last session of the Dominion Parliament, enabling the Co. to hold stock of the Montreal & Vermont Jct. Railway, the Stanstead, Shefford & Chambly Ry., & the Montreal & Providence Line Ry., permitting the consolidation of these lines with each other, or with the C.V.R. An agreement has been entered into with the owners of the M. & P.L. R. from St. Lambert, Que., to the International Boundary, (3 miles south of Frelighsburg), to acquire the stock of that Co., upon the C.V.R., guaranteeing \$200,000 of 4% 50 year bonds. The Dominion Government has granted a subsidy of \$3,200 a mile for the rebuilding of the abandoned portion of the M. & P.L.R. from Farnham to the Province Line, & we will begin the work of rebuilding from Farnham to Frelighsburg at an early date.

The New York, New Haven & Hartford Co. having extended its Norwich & Worcester line from Allen Point to Groton, discontinued June 3, 1899, the use of our tracks between Norwich & New London. Your receipts have thereby been diminished to the extent of \$40,000 a year, the rental heretofore paid by that Co. Passenger receipts on that portion of the line have also suffered from the competition of the new road.

There were issued to the C.V.R. Co. for the payment of liens & expenses properly chargeable to the new company, bonds to the amount of \$292,600 And in exchange for Consolidated R.R. of Vermont bonds held by the Company. 17,400

Total	\$310,000
All of which were received from the Trust Company. Of this amount there was paid for the claim of the Weldon National Bank, in bonds at par.	\$10,000
For payment of mortgage on property acquired from the Shepard & Morse Co., Burlington, bonds at par.	40,000
	\$ 50,000

Leaving a balance of bonds in your treasury of \$260,000

All other expenses & amounts due for which these bonds were provided have been paid by the Co. in cash.

Our passenger & freight equipment is at present inadequate for the proper handling of the business, & in order to provide the necessary funds it has been decided by your directors that the surplus from operation for the period covered by this report of \$142,645.94 be applied to the credit of an equipment renewal fund, against which shall be charged expenditures as they may be made for new cars & engines.

Following are extracts from the Vice-President & General Manager's reports:—

For the 14 months, May 1, 1899, to June 30, 1900, the percentage of expenses to earnings was 73.99%, compared with 76.49% in the preceding 14 months, a decrease of 2.5%. The percentage of improvements included in operating expenses, to the earnings, was 10.86%, as compared with 5.69% in the preceding 14 months. The percentage of ordinary expenses, to the earnings, was 63.13%, as compared with 70.80% in the preceding 14 months.

Rates have been well maintained during the year. The number of tons carried one mile was 252,551,609, an increase of 14,715,098; the earnings per freight train mile, \$1.56, an increase of 2c., & the earnings per ton per mile, 0.88c., an increase of 0.04c. The number of passengers carried one mile, 43,707,921, shows an increase of 1,107,897; the earnings per passenger train mile, \$1.04, an increase of 0.8c., & the earnings per passenger per mile, have increased from 2.18c. to 2.22c., an increase of 0.04c.

ASSETS.

Cost of road & equipment	\$13,825,839 85
Bonds deposited with trustee	1,000,000 00
Materials & supplies on hand.	254,070 09
Cash on hand & in transit	153,232 41
Investments in bonds.	257,679 68
Sundry accounts collectible.	
Due from agents	88,417 08
From U.S. & Canada carrying mails.	20,365 73
Sundry railroads & individuals	311,744 00
Advances fast freight line account working fund.	9,950 00
	\$15,921,298 84

LIABILITIES.

First mortgage bonds.	\$12,000,000 00
Common stock.	3,000,000 00
Interest due.	9,938 00
Interest accrued not due.	74,408 36
Taxes accrued not due.	51,872 71
Sundry accounts payable.	
Vouchers & pay rolls.	429,360 19
Sundry railroads & individuals.	117,331 07
Improvement fund.	95,742 57
Equipment renewal.	142,645 94
	\$15,921,298 84

ENGINE MILEAGE.

	Year ended June 30, 1900.	Year ended June 30, 1899.
On passenger trains	995,395	1,049,037
On freight trains	1,302,764	1,141,140
On mixed trains	182,021	207,962
Total miles earning revenue.	2,480,180	2,398,139
Piloting, switching & light running.	763,065	683,812
Engine traffic—miles run.	3,243,245	3,081,951

CAR MILEAGE.

	Year ended June 30, 1900.	Year ended June 30, 1899.
Passenger	4,986,541	5,107,461
Freight	31,746,397	29,124,195
Total car miles.	36,732,938	34,231,656

Freight & passenger train earnings per ton & per passenger mile—year ended June 30, 1900.

	FREIGHT.	
	Year ended June 30, 1900.	Year ended June 30, 1899.
Revenue train miles.	1,424,111	1,204,572
Freight earnings.	\$2,229,552 12	\$2,001,409 98
Earnings per freight train mile.	\$1 56	\$1 54
Tons carried	2,658,925	2,801,721
Tons carried one mile.	252,551,609	237,836,511
Earnings per ton per mile	.0088	.0084

PASSENGER.

	PASSENGER.	
	Year ended June 30, 1900.	Year ended June 30, 1899.
Revenue train miles.	1,056,069	1,121,888
Passenger train earnings.	\$1,107,930 05	\$1,085,923 66
Earnings per passenger train mile.	\$1 04	\$0 96
No. of passengers carried	1,601,726	1,603,552
No. of passengers carried one mile.	43,707,921	42,600,024
Earnings per passenger per mile.	.0222	.0218

Earnings from express & mail are included in passenger train earnings.

Earnings per passenger mile do not include express & mail.

The directors were re-elected as follows:— Chairman, C. M. Hays; President, E. C. Smith; Vice-President & General Manager, E. H. Fitzhugh; Solicitor, C. M. Wilds; other directors, D. D. Ranlett; W. S. Webb, J. W. Stewart, J. G. McCullough, E. H. Baker, H. B. Day, A. F. Walker, S. E. Kilner, John Bell.

President Shaughnessy's Western Trip.

As mentioned in our last issue, President Shaughnessy, of the C.P.R., left Montreal Sept. 20, in his private car Manitoba, for a trip of inspection over the line to the Pacific coast. He was accompanied by three other directors, R. B. Angus, E. B. Osler, & W. D. Matthews, & by P. A. Peterson, Chief Engineer, & A. R. Creelman, Q.C., of Toronto. Manager Tait, of the eastern lines, & General Superintendent Spencer, of the eastern division, accompanied the President to Fort William, where he was met by Manager Whyte, of the western lines, & General Superintendent Osborne, of the western division. Mr. Whyte accompanied him throughout the trip to the Pacific coast, Mr. Osborne also going over the western division with the party.

In an interview at Winnipeg, Mr. Shaughnessy said in regard to the decision of the Manitoba Legislature to tax railways:—"While we are always willing to contribute our legitimate share to the expenses of the government of the country, I cannot say that I am satisfied with the Provincial Government's action in this respect. It remains to be seen in the future whether the effect will be generally beneficial, or whether such a policy will have the effect of discouraging railway construction in the province. There is a danger that it may have the latter effect."

In regard to the Manitoba government's proposition for government ownership of railways, he said:—"I think that the government's ownership theory, & the benefits to be derived therefrom in the matter of railways, which is entertained by but few people in this country, receives a most complete denial in the experience of the working of the C.P.R. I would like Premier Macdonald or anyone else to point to any system in the world which carries traffic at rates so low as ours, & pays wages on the same scale. A reference to the reports of any of the railway systems owned by governments will prove this. Not only are our rates lower, but our wages are very much higher."

Speaking of the elevator bill passed at the last session of the Dominion Parliament, he said:—"I think it is the duty of every person



& company interested to give the bill a fair trial. We, as a Company, have no interests in such respect, save for the best facilities for our traffic & the convenience of the shipper. The new regulations may prove a source of inconvenience to the Company as well as to the public. We will, however, give our utmost co-operation in carrying out any measure that will assist the farmer in grading & marketing his wheat."

In answer to an inquiry as to the probability of a C.P.R. fast Atlantic service, he said:—"There is none at present. It is very difficult just now to get ships built, the shipbuilding yards are all so full. This question is not a live one for the moment."

While at Winnipeg Mr. Shaughnessy met the members of the city council. Representatives of the press were not admitted, but the Winnipeg Tribune gives the following account of the proceedings:

Mr. Shaughnessy said that if the city council & the citizens of Winnipeg would but meet the C.P.R. Co. on a reasonable basis the Co. was willing to commence operations within a week for the building of a \$1,000,000 station & hotel. Before these buildings could be erected a subway or overhead bridge would certainly have to be constructed. This latter, with compensation to the property owners, would cost about \$120,000. The benefits to be derived from such subway or bridge would be mutual. The city would gain as much as the Co., to say nothing of the great general benefit to the city by the new station & hotel. He would like the city to meet the Co. in a friendly spirit, but he might inform the aldermen that the C.P.R. had had similar experiences to the present one with Winnipeg, in other cities. He instanced several cases in which, by an appeal to the Railway Committee of the Privy Council by the Co., that body had compelled the city to pay half the cost of such improvements, in some cases more than half the cost; in Toronto, for instance, the city had been compelled to bear the whole cost of a similar improvement. He believed that if the Co. appealed to the Railway Committee

of the Privy Council, Winnipeg would be compelled to bear at least half the cost of such improvement, seeing that the benefits to be derived were of such mutual character. The council had offered early in the year to bear half the expense of the subway, the amount to be deducted from certain taxes which it was claimed could be collected from the C.P.R. in the future. The action of the Provincial Government had settled this question, as the city could not collect the taxes now. He would say further that if the city would meet the Co. in the matter the C.P.R. would not object to paying frontage taxes, school taxes, & business taxes on the hotel property, notwithstanding the Provincial Government's action. What he proposed was that the city should bear half the cost of the subway & compensation for its construction, the whole to be \$60,000.

It is understood that the aldermen were divided on the matter. Some of them demanded that a by-law be submitted to the ratepayers before anything was done. Others were afraid that if a by-law was submitted it would be defeated, & then the C.P.R. would appeal to the Privy Council, & compel the city to pay half the cost of subway. Then the Co. could please itself whether it built hotel or not. The council may take any one of three courses: 1. To give the Co. the amount demanded, taking it out of the current year's taxes without submitting by-law. 2. To put by-law before the people. 3. To get decision of the Privy Council.

Since the meeting referred to negotiations have been carried on between the Co. & the city, & it is expected a mutually satisfactory settlement will be arrived at.

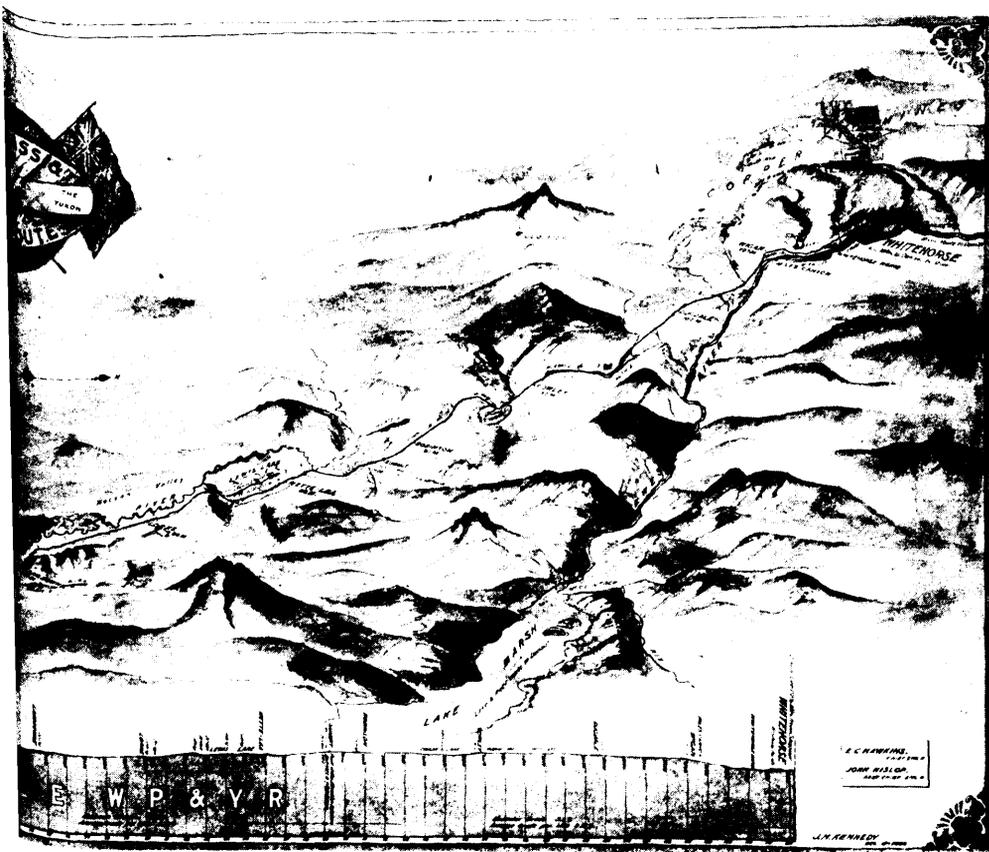
Mr. Shaughnessy & his party were entertained at dinner at the Manitoba Club, Winnipeg, about 100 of the leading citizens being present, Chief Justice Killam presiding. In a pleasing speech acknowledging the toast of his health, Mr. Shaughnessy expressed the hope that their next meeting might be in the Co.'s new hotel in Winnipeg.

The Winnipeg Board of Trade appointed a

committee to wait on the C.P.R. management & point out that the people of Winnipeg labored under a sense of injustice, from the fact that the Co. would not issue return trip tickets from Winnipeg to the East on terms equal to tickets from the East to Winnipeg & back. For instance, a person in Winnipeg has to pay \$75 for the round trip, Winnipeg to Montreal & return, while a Montrealer desiring to go to Winnipeg can purchase a return ticket for \$60. The committee was instructed to endeavor to get a system of return tickets arranged for from Winnipeg to eastern points & return on the same basis as tickets issued from eastern points to Winnipeg & back. In his speech at the Manitoba Club Mr. Shaughnessy said the policy of the Co. in the past had been to offer inducements to people to visit the West, but not to offer the same inducements for them to get out again, but that time had gone by, & the Co. had decided to meet the wishes of the Board of Trade. This means that in future return tickets from Winnipeg to points in Ontario or to Montreal will be materially reduced in price.

From Winnipeg, Mr. Shaughnessy went via the Crow's Nest Pass line to the Kootenay District of B.C. Capt. Troup, Superintendent of the Kootenay lines & steamers, met the party at Kootenay Landing. After crossing Kootenay Lake they went over the new line from Balfour to Nelson, where they were met by General Superintendent Marpole of the Pacific Division. After leaving Nelson they visited Rossland & went over the new line to Midway, afterwards going up the Arrow Lakes & on by the main line to Vancouver.

At Vancouver Mr. Shaughnessy held a conference with the Board of Trade. President Buscombe brought up the question of the inadequate steamship service between Vancouver & the North. He said the matter had been discussed many times before, & the merchants of Vancouver were all agreed that something should be done. During the past season, between 13,000 & 15,000 tons of freight had been shipped from Vancouver to the North. This at \$10 per ton amounted to a



large sum. It was absolutely necessary for the service to be improved if passengers were to be brought from the North to Vancouver. It was felt that every passenger from the North as a usual thing spent \$100 to \$500 when he arrived from the Interior, & by their going down to Seattle the loss of the legitimate business of Vancouver was great. He enumerated the eight passenger & freight steamers of the C.P.N. Co., of Victoria, & of the Union Steamship Co., of Vancouver, & gave the details of operation. He thought if the C.P.R. Co. would put on a couple of very fast steamers, from 18 to 20 knot boats, they would pay for themselves in a season or two. It was stated that they would cost about \$150,000, being capable of carrying from 600 to 1,000 tons of goods & 120 passengers. He could say that the merchants of Vancouver were so interested in their pockets that they would guarantee the interest on a part of the sum at least that would be required to inaugurate the service. He thought, too, the City Council would follow the lead of the business men in the matter. It was a case of mutual advantage, for the more goods that were shipped North from Vancouver the more would be carried by the railway across the continent. He hoped the Co. would take an interest in it at once & that all would profit by the business accruing. One firm in Vancouver had this year shipped 1,500 tons of goods, which showed what a large trade there was.

Mr. Shaughnessy referred to the Co. having put on two steamers at the beginning of the Klondike excitement. The losses at that time were so appalling that they were afraid to continue the service. Then, too, they rather disapproved the idea of interfering with the business of existing steamship lines. He was afraid there was a serious handicap in the fact that trade had run in the lines of Seattle & Puget Sound, & that it would be difficult now to change it.

Mr. Buscombe called attention to the fact that 85% of the business that passed through Skagway was of Canadian origin. He thought that with good boats Vancouver would at

once regain the trade, just the same as had been the experience in the Rossland district.

Mr. Shaughnessy said the boats put on at first by the Co. were not adapted to the business. Another point he brought out forcibly was that if the Co. put on two fast steamers, that would be large & commodious & strictly up-to-date, they would be confined by necessity to the business afforded by Vancouver & Victoria to Skagway. They could, according to law, make no stops in U.S. territory other than Skagway, & they could not take goods from Seattle & Tacoma; whereas, the American boats, such as the City of Seattle & other fast vessels, were allowed, by being American, to trade both in Seattle & in Vancouver, & would thus have an advantage over the Canadian boats, no matter what their facilities here. "The question is," said Mr. Shaughnessy, in conclusion, "do you think that the tonnage here is sufficient to warrant such an undertaking as is suggested. Would we not have the protest of the local lines, if we went into that business?"

Mr. Buscombe said that the merchants of Vancouver felt the case so pressing that they were willing to put their hands in their pockets & guarantee interest on a good sum. The service was now absolutely inadequate, & it was impossible to expect passengers to travel on the second & third & fourth rate boats that now come down to B.C. ports, when there were better ones on the Sound.

Mr. Shaughnessy said that the Co. had got somewhat of a scare at the result of its former experience in the North. If it had not been for the Philippine war & a few other terrible events, the Co. would have lost considerably in its deal of the two steamers. He asked Mr. Buscombe to supply him with all the data obtainable & he would lay the whole question before the board. The Co. would do everything in its power to keep the trade for Vancouver & Victoria, but, if possible, it did not care to compete with other lines of boats.

Mr. Shaughnessy returned to Montreal Oct. 11, after having travelled about 8,000 miles during his trip. Being asked whether the C.

P.R. earnings were likely to suffer as a result of the smaller grain crop, he replied that such would necessarily be to some extent the case. "However," he added, "our earnings will not by any means show as large a relative falling off as the volume of the grain transportation business will be smaller, which shows that we are acquiring a considerable general freight traffic apart from the grain."

He said that the C.P.R. was steadily building additional branch lines, or spurs, from its main lines into the mining country. In this the Co. was following a policy which was altogether unique in railway annals. Unlike other railways similarly situated, the C.P.R. had asked no guarantee from the mining communities for the construction of such spurs, but had undertaken the work at its own expense & at its own risk. In other words, the railway stood to gain or lose as a simple business proposition, & nobody else was asked to contribute a cent.

### C. M. Hays Leaving the G.T.R.

The persistent rumors about Mr. Hays retiring from the position of General Manager of the G.T.R. have at last proved to be well founded, as on Oct. 28 he stated that he had accepted the Presidency of the Southern Pacific Co., in succession to the late C. P. Huntington. It is said he will sever his connection with the G.T.R. on Dec. 31, & then proceed at once to San Francisco, which will be his headquarters.

A New York despatch, referring to the appointment, says: "Vice-President Huntington's acquiescence in the selection of Mr. Hays is said to be cordial. Although having a natural ambition to succeed his uncle as President, he recognizes Mr. Hays' fitness for the place, inasmuch as it has been the desire of the controlling stockholders to put the best man obtainable at the head of the operating department. The younger Mr. Huntington has not had the experience as a railway operating man that Mr. Hays has had. In recent years he has been the personal representative of his uncle in San Francisco, while the traffic & operating departments of the Southern Pacific were in the hands of Vice-Presidents Stubbs & Kruttschnitt. H. E. Huntington is expected to retain the office of First Vice-President as long as he chooses to keep it. As the inheritor of one-third of his uncle's large interest, he becomes one of the most influential of individual stockholders. The Huntington estate & the foreign holdings represented by Speyer & Co. are said to control the property, & a person conversant with the actual conditions estimates that Speyers & Co. represent about one-quarter of the entire capitalization of \$200,000,000."

Mr. Hays was born at Rock Island, Ill., in 1856, & on Nov. 10, 1873, entered the Passenger Department of the Atlantic & Pacific Ry. at St. Louis, Mo.; from Jan. 2, 1874, to Mar. 9, 1874, he was employed in the auditor's office, & from Mar. 9, 1874, to Jan. 1, 1877, as clerk in the General Superintendent's office of the same road; from Jan. 1, 1877, to April 1, 1884, he was Secretary to the General Manager of the Missouri Pacific Ry.; & from April 1, 1884, to Oct. 1, 1886, Secretary to the General Manager of the Wabash, St. Louis & Pacific Ry.; from Oct. 1, 1886, to July 1, 1887, he was Assistant General Manager of the same road; from July 1, 1887, to July 1, 1889, he was General Manager of the Wabash Western Ry.; on July 1, 1889, he was appointed General Manager of the Wabash Railroad Co. (successor to the Wabash Western & Wabash Rys); & in Feb., 1893, was appointed Vice-President & General Manager of the Wabash Railroad. On Dec. 31, 1895, he severed his connection with the Wabash Co. to accept the position of General Manager of the G.T.R. System, under a 5 years' contract, at a salary of \$25,000 a year, which was after-

wards increased to \$35,000, & he is said to have received an additional sum from the Central Vermont Ry.

Mr. Hays married Clara J., daughter of Wm. H. Gregg, St. Louis, Mo. In religion he is a Presbyterian.

The other members of the Executive Department of the S. P. Co. are, C. H. Tweed, Chairman of the Board, New York; a son of the late C. P. Huntington, H. E. Huntington, who is 1st Vice-President, with headquarters at San Francisco; the 2nd Vice-Presidency is vacant; J. C. Stubbs, 3rd Vice-President, at San Francisco, with charge of the Traffic Department; J. Kruttschnitt, 4th Vice-President, at San Francisco, with charge of transportation; & A. C. Hutchinson, President of the Morgan's Louisiana & Texas R.R. & S.S. Co. New Orleans.

The Southern Pacific Co. was organized in 1884, under the laws of Kentucky, its authorized capital stock being \$150,000,000. In 1885 it began to acquire different railways & now operates the following:

Central Pacific R.R.	1,487.91 miles.
Oregon & California R.R.	655.76 "
Northern Ry.	390.74 "
Northern California Ry.	53.72 "
California Pacific R.R.	115.51 "
Southern Pacific R.R. of California	1,678.11 "
Southern Pacific R.R. of Arizona	392.93 "
Southern Pacific R.R. of New Mexico	167.30 "
South Pacific Coast Ry.	104.00 "
Louisiana Western R.R.	147.23 "
Morgan's Louisiana & Texas R.R.	283.35 "
Galveston, Harrisburg & San Antonio Ry.	936.90 "
Texas & New Orleans R.R.	259.83 "
Iberia & Vermillion R.R.	16.13 "
Louisiana Western Extension R.R.	7.00 "
Galveston, Houston & Northern Ry.	56.50 "
New York, Texas & Mexican Ry.	91.00 "
Gulf, Western Texas & Pacific Ry.	111.17 "
Transportation Lines	7.90 "
Total rail mileage	6,962.99 "
Steamer lines	7,276.00 "
Grand total	14,238.99 "

The S. P. Co. is the principal stockholder in the following lines, which are operated by their own organizations:

Austin & Northwestern R.R.	107.86 miles.
Central Texas & Northwestern Ry.	12.36 "
Fort Worth & New Orleans	40.05 "
Galveston, Harrisburg & San Antonio	919.43 "
Gulf, Western Texas & Pacific	111.20 "
Houston & Texas Central R.R.	507.23 "
New York, Texas & Mexican Ry.	91.00 "
Texas & New Orleans R.R.	215.72 "
Total	2,004.85 "
Direct Navigation Co. water line	75.00 "

The S. P. Co. is also largely interested in the Mexican International R.R., but does not control a majority of the stock.

The S. P. Co.'s railways are situated in Oregon, California, Nevada, Utah, Arizona, New Mexico, Texas & Louisiana. The system is in reality a transcontinental one, extending from Portland, Oregon, to New Orleans, La., 3,261 miles. Another important line is the old Central Pacific, between Sacramento, Cal., & Ogden, Utah, 743 miles.

The Co.'s steamships ply between New Orleans, Key West & Havana, & between New Orleans & Port Tampa.

For the year ended June 30, 1898 (the latest figures we have at hand) the receipts of the Southern Pacific Co. were \$58,477,498.54, & the disbursements \$54,354,895.93, leaving a balance of \$4,122,602.61. Out of this there was spent \$1,299,258.03 in betterments & additions, leaving a surplus of \$2,823,344.58.

The gross earnings per mile were \$7,538.05, the gross expenses per mile \$4,668.25; the net earnings per mile \$2,869.80, & the ratio of expenses to earnings 61.93%. During the year the Co. sold 32,656.53 acres of land, at an average price of \$2.73 per acre, but 118,682.32 acres were returned with cancelled contracts.

Some interesting particulars about the S. P. system were given in an obituary reference to the late C. P. Huntington, on pg. 268 of our last issue.

**Twenty-four hour system in Spain.**—The Spanish Government has issued notice that in the railway, mail, telegraph, telephone & steamship service of that country, & in all ministerial offices, the courts & public works, the computation of the hours, after Jan. 1, is to be made by the numbers 1 to 24, beginning at midnight. Midnight will be designated as 24, but for the next 59 minutes a cipher will be used; for instance, 12:30 will be called 0:30. Greenwich time is to be the standard.

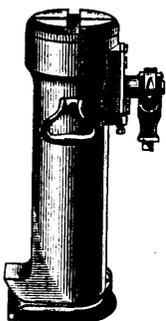
**Steel Rails Prices.**—It is authoritatively announced that the rail makers in the U. S. have reduced the price of rails for large orders from \$35 to \$26 per gross ton, delivered on cars at either Western or Eastern mills. Based on the past year's record, it is probably safe to assume that this price will hold good during the coming year. There seems to be no doubt that this will result in placing large orders, for it is doubtless true that orders have been held for some time in expectation of lower prices. Although \$26 is probably not as low a price as the railway companies would wish to buy rails for, still at this price they can have the satisfaction of knowing that it is \$5 a ton less than English railway companies pay for their rails, & about \$6 a ton less than European Continental companies pay. It is, doubtless, a fact that the U. S. is now the cheapest rail market in the world.—Railroad Gazette.

Commissioner Chipman, of the Hudson's Bay Co., is spending some time in Montreal in consequence of the visit of the Governor of the Co., Lord Strathcona, to Canada.

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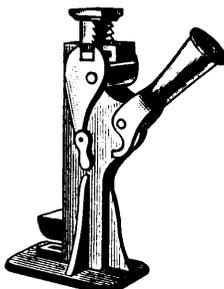
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**Canadian Ticket Agents' Association.**

The 14th annual meeting was held at Hamilton, Oct. 9 & 10, the following members being in attendance:—G. N. Asselstine, C.P.R., Gananoque, & wife; S. Burrows, C.P.R., Belleville, & wife; W. H. Bunton, G.T.R., Peterborough; E. R. Blow, C.P.R., Whitby; A. H. Baird, C.P.R., Paris, & wife; A. C. Brown, C.P.R., Guelph, & wife; J. L. Boyes, G.T.R., Napanee, & wife; Miss M. A. Ball, C.P.R., Goderich; A. Berube, C.P.R., St. Thomas; C. E. Bunting, C.P.R., Toronto; J. Clark, C.P.R., Renfrew, & wife; A. Calder, C.P.R., Winnipeg, & wife; R. J. Craig, C.P.R., Cobourg, & wife; J. D. Conway, G.T.R., Hespeler; R. R. Casement, C.P.R., Madoc, & wife; R. Cox, C.P.R., Enterprise; R. H. Carney, G.T.R., Sault Ste. Marie, & wife; C. Chubb, G.T.R., Wallaceburg; R. Clanahan, C.P.R., Glencoe, & wife; H. L. Cowan, G.T.R., Mount Forest, & wife; Jno. Carter, C.P.R., Sundridge, & wife; F. R. Chalmers, C.P.R., Morrisburg, & wife; E. De la Hooke, G.T.R., London, & wife; Jas. Douglas, G.T.R., Dobbington, & wife; A. J. Davis, C.P.R., Port Perry, & wife; F. B. Edgecombe, C.P.R., Fredericton, N.B., & wife; W. Fulton, C.P.R., London & wife; R. J. Fletcher, C.P.R., Barrie; J. H. Flock, Q.C., Honorary Counsel, London; W. E. Gladney, G.T.R., Marmora, & wife; J. A. Goodearie, N.Y.C., Kingston, & wife; W. J. Grant, C.P.R., Hamilton, & wife; J. P. Hanley, G.T.R., Kingston; J. A. Hacking, G.T.R., Listowel, & wife; W. H. Harper, C.P.R., Chatham, & wife; F. M. Hawley, G.T.R., Cobourg, & wife; F. R. Hodgins, G.T.R., Clinton, & wife; M. A. Halliday, C.P.R., Chesley, & wife; T. Howard, C.P.R., Hastings, & wife; J. H. Hayes, C.P.R., Simcoe, & wife; C. W. Irwin, Toronto; W. Jackson, C.P.R., Clinton, & wife; J. H. Jackson, C.P.R., Georgetown; J. F. Kellock, G.T.R., Perth, & wife; W. Lahey, C.P.R., Brantford, & wife; G. D. La Course, G.T.R., Berlin; T. Long, C.P.R., Port Hope, & wife; A.



F. W. CHURCHILL,  
President C. T. A. Association.

mara, C.P.R., Walkerton, & wife; E. McLaughlin, C.P.R., Napanee, & wife; W. A. MacCallum, C.P.R., Buckingham, Que., & wife; W. H. McCaw, G.T.R., Port Perry, & wife; W. H. McGannon, G.T.R., Morrisburg; A. McKean, C.P.R., Mount Forest, & wife; W. H. C. Mackay, C.P.R., St. John, N.B.; W. H. McFarlane, C.P.R., Paisley, & wife; W. McIlroy, C.P.R., Galt, & wife; C. A. Nettleton, C.P.R., Penetang, & wife; W. W. Porte, C.P.R., Brighton, & wife; J. Paul, M.C.R., London, & wife; R. P. Perry, C.P.R., Bracebridge, & wife; S. H. Palmer, M.C.R., St. Thomas, & wife; L. Peine, C.P.R., New Hamburg, & wife; N. Page, C.P.R., Hull, Que., & wife; W. E. Rispin, G.T.R., Chatham, & wife; J. A. Robb, C.P.R., Valleyfield, Que., & wife. A. J. Roos, C.P.R., Berlin; A. E. Raynes, C.P.R., Tilsonburg, & wife; J. H. Sherin, C.P.R., Lakefield; W. G. Stovel, C.P.R., Walkerton. B. Travers, C.T.R., Paris, wife & son; M. N. Todd, G.T.R., Galt; J. R. Tierney, C.P.R., Arnprior, & wife; W. B. Tomlinson, G.T.R. & Wabash, Simcoe, Ont.; D. B. Taylor, G.T.R., Tweed; C. L. VonGuten, G.T.R., Blenheim; J. C. Whitcho, C.P.R., Parry Sound, & wife; W. Ward, G.T.R., Dresden, & wife; A. H. Whittmaak, C.P.R., Hespeler, & wife; G. T. Whittier, G.T.R., Trenton; C. C. Young, L.E. & D.R., London.

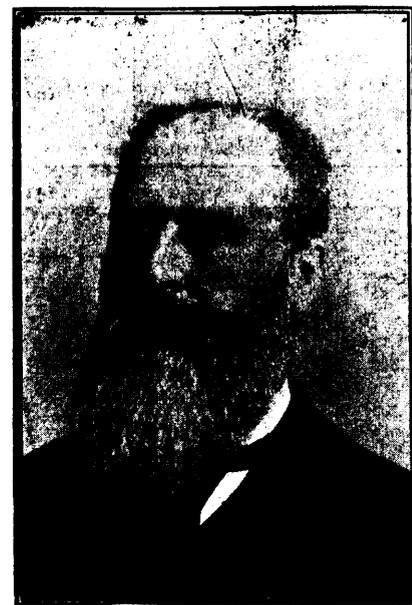
Among the guests & visitors present were: W. Askin, Gen. Agent, Northern Navigation Co. & Northwest Transportation Co., Toronto; B. H. Bennett, General Agent, Chicago & Northwestern Ry., Toronto; J. N. Bastedo, Passenger Agent, Atcheson, Topeka & Santa Fe Ry., Detroit; R. M. Boggs, Hotel Brant, Burlington; M. Barton, Northern Navigation Co., Barrie, & wife; F. F. Backus, General Freight & Passenger Agent, T. H. & B. Ry., Hamilton; H. F. Carter, Michigan, Passenger Agent, Union Pacific Ry., Detroit; H. F. Chaffee, City Passenger Agent, R. & O. N. Co., Montreal; J. M. Copeland, C. M. & St. P. Ry., Toronto, & wife; G. R. Cheshbrough, Western Passenger Agent, Lehigh Valley Ry., Buffalo; C. E. A. Carr, General Manager London Electric Ry.; M. C. Dickson, District Passenger Agent, G.T.R., Toronto; J. P. Dickson, Secretary, Canadian Railway Accident Insurance Co., Ottawa; W. T. Dockrill, Travelling Passenger Agent, C.P.R., Toronto, & daughter; G. H. Doherty, Niagara Navigation Co., Toronto; J. F. Dolan, District Passenger Agent, R. & O. N. Co., Toronto, & wife; L. Drago, Canadian

Passenger Agent, New York Central Ry., Buffalo; A. W. Ecclestone, District Passenger Agent, Nickel Plate Road, & Southern Passenger Agent, Central Vermont Ry., New York; E. Fisher, General Superintendent T.H. & B. Ry., Hamilton; W. A. Fletcher, Florida East Coast Ry., Chicago; F. P. Fox, Division Passenger Agent, Delaware, Lackawanna & Western Ry., Buffalo; B. Gavett, District Passenger Agent, Pere Marquette Ry., Detroit; C. W. Graves, District Freight & Passenger Agent, Great Northern Ry., U.S.A., Toronto, & wife; A. A. Heard, Assistant General Passenger Agent, Lehigh Valley Ry., New York; F. T. Hendry, General Agent Passenger Dept., Santa Fe Ry., Detroit; H. P. Heming, Director & Secretary Muskoka Tourist Hotel Co., Hamilton; T. Henry, Traffic Manager R. & O. N. Co., Montreal; W. F. Herman, General Passenger Agent, Cleveland & Buffalo Transit Co., Cleveland; H. B. Jagoe, General Eastern Passenger Agent, West Shore R.R., New York, wife & mother; H. W. Jameson, Travelling Passenger Agent, Pere Marquette R.R., Milwaukee; R. S. Lewis, Canadian Passenger Agent, Lehigh Valley R.R., Toronto; G. W. McCaskey, District Passenger Agent, Northern Pacific R.R., Toronto; A. J. McDougall, General Eastern Passenger Agent, Illinois Central R.R., New York; A. H. Notman, Assistant General Passenger Agent, C.P.R., Toronto; C. A. Pison, General Agent for Ontario, White Star Line, Toronto; C. S. Proctor, Travelling Passenger Agent, G.T.R., Toronto; J. A. Richardson, Passenger Agent, Wabash R.R., Toronto; W. Robinson, General Travelling Agent, I.C.R., Toronto; J. W. Slosson, General Agent Denver & Rio Grande R.R., Chicago; E. O. Soule, General Agent, Passenger Dept., Burlington, Cedar Rapids & Northern Ry., Cedar Rapids; S. J. Sharp, Western Agent, Elder Dempster Steamships, Toronto; R. H. Spencer, Treasurer Central Ontario Ry., Trenton; A. J. Spurr, Travelling Passenger



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EDWARD DE LA HOOKE,  
Secretary-Treasurer C. T. A. Association.

Agent, Burlington Route, Chicago, & wife; A. J. Taylor, Agent, Chicago, Milwaukee & St. Paul Ry., Toronto; J. D. Tenbroeck, Travelling Passenger Agent, Union Pacific System, Albany, N.Y.; H. E. Watkins, Great Northern Ry., U.S.A., Toronto; G. B. Wylie, Travelling Passenger Agent, Illinois Central R.R., Buffalo, & wife; J. Wallace, General Agent, G.T.R., Hamilton, & the Editor of THE RAILWAY & SHIPPING WORLD.

On arriving at the headquarters at the Royal Hotel, Hamilton, Secretary De La Hooke presented each member with an itinerary in the form of a coupon ticket, headed with the following conditions:—

1. That I will attend the annual meeting of the Canadian Ticket Agents' Association in Hamilton on Oct. 9, 10, & comply with the conditions of circular no. 2 issued by the Secretary-Treasurer of the Association.

2. I agree to keep in line with the other members of the aggregation from start to finish, & should I get side tracked I agree to furnish a substitute for the banquet which is to be held at the Royal Hotel on Oct. 10th, & if married, to bring my wife; if I travel on a single ticket that my intended shall accompany me.

3. I agree to take a part in the discussion of mutual interest to the association, & to frame resolutions pregnant with force & calculated to admit of no equivocation, & to do a lot of other things not on the official programme.

4. I reserve to myself the individual right to uphold the special claims of the corporation I represent, but will not be held person-

ally responsible if I should lie under a wrong impression in regard to official statements.

On October 9, at 2.30 p.m., the members, the ladies & the guests assembled in the City Hall, where Mayor Teetzel welcomed them on behalf of the city. President F. W. Churchill, being unable to be present, owing to illness, 1st Vice-President Jackson responded on behalf of the Association.

Then a trip was made by special electric cars to the historic Dundurn Castle, formerly the home of the late Sir Allan MacNab & Senator MacInnes, & now owned by the city & used as a public park. After a delightful stroll through the picturesque grounds the cars were again taken to the foot of the Hamilton & Barton Incline Ry., which was ascended to the top of "the mountain," from which visitors obtained a beautiful view of the city, of Lake Ontario, & of the Dundas valley, &c. In the evening Gore Park & the public buildings were beautifully illuminated by electricity, & most of the members & guests attended a concert by the 13th Battalion band.

#### THE ANNUAL MEETING.

On Oct. 10, at 10 a.m., the annual business

meeting was held. Secretary De La Hooke's report showed a gain of 10 members, 19 having joined & 10 having withdrawn. The financial statement shows over \$200 in hand.

Considerable time was spent in considering amendments proposed to the constitution, the principal changes made being as follows: The objects of the Association are declared to be for educational, beneficial & social purposes. The annual subscription was raised from \$1 to \$2, which, however, will include a yearly subscription to THE RAILWAY & SHIPPING WORLD, which is in future to be supplied to all members of the Association. Heretofore it has been the practice at each annual meeting to fix the place & date for the next annual meeting. This has been changed so that the place only shall be fixed & the date left to the Executive Committee. The Executive Committee is to have a chairman with power to call meetings, & three members are to constitute a quorum. The clause relating to rate-cutting has been transferred to the by-laws. It is provided that members of the Association ceasing to be coupon ticket agents forfeit all rights of members.



## The Barrett Track Jack....

Recommended as a Standard by the  
Roadmasters' Association of America.

These Jacks are made with Malleable Iron Frames, Steel Pawls, Machinery Steel Bearings and Pivots, forged Steel Rack. The wearing parts are removable and readily renewable at slight expense. The rectangular base gives great lifting strength and fits into close quarters better than other shaped stands. Adaptable to either high or low set loads.

The Barrett Jack is the safest, best and strongest known to the railroad world to-day.

Lifting Capacity 10 to 15 tons.

For Catalogue and Price List apply to

**THE DUFF MANUFAC. CO.,**  
Marion and Martin Avenues, Allegheny, Pa.

Stock carried by **JAMES COOPER, Agent,**  
299 St. James St., MONTREAL.

## Edward L. Drewry

**REDWOOD  
BREWERY,**

Fine  **Winnipeg, Manitoba**  
**ALES, EXTRA PORTER**

... AND ...

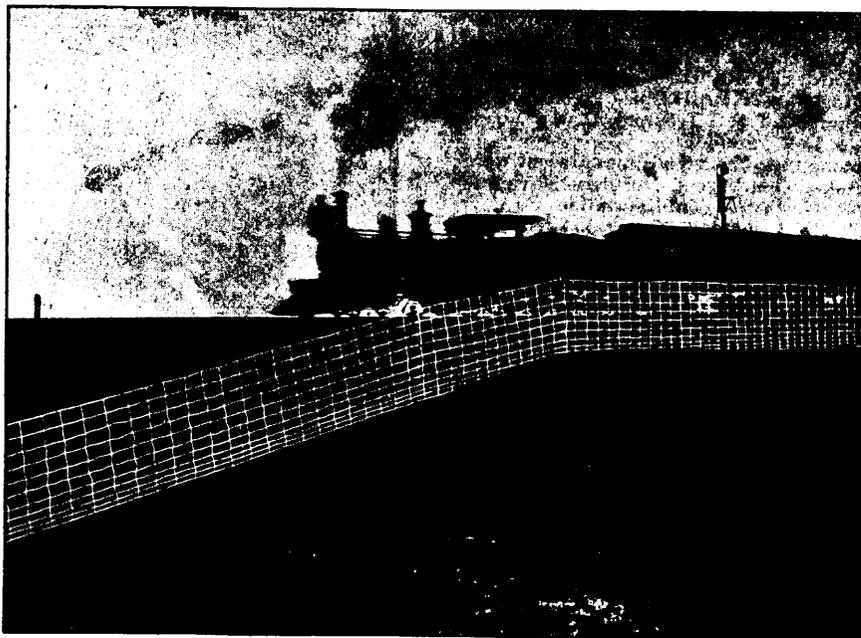
**PREMIUM LAGER.**

*Most Extensive and Complete Brewery  
and Malshouses in Western Canada.*

**CHOICE MALT FOR SALE.**

Manufacturer of the Celebrated

Golden Key Brand **AERATED WATERS.**



Page Fencing on G. T. R., near Clinton, Ont.  
THE PAGE WIRE FENCE CO., LTD., WALKERVILLE, CANADA.



**I**f time has a commercial value;  
promptness secures business;  
immediate information is required;  
an answer is wanted, and wanted quick;  
you are not in business for exercise:

**STAY AT HOME  
AND TELEPHONE.**

\*\*\*

The Bell Telephone Company of Canada

will be pleased to furnish details.



HAMILTON AND BARTON INCLINE RAILWAY.

By-laws were adopted for the first time, their principal provisions being as follows:

Every member of the Association must maintain tariff rates, & should any member offend against this article, & be charged by another member with such offence, & sufficient evidence be submitted to the executive of the Association to prove the charge, the offending member's certificate shall be withdrawn. And if a member of the Association shall submit to the executive committee similarly conclusive proof of offence against an agent not a member of the Association, it shall be the duty of the executive committee to take the matter up in its member's behalf, & see that, if possible, a remedy is provided. This law to be applicable to both the railway & steamship ticket business.

The legitimate expenses of the members of the executive & other committees attending meetings, other than the annual, shall be paid out of the funds of the Association.

Annual dues shall be payable in advance on Jan. 1 each year, & shall be for one year, ending on Dec. 31. Members who have not paid their dues on or before July 1 for the then current year, deprive themselves from obtaining transportation through the Association to attend annual convention & of all other privileges. If a member neglects to pay his dues for 12 months, & having received notice from the Secretary, his name shall be dropped from the membership.

No agent shall be eligible to attend the annual meeting unless application for membership shall have been made on or before Sept. 1 of the year in which the meeting is to be held.

Any member who has voluntarily withdrawn from membership & seeks readmission, will be required to pay an amount equal to the subscription for each year he stood out.

When a company's certificate of appointment to an agency reads in the name of a firm of two or more persons, and both, or more members of the firm, desire to become members of the Association, it will be necessary that each one pay the entrance fee & annual subscription.

Any member misusing or transferring any privileges granted by railway, steamship or other transportation companies shall, on the offence being proved against him, forfeit his membership, & if the gravity of the offence warrants it, the matter shall be reported to the officials of the company he represents.

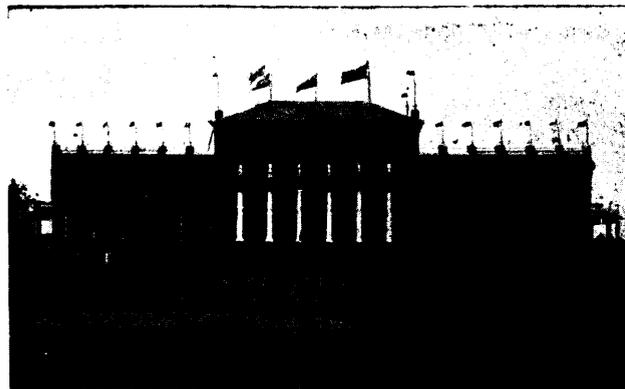
It was resolved that hereafter THE RAILWAY & SHIPPING WORLD be the recognized organ of the Association & that it be supplied

at the expense of the Association to all members.

The election of the officers resulted in all of them being re-elected by acclamation, except the Executive Committee, in which two changes were made. The list for the current year is as follows:—President, F. W. Churchill, Collingwood; 1st Vice-President, W. Jackson, Clinton; 2nd Vice-President, M. McNamara, Walkerton; Secretary-Treasurer, E. De La Hooke, London; Honorary Counsel, J. H. Flock, Q.C., London; Auditor, S. H. Palmer, St. Thomas; Executive Committee, C. E. Morgan, Hamilton; W. H. Harper, Chatham; T. Long, Port Hope; W. F. Egg, Montreal; J. P. Hanley, Kingston.

Montreal was selected as the place for the annual meeting in 1901.

While the business session was being held, Mrs. Teetzel, wife of the Mayor of Hamilton, Mrs. Vallance & other ladies, took the ladies of the Association & other lady guests for a drive about the city. In the afternoon the members & guests were tendered a trip over



BRANT HOTEL, BURLINGTON BEACH.

the Hamilton Radial Electric Railway to the Brant House, Burlington Beach.

THE ANNUAL DINNER

Was held at the Royal Hotel in the evening. A local paper says that, "till the last speech was made, the last song sung & the last cheer given, there was not a minute in which things were allowed to run at less than Imperial Limited speed. It was a through trip, fast-service affair, with no sidetracking or long waits for connections."

1st Vice-President Jackson occupied the chair, & 2nd Vice-President McNamara was Vice-Chairman. Nearly all the male members of the Association, whose names are given above, were present, as well as most of the male guests

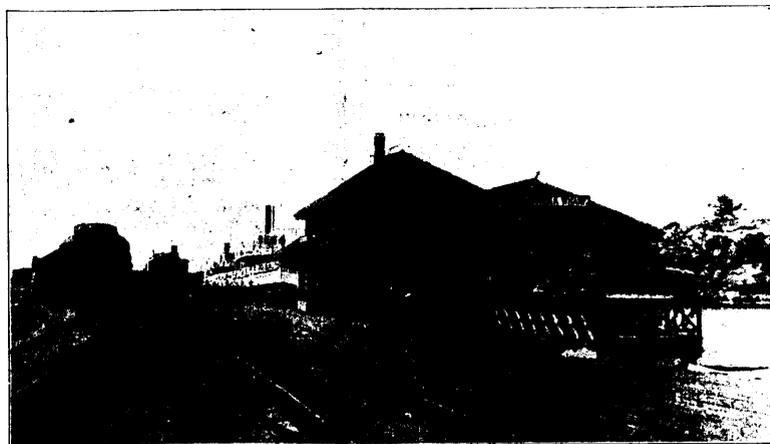
& some additional local guests from Hamilton.

A fraternal telegram having been read from the American Association of Travelling Passenger Agents, assembled at Virginia Beach, the toasts of the Queen & the President of the U.S. were honored. Other toasts were as follows: The General Passenger Departments, responded to by A. A. Heard, F. A. Backus, H. Parry, T. Henry & M. C. Dickson; our Association, responded to by J. H. Flock, Q.C.; Our Guests, responded to by Mayor Teetzel, Adam Brown, Postmaster of Hamilton, & H. Carscallen, M.L.A.; Travelling Passenger Agents & the Ladies. The speeches were interspersed by a number of excellent songs.

While the menu portion of the dinner was in progress, the ladies of the Association & the lady guests were entertained in the hotel parlors by Mrs. Teetzel, who was assisted by Mrs. Fenwick, Mrs. Vallance, Mrs. McArthur & Miss Annie Vallance. After enjoying some music, the ladies adjourned to the galleries & palm rooms overlooking the dining-room & listened to the speeches.

TRIP TO MUSKOKA.

On Oct. 11 at 9 a.m. the majority of the members & guests, accompanied by the ladies, left Hamilton in a special train provided through the courtesy of General Passenger Agent Davis of the G. T. R., the arrangements for its running being made by Superintendent Tiffin, of the Northern division, who, unfortunately, was unable to be present owing to an important engagement up the line. A rapid run was made via Georgetown Junction & Allandale to Muskoka Wharf, which was reached at 1.55 p.m. Here the party was met by A. P. Cockburn, Manager & Secretary of the Muskoka Navigation Co., & at once went on board that Co.'s steamer Medora. Luncheon was served while the steamer proceeded up Lake Muskoka. A short stop was made at Port Carling, where most of the party went on shore, then the steamer was headed up Lake Rosseau & another stop was made at Renshaw's Point, the site of the hotel which the Muskoka Tourist Hotel Co. proposes to erect, where the party disembarked & inspected the site, which is at an elevation of 60 feet above the lake & very prettily situated. The head of Lake Rosseau was reached at 6 p.m. & the party proceeded to the Monteith House, where dinner was partaken of & the night spent. During the evening the party assembled in the public hall, where an impromptu concert was given, during which the following pres-



MUSKOKA WHARF.

entations were made on behalf of the Association: To A. P. Cockburn, of the Muskoka Navigation Co., a gold-mounted umbrella; to M. C. Dickson, District Passenger Agent of the G.T.R., a fitted travelling bag; to C. E. Morgan & W. J. Grant, of the local reception committee at Hamilton, a gold-headed cane & a gold-mounted umbrella, respectively.

It was intended to make an early start from Rosseau on the morning of Oct. 12, & to go up to the head of Lake Joseph at Port Cockburn, but owing to a heavy fog the departure of the steamer was delayed for a few hours, & the trip had to be cut short. The party disembarked at Port Sandfield, & on their re-embarking the steamer went up Lake Joseph to a little beyond Hammil's Point, where it turned around & headed for Muskoka Wharf. A stop was made at Beaumaris Hotel, Tondern Island, for luncheon, after which short speeches were made by a number of the guests on the hotel lawn.

During the afternoon a number of the party assembled in the dining saloon of the steamer on the invitation of H. P. Heming, Secretary of the Muskoka Tourist Hotel Co., who explained the Co.'s plans. The capital of the Co. is \$250,000, divided into 3,500 preference shares of \$50 & 1,500 ordinary shares of \$50 each, the preference shares being entitled to an accumulative dividend at the rate of 7% a year, & the ordinary shares to an accumulative dividend of 6% a year. The Co. has acquired 131

acres at Renshaw's Point, Lake Rosseau, with a shore line of nearly 3½ miles in extent, & propose to build a 4-story hotel, with about 250 bed rooms. Mr. Heming stated that the G.T.R. has agreed to carry all building material, plant & furniture for the hotel from any of its stations in Canada to Muskoka Wharf free of charge, to advertise the hotel thoroughly throughout Canada & the U.S., to carry the hotel employes at half rates, & to give an absolute guarantee for 10 years that the interest on the total investment, after allowing for renewals of building & furniture, will not be less than 5% a year. He also stated that the Muskoka Navigation Co. has agreed to carry all building material from Muskoka Wharf to the hotel site free, & employes at single fare. A few of those present took stock.

Another stop was made at Port Carling, & Muskoka Wharf was reached at 6.15 p.m., where a special train was at once taken for Toronto, where the party arrived at 10 p.m., & separated after a most enjoyable outing.

The members & guests present desire us to express their hearty appreciation of the courtesy of the G.T.R. management in tendering complimentary special trains between Hamilton & Muskoka wharf, & between Muskoka wharf & Toronto; also to the Muskoka Navigation Co. for the use of the steamer Medora. The Manager & Secretary of the M.N. Co., A. P. Cockburn, has been inti-

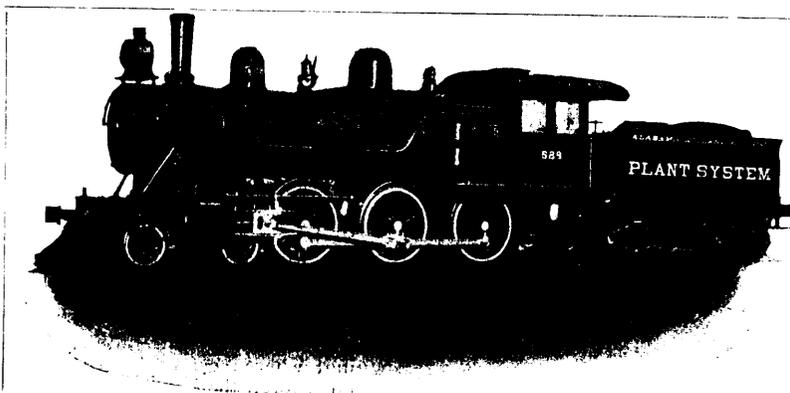
mately connected with the Muskoka district for nearly 40 years, & represented it in Parliament for a considerable period. He knows every foot of the lakes, & during this trip went to infinite trouble to point out the various places of special interest, to tell the name of the owner of every summer home passed, & in many other ways to add to the delight of the visit.

A photograph of 1st Vice-President Jackson was received too late to have an engraving made from it for this issue. It will appear next month.

### The Train Among the Hills.

Vast, unrevealed, in silence and the night  
Brooding, the ancient hills commune with sleep.  
Inviolate the solemn valleys keep  
Their contemplation. Soon from height to height  
Steals a red finger of mysterious light,  
And lion-footed through the forests creep  
Strange mutterings; till suddenly, with sweep  
And shattering thunder of resistless flight  
And crash of routed echoes, roars to view,  
Down the long mountain gorge, the Night Express.  
Freighted with fears, and tears and happiness. . . .  
The dread form passes; silence falls anew.  
And lo! I have beheld the thronged, blind world,  
To goals unseen from God's hand onward hurled.

C. G. D. ROBERTS.



## Richmond Locomotive and Machine Works,

RICHMOND, VIRGINIA, U.S.A.

BUILDERS OF

Simple and Compound

## LOCOMOTIVES.

Adapted to every variety of service.

## MANITOBA

The Government Crop Bulletin issued Dec. 12th, 1899, gives the following statistics for the year:

CROPS.		
ACRES.	AVERAGE YIELD.	TOTAL.
Wheat.....1,629,995	17.13 bus.	27,922,230 bus.
Oats.....575,136	38.80 "	22,318,378 "
Barley.....182,912	29.4 "	5,379,156 "
Potatoes...19,151	168.5 "	3,226,395 "

### STOCK.

Beef Cattle exported during the year	12,000
Stockers exported.....	35,000
Total value dairy products.....	\$470,559 09

### 10,500 FARM LABORERS

Came from Eastern Canada to assist in the harvest fields of Manitoba in 1899—and the demand was not fully satisfied.

### MANITOBA FARMERS ARE PROSPEROUS.

Farmers erected, last year, farm buildings valued at one and one-half million dollars.

**MANITOBA LANDS**—For sale by the Provincial Government. Over 1,600,000 acres of choice land in all parts of the Province are now offered at from \$2.00 to \$5.00 per acre. Payments extend over eight years. **Special Attention** is directed to 500,000 acres along the line of the Manitoba and Northwestern Railway at \$3.00 and \$3.50 per acre.

**FREE HOMESTEADS** are still available in many parts of the Province.

For full information, maps, etc., **FREE**, address J. A. DAVIDSON, Minister of Agriculture and Immigration, Winnipeg, Manitoba.  
Or C. H. JEFFERYS, Manitoba Emigration Agt., Union Station, Toronto, Ont.

### THE FAVORITE ROUTE

To New York and  
....Philadelphia

### GRAND TRUNK RAILWAY

in connection with the

### LEHIGH VALLEY RAILROAD

Route of the "Black Diamond Express," handsomest train in the world.

Leaving Toronto daily (except Sunday) at 9 a.m., Hamilton 9.55 a.m., arrive New York 10.08 p.m.

Fast Night New York and Philadelphia Express, leaving Toronto 6.15 p.m. daily, arrive New York 9.38 a.m., Philadelphia 8.56 a.m.

Pullman Sleepers from Toronto, Hamilton and London to New York and Buffalo to Philadelphia.

Call on Grand Trunk Ticket Agents for tickets and further information, or address

Robt. S. Lewis,

Canadian Pass'g'r Agt., 33 Yonge St., Toronto.

Geo. R. Chesbrough,

West'n Pass'g'r Agt., Buffalo, N.Y.

Chas. S. Lee,

Gen'l Pass'g'r Agt.,  
New York.

A. A. Heard,

Ass't Gen'l Pass'g'r Agt.,  
New York.

All C.P.R. Agents in

MANITOBA,  
ASSINIBOIA,  
ALBERTA and  
BRITISH COLUMBIA

sell through tickets to the Old Country, cheaper than if passengers bought railway tickets to New York or Montreal, and then re-booked.

They also sell prepaid tickets to passengers coming from the old country, cheaper than the rate obtainable in Europe, and on favorable terms.

Apply to any agent Port Arthur and west, or to

W. P. F. CUMMINGS,

C.P.R. Offices,  
WINNIPEG

### Relations of Car Service to Traffic.

The Car Service Committee of the Canadian Freight Association recommend the attention of all members of the Association to the following paper by H. S. Smith, Traffic Manager of the Nashville, Chattanooga & St. Louis Ry., which will also be found of importance & interest to other railway officials.

Car service being a feature of transportation, I will assume the liberty of also considering the relation of transportation to traffic. Reference to performance or statistical data is made with respect to southern railways.

The operating department, embracing the mechanical, road and transportation departments, produces the "stock in trade" of a railway, to wit: transportation; we of the traffic department sell it, & are, therefore, responsible for the revenues.

The price of competitive transportation is supposed to be uniform; one line cannot charge more or, as a rule, less than others; therefore, to enable the traffic department of a railway to sell its proportion of competitive transportation, the character of its service must be as desirable as that of competing lines.

The schedules of southern railways are uniformly satisfactory, & the difference in service, warranting preference of shippers, consists of superiority of shipping facilities, particularly sufficient equipment, expeditiously handled at loading & discharging points.

Car service associations or bureaus have been organized to aid in expediting the handling of equipment at such points, & we, of the traffic department, keenly appreciate the benefit resulting therefrom to the interest we represent.

Six months of every year there is a shortage of cars; some lines, & shippers dependent thereon, suffer more severely from this condition than others on account of commanding comparatively less equipment than more fortunate competitors; to such lines & shippers car service is indispensable, & its relations to traffic are direct & of paramount importance.

Formerly freight traffic was of three classes, to wit: time, important, non-important, embracing live stock & perishable; general merchandise; & lumber, lime, brick, sand, stone, pig iron, coal, etc., respectively; non-important freight being moved at company's convenience. Now all is important; equal time in transit is expected & demanded for all classes, therefore, practically same expedition with respect to loading & discharging cars containing all classes of freight can properly be demanded. This the rules of car service associations do not require, resulting during 6 months of each year in adding to the embarrassment of the carriers & many shippers, & directly affecting the traffic. Freight is now regularly transported from 600 to 1,000 miles in 48 hours; therefore, does it not appear unreasonable that the same time should be allowed in which consignees may release a car which, in a majority of instances, can practically be unloaded in from one to six hours?

It is quite common, when cars are scarce, to unload a whole train of "house freight" after 6 p.m. & reload the equipment for forwarding by 6 the next morning; yet car service rules grant the consignee of one or more cars 48 hours in which to unload, & an additional 48 hours to reload same car.

A shipper or consignee who unnecessarily detains a car during the busy season injures other shippers &, indirectly, himself, by aiding to increase the shortage.

The freight equipment of the principal railways of the South aggregates 127,000 cars, valued at \$60,000,000, equivalent to 5.47 cars per mile of road operated. Estimating 5% to be undergoing repairs leaves 220,650 in constant service.

Oct., 1899, to Mar., 1900, inclusive, the

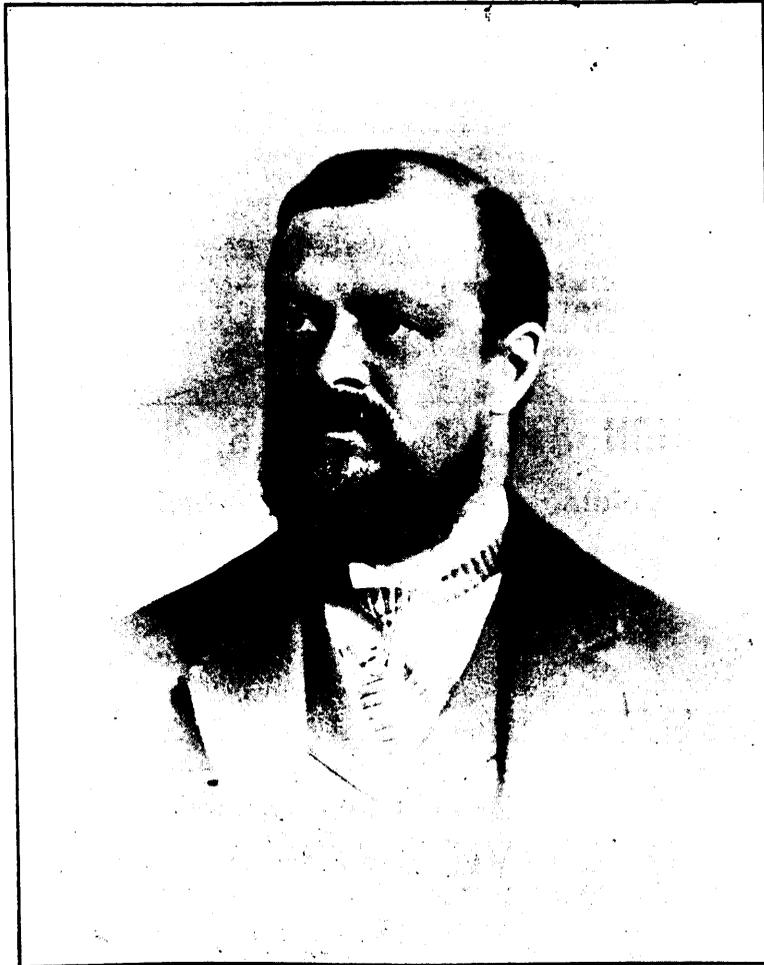
control of this matter of illegitimate detention by one line of the equipment of another.

Permit me to suggest that car service associations be empowered to assume control of & establish rules to govern with respect to maximum delay ("dead time") a line may, without penalty, cause to foreign equipment; charge, as now, for miles run, & in addition a per diem rental for all "dead time" in excess of fixed maximum at terminals, or each point cars are set out of trains for any account whatsoever; collection of said rentals to be under such rules as govern with respect to mileage. I believe the effect would be material reduction in the general delay to equipment, & doubtless prevent, in a great measure, the annual shortage of cars, in which case the benefit of car service to traffic would be marked & direct.

The Southeastern Car Service Association reports show for the period of 4 months, Jan. to April, 1900, inclusive, 206,118 cars subject to car service rules; average detention by railways, 14 hours; by consignees or shippers, 34 hours; aggregate average detention, 48 hours. Had the Association restricted the aggregate average detention to 36 hours the effect would have been equivalent to placing in service 429 more cars each day, or an aggregate of over 50,000 during the 4 months. This would have resulted in the supply of equipment available equalling the traffic offering, demonstrating possibilities for improved results open to car service associations. It is appalling to contemplate the result had not car service restrictions been applied. For instance, had the aggregate detention to the 206,118 cars been one-fourth longer than 48 hours the effect would have been equivalent to taking over 50,000 cars from the service.

The net earnings during this period were \$12,306.91, equivalent to 5.9-10 of 1c. per car reported, a most insignificant penalty if distributed pro rata, clearly demonstrating that car service is not maintained for purpose of extorting car rental from patrons, also indicating that "delay time" now allowed by the rules might be reduced with benefit to carriers & relief to the large majority of patrons, & without special hardship to the minority who, under existing rules, are paying demurrage.

Our car service associations have determined that equity requires a consignee to be allowed 48 hours in which to release cars loaded with certain commodities, all conditions of weather, etc., being favorable to said consignee, & that for each 24 hours or fraction thereof cars are detained beyond this 48 hour limit, the penalty of \$1 shall be assessed. Granting that the rules with respect to the first 72 hours may be equitable to all interests, I am disposed to contend that the penalty should be increased for the second 24 hours' detention, &, likewise, further increased for each succeeding day's detention; & that where practicable to release equipment, by storing contents, a maximum time for holding freight in cars be established, thereby fixing maximum demurrage that will be permitted to accrue.



C. M. HAYS,

General Manager of the Grand Trunk Ry. System & President-elect of the Southern Pacific Co.

daily shortage averaged 9,720 cars; during a part of that period the actual shortage was much greater than this average; thousands of patrons were waiting for cars. In the meantime over 63% of this large amount of equipment was standing on side-tracks, & less than 37% was rolling. This data represents the average condition, which was not uniform with respect to the several lines. Some lines, with ample equipment to accommodate the traffic they controlled, suffered severely, and their patrons equally as much, owing to failure of connecting lines to return their equipment promptly, thereby affecting traffic & revenues.

The benefit derived by the traffic department from car service would be amplified by the expansion of car service association jurisdiction, which would give said association

Car service prevents blocked yards, minimizing expense of operating terminals, improves the service rendered patrons, restricts discrimination between shippers maintaining expensive & permanent facilities & those who would make warehouses out of rolling stock, is without doubt directly beneficial to a large majority of shippers, & with possibly the exception of fast schedules regularly operated, is to traffic the most important feature of transportation. Therefore, I submit that traffic organizations should, in every consistent manner, co-operate with & sustain car service associations, discountenancing actions of traffic agents which contemplate aiding or encouraging shippers to evade car service rules, or in any manner embarrassing managers of car service bureaus.

To conclude, permit me to suggest that it is not enough that you gentlemen of the service have done well, but predicated on your work of the past, I am persuaded that you will continue to progress & to increase the efficiency & importance of your branch of the service.

#### General Baggage Agents' Association.

J. E. Quick, of Toronto, Secretary of the American Association of General Baggage Agents, has issued the following circular:—

At Charlevoix meeting of the Association, July, 1899, the following resolution was adopted:—"Resolved, That it is the sense of this Association that all junction points be shown on all foreign checks." The Secretary desires to call the attention of all lines to this

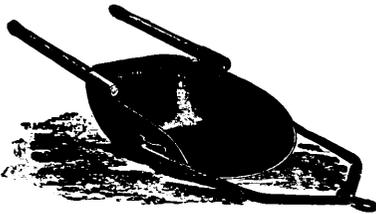
resolution, with the request that all transportation companies, whether members of this Association or not, issuing through checks kindly comply with it. It is a very important matter to larger lines, having more than one junction point with any one line, that the full routing in accordance with the reading of tickets presented & showing junction points, be shown on checks. For example as to how this will apply: Should the G.T.R. System receive at Chicago from western connecting lines, baggage checked to Ottawa, Ont., & routed simply via G.T.R. & C.P.R., train baggage man would be at a loss to know at what junction point with the C.P.R. he was to deliver baggage, as the G.T.R. connects with the C.P.R. at London, Hamilton, Toronto, Brockville & Prescott, through either of which gateways passengers & baggage could reach Ottawa, but should passengers & baggage be sent via different routes, it would make a difference in the time of arrival. This same state of affairs exists with other lines, thus the importance of showing junction points of all interline checks.

The London & Port Stanley Ry., which connects those places, is 23.75 miles long, & is owned by the city of London. It was leased to the Lake Erie & Detroit River Ry. Co. for 20 years from Jan. 1, 1894, so that the lease has 13 years to run from Jan. 1 next. The L. E. & D.R.R. pays \$10,000 a year rental, interest on the bridges which were built by the city of London over the ravines near St. Thomas amounting to about \$2,500, & 10% on

gross earnings over \$80,000 a year. Last year was the first when there was any percentage payable on gross earnings, & it amounted to \$225. The L. E. & D.R.R. wishes to get the lease extended in order to enable it to consolidate its bonded indebtedness & to issue bonds for 30 years. It therefore recently proposed to the city of London to have the lease extended for a further 20 years, & offered what it considered a fair increase in the rental for what it would get in return. This, however, was not accepted, & the city's figures are in the Co.'s estimation altogether too high. It is considered probable that the Co. & the city will be able to compromise the matter on some equitable basis, & that a conference for this purpose will be held in the near future.

A. B. Stickney, formerly General Superintendent of the C.P.R. at Winnipeg, & now President of the Chicago Great Western Ry., has been trying a co-operative experiment among the employes of the latter road, which has, according to his own statement, proved a failure. He offered them a chance to become money-making stockholders in the corporation, but with comparatively few exceptions the offer was silently declined. The few that bought stock soon wearied of saving their money, & whenever the stock mounted a peg or two they would sell out & go to spending their wages as of old. They could not stand prosperity—they tired of economy; & so the plan, originated so wisely & so generously for their benefit, failed of its purpose & became inoperative.

## WIRE ROPES, MARION STEAM SHOVELS, BALLAST UNLOADERS.



Columbus Pressed Bowl Wheel and Drag Scrapers.

..... Wheelbarrows, Picks, Shovels, Mattocks, Etc.

Contractors Rails and Dumping Cars.

Saddle Tank Locomotives.

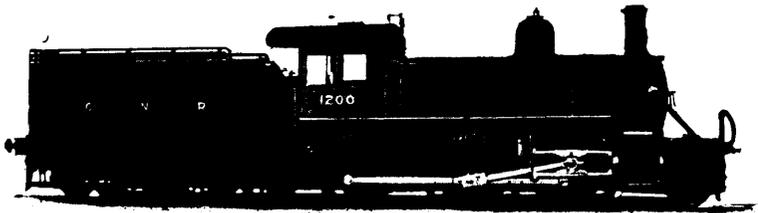
**JAMES COOPER, 299 ST. JAMES ST., MONTREAL.**

Established 1831.

Annual Capacity, 1,000.

## BALDWIN LOCOMOTIVE WORKS.

SINGLE EXPANSION AND COMPOUND LOCOMOTIVES.



Built for the Great Northern Railway.

Broad and Narrow Gauge Locomotives; Mine and Furnace Locomotives; Compressed Air Locomotives; Steam Cars and Tramway Locomotives; Plantation Locomotives; Oil Burning Locomotives.

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Established 1849

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THE BRADSTREET COMPANY gathers information that reflects the financial condition and the controlling circumstances of every seeker of mercantile credit. Its business may be defined as of the merchants, by the merchants, for the merchants. In procuring, verifying and promulgating information, no effort is spared, and no reasonable expense considered too great, that the results may justify its claim as an authority on all matters affecting commercial affairs and mercantile credit. Its offices and connections have been steadily extended, and it furnishes information concerning mercantile persons throughout the civilized world.

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CORRESPONDENCE INVITED

OFFICES IN CANADA:

Halifax, N.S.	Hamilton, Ont.	London, Ont.
Montreal, Que.	Ottawa, Ont.	Quebec, Que.
St. John, N.B.	Toronto, Ont.	Vancouver, B.C.
Victoria, B.C.		Winnipeg, Man.

THOS. C. IRVING,

Gen. Man. Western Canada, Toronto.

JOHN A. FULTON,

Gen. Man. Eastern Canada, Montreal.

**The Victoria Jubilee Bridge.**

Back in the fifties, Montreal could not boast of a better connection with the railway to the south than by the primitive mode of a ferry across the St. Lawrence River. The terminus of the G.T.R., then called the St. Lawrence & Atlantic R.R., running from Portland, Me., was Longueuil, at which place the Co.'s steamers were in readiness to ferry the passengers to Montreal, the most important city of all the British possessions in America, & one which at that time warranted the expectation of its becoming an immense metropolis. The population of Montreal was between 60,000 & 70,000, more than half of whom were of French extraction.

Freight was transported in barges & during the winter sleighs were resorted to as conveyances for passengers & merchandise. Twice a year there was a stoppage of traffic from one to three weeks during the fall & spring, when the mighty St. Lawrence was impassable. On one occasion a number of passengers were being carried across the ice-bridge in a sleigh, driven by one of the G.T.R. teamsters, when a casualty occurred which proved fatal to one of the number, the others narrowly escaping. When nearing the middle of the stream the whole field of ice, many miles in extent, began to move, but fortunately stopped after going a short dis-

tance, & all escaped in safety, except one man who died from exhaustion & fright.

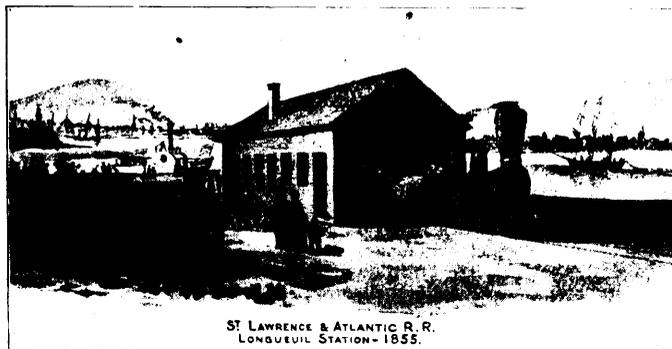
taking the trowel & assisting in preparing the mortar bed for the first stone in the first pier of the great undertaking.

On Nov. 24, 1859, Vice-President Blackwell, Hon. G. E. Cartier, Attorney-General; J. Hodges, A. M. Ross, C.E.; W. Shanley, Major Campbell, Messrs. Gzowski, Macpherson, Forsyth, Captain Rhodes & others, were the first to cross the Victoria Bridge.

Mr. Blackwell was on his way to England to attend the Grand Trunk meeting, where he was able to report himself as coming "via Victoria Bridge."

On Aug. 25, 1860, the bridge was officially inaugurated, & the last rivet driven by H.R.H. the young Prince of Wales, on which occasion a grand banquet was held near the bridge, & addresses were given by the Prince, the Duke of Newcastle, Mr. Blackwell, A. M. Ross, C.E., Mr. Hodges & others.

To commemorate this event, Mr. Blackwell had a medal prepared by J. S. Wyon, Chief Engraver of Her Majesty's seals, a gold one

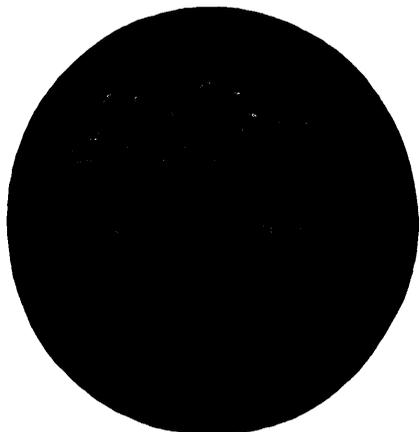


ST. LAWRENCE & ATLANTIC R.R. LONGUEUIL STATION - 1855.

going east may have observed on his left a gigantic boulder placed upon cut stonemason work, surrounded by a picket fence. This boulder was dug up in the vicinity of the bridge while the latter was under construction, & was placed where it now stands by the workmen employed on the construction, in commemoration of the immigrants who died from ship fever during the years 1847-8. The boulder bears the following inscription:—"To preserve from desecration the remains of 6,000 immigrants, who died of ship fever, A.D. 1847-8. This stone is erected by the workmen of Peto, Brassey & Betts, employed in the construction of the Victoria Bridge, A.D. 1859."

At the time of the completion of the Victoria Tubular Bridge in 1860 it was considered the eighth wonder of the world, & was the admiration of not only the promoters & the G.T.R. Co., but of all Canadians & others who looked upon it. Through increase in traffic, & with the onward march of time & improvement, the old bridge had become inefficient to meet the demands of the G.T.R. System, & the management concluded it must be replaced with a structure which would meet all needs. Accordingly a new open work steel bridge, with double tracks, carriage ways, & foot walks for pedestrians, now rests on the piers which held the old Victoria Bridge for so many years.

On December 13, 1898, the second track across the new Victoria Jubilee Bridge over the St. Lawrence River at Montreal was completed, & the bridge opened for traffic with a double track, the first train to pass over it being the St. John's local, with passenger engine No. 265, Conductor Lavigne & Engineer Day. While apparently of small moment in itself, this fact marked an interesting event



SOUVENIR MEDAL, OPENING OF VICTORIA TUBULAR BRIDGE.



of which was presented to the Prince, & a bronze one to each of the officers of the G.T.R. It bears a fine impression in relief of the Prince as he then appeared, with the Prince's feathers on the reverse side, & the words, "Welcome, Albert Edward, Prince of Wales, visited Canada & Inaugurated the Victoria Bridge, 1860."

The following particulars respecting the old Victoria Tubular Bridge may be interesting:

Length of ironwork ..... 6,502 ft.  
 Total length ..... 9,144 ft.  
 Number of piers ..... 24  
 Number of iron tubes ..... 25  
 Width of centre span ..... 320 ft.  
 Width of side spans ..... 242 ft.  
 Thickness of centre piers at summer water level ..... 28 ft.  
 Thickness of side piers at summer water level ..... 18 ft.  
 Material of piers ..... Limestone  
 Quantity of masonry (piers and abutments) ..... 100,000 cubic yards  
 Total weight of masonry ..... 223,000 tons  
 Height of tubes ..... 18 1/2 to 22 ft.  
 Width of tubes ..... 16 ft.  
 Total weight of tubes ..... 9,044 tons  
 Height from water ..... 60 ft.  
 Grade of tubes to centre ..... 1 in 130  
 Cost of bridge ..... \$7,000,000  
 Engineers: A. M. Ross & Robert Stephenson.  
 Builders: Peto, Brassey & Betts, under the superintendency of J. Hodges.

The first stone for the first pier of the old bridge was laid July 22, 1854, by Sir Cusack Roney, along with Vice-President Holmes, J. Hodges, A. M. Ross, C.E., & other gentlemen, who were also joined by Lady Roney, Mrs. Hodges, Mrs. Maitland, & others, each

The traveller on leaving the Montreal side of the bridge

The traveller on leaving the Montreal side of the bridge



H. R. H. THE PRINCE OF WALES AND SUITE PRESENT AT OPENING OF VICTORIA TUBULAR BRIDGE, 1860.

in the history of the G.T.R. System, as well as in the history of the development of the commerce of both Canada & the city of Montreal.

The Chief Engineer of the new bridge was Jos. Hobson, Chief Engineer of the G.T.R. System. The work was commenced in Oct. 1897, by the erection of the first span on the west end - the structure being built completely around the tube of the old bridge, the latter being cleverly utilized as a roadway on which a temporary steel span was moved out to the first pier, & the new structure then erected outside the temporary span. The progress of the work was delayed for two months during the winter of 1907-8, owing to very severe weather, & the actual time of construction only extended over about 8 months; during that time the enormous traffic of the Grand Trunk was delayed but very little, practically nothing to speak of, the longest time on any one occasion that the line was closed to traffic being about 2 hours, & the total length of time closed during construction being about 20 hours. This is a very remarkable result, when the following facts were taken into consideration:

While the old bridge, entire, weighed 9,044 tons, the new bridge weighs 22,000 tons. The total length of bridge is 6,592 ft; number of piers, 24; number of spans, 25; length of central span, 330 ft; length of side spans, 242 ft. While the width of the old bridge was 16 ft., the width of the new bridge is 66 ft. 8 ins.; the height of the old bridge superstructure was 18 ft.; the height of that of the new bridge over all is from 40 to 60 ft.

The total cost of the new bridge, which provides double tracks for railroad trains, & driveways for vehicles on each side, was about

\$2,000,000, the contract price of the old Victoria Bridge was \$7,000,000.

The superstructure of the bridge, exclusive of its own weight, in which are included floors, railway tracks, guard rails, etc., is designed to carry the undermentioned moving loads: (1) trains running in both directions, consisting of 2 consolidation engines and tenders, coupled, of an average weight of 5,200 lbs per ft of their length, followed by a car load of 4,000 lbs per ft; (2) a moving load on each carriageway of 1,000 lbs per ft. There is no limit prescribed for the speed of either railway trains, of electric street cars, or of ordinary carriages.

The new bridge ranks, from an engineering standpoint, with the foremost structures of the age, as the bridge which it replaced ranked the foremost as a monument to the skill of the engineers and bridge-builders of the period in which it was built.

The opening of the double track on the new bridge marked an era in the handling of traffic over the G.T.R. System, for whereas the old bridge could accommodate a maximum of but 100 trains a day, as they were required to travel at a low rate of speed, & one train could not follow another until the preceding one was out, thus losing a considerable amount of valuable time during a day, the present bridge has almost an unlimited capacity in this respect, as trains can be moved swiftly, & follow each other in rapid succession, owing to the establishment of a modern electric block system, which will permit 2 or 3 trains on the bridge in each direction at the same time. This will enable the G.T.R. to handle with facility the large & constantly increasing freight business, which has heretofore been more or less hampered, owing to the limited

capacity of the old bridge, as well as handling in a proper manner the large passenger business which constantly comes to & through Montreal, & with increased volume during the summer tourist season.

The view from the train while crossing the Victoria Jubilee Bridge is one of much grandeur, & if seen while approaching Montreal from the south shore, cannot but arrest the artistic sense of the beholder. With the St. Lawrence river sweeping under this massive structure, with hundreds of steamboats, sailing vessels, steam tugs & crafts of every description, scurrying hither & thither on its waters opposite the harbor, & the City of Montreal, lying in its beautiful location at the base of Mount Royal as a background, forms one of those beautiful pictures which delight the eye of the artist & awakens the admiration of all. The massive stone warehouses that line the harbor for miles, the extensive manufactories, from whose tall chimneys belch forth volumes of smoke, and which can be seen on the shores of the river as far as the eye can reach, tend to show that Montreal is the commercial metropolis of Canada. While speaking of Montreal, it may be said that when the old Victoria Tubular Bridge was completed in 1860, the population of that progressive city was, as already stated, between 60,000 & 70,000 & to-day the population is given as more than 300,000.

A synopsis of the dimensions & interesting features of the new bridge is appended:—

Length of steel work.....	6,592 ft.
Length (including approaches).....	9,144 ft.
Number of piers.....	24
Number of steel truss spans.....	25
Length of centre span.....	330 ft. in the clear
Length of side spans.....	242 to 247 ft. in the clear
Thickness of centre piers at summer water level.....	28 ft.
Thickness of side piers at summer water level.....	18 ft.

### C. P. R. LANDS.

The Canadian Pacific Railway lands consist of the odd-numbered sections along the Main Line and Branches, and in Northern Alberta and the Lake Dauphin District. The Railway Lands are for sale at the various agencies of the company in Manitoba and the North-West Territories at the following prices:

Lands in the Province of Manitoba average \$3 to \$6 an acre.

Lands in Assiniboia, east of the 3rd meridian, average \$3 to \$4 an acre.

Lands west of the 3rd meridian, including the Calgary District, generally \$3 per acre.

Lands in Northern Alberta and the Lake Dauphin District, \$3 per acre.

#### TERMS OF PAYMENT.

The aggregate amount of purchase money and interest is divided into ten instalments, as shown in the table below; the first to be paid at the time of purchase, the second two years from the date of purchase, the third in three years, and so on.

Interest on the outstanding purchase money is payable in one year, except in case of an actual settler who breaks up at least one-sixteenth of the land within that time. No rebate of interest is allowed on hay or grazing lands.

The following table shows the amount of the annual instalments on a quarter section of 160 acres at different prices under the new conditions:

160 acres at \$3.00 per acre, 1st instalment \$71.90, and nine equal instalments of \$60.
160 acres at \$3.50 per acre, 1st instalment \$83.90, and nine equal instalments of \$70.
160 acres at \$4.00 per acre, 1st instalment \$95.85, and nine equal instalments of \$80.
160 acres at \$4.50 per acre, 1st instalment \$107.85, and nine equal instalments of \$90.
160 acres at \$5.00 per acre, 1st instalment \$119.85, and nine equal instalments of \$100.
160 acres at \$5.50 per acre, 1st instalment \$131.80, and nine equal instalments of \$110.
160 acres at \$6.00 per acre, 1st instalment \$143.80, and nine equal instalments of \$120.

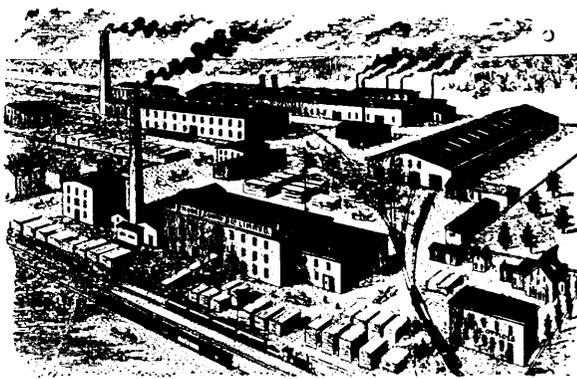
**DISCOUNT FOR CASH.** If land is paid for in full at time of purchase, a reduction from price will be allowed equal to ten per cent. of the amount paid in excess of the usual cash instalment.

Purchasers paying any instalment, or more, one full year before the date of maturity, will be allowed a discount on the amount of the instalment or instalments so paid at the rate of six per cent. per annum.

Interest at six per cent. will be charged on overdue instalments.

Write for maps and full particulars.

**L. A. HAMILTON,** Land Commissioner,  
**F. T. CRIFFIN,** - Asst. Land Commissioner,  
**WINNIPEG.**



## Car Wheels, Castings, Forgings, &c. AMHERST, NOVA SCOTIA.

## Rhodes, Curry & Co.,

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### Railway and Street Cars

of all descriptions.

Special Cars for Coal, Ore,  
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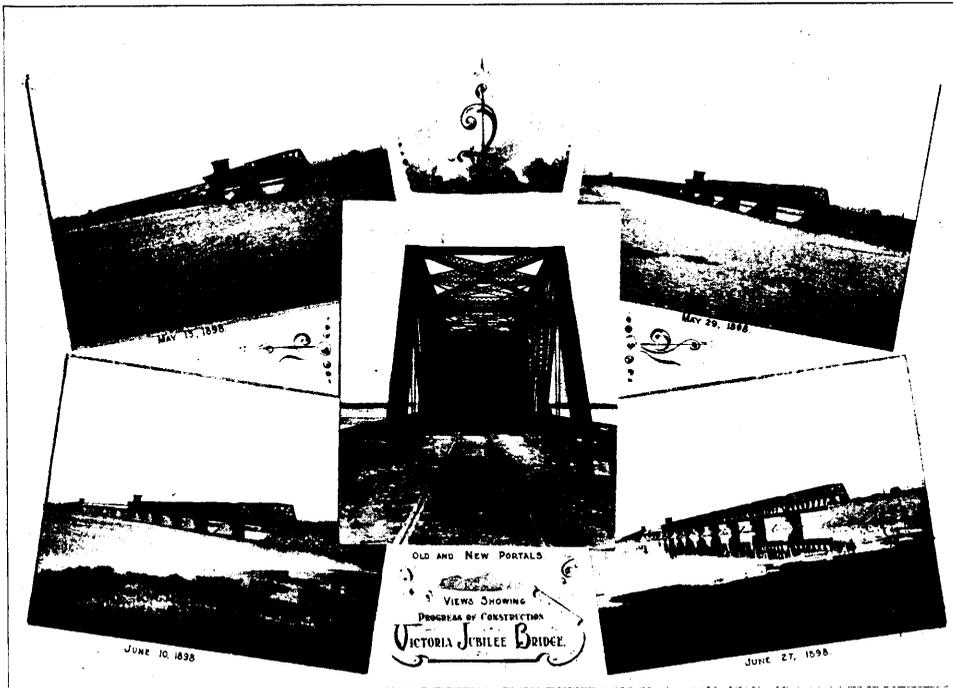
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1075 W. FIFTEENTH STREET, CHICAGO, ILL.

A partial list of elevators which have been designed and constructed by us and under our supervision.

Burlington Elevator, St. Louis, Mo.....	Capacity.....	1,300,000 Bushels
Grand Trunk Elevator, Portland, Me.....	".....	1,000,000 "
Export Elevator, Buffalo, N.Y.....	".....	1,000,000 "
J. R. Booth Elevator, Depot Harbor, Ontario.....	".....	1,000,000 "
Cleveland Elevator Company's Elevator, Cleveland, O.....	".....	500,000 "
Erie R. R. Transfer & Clipping House, Chicago, Ill.....	".....	100 cars in 10 hrs.
Manchester Ship Canal Co.'s Elevator, Manchester, Eng.....	".....	1,500,000 "
Burlington Elevator Co., Peoria, Ill.....	".....	500,000 "
Canada Atlantic Railway Elevator, Coteau Landing, Que.....	".....	500,000 "
Northern Grain Co., Manitowoc, Wis.....	".....	1,350,000 "
Union Elevator, East St. Louis, Ill.....	".....	1,100,000 "
Montreal Warehousing Co.'s Belt Conveyer System.....	".....	

We make a speciality of furnishing..... **PLANS AND SPECIFICATIONS.**



Material of piers.....	Limestone
Quantity of masonry (piers & abutments).....	100,000 cubic yards
Height of ordinary spans (centre to centre of chords).....	40 ft.
Height of centre span (centre to centre of chords).....	60 ft.
Width between main trusses (centre to centre).....	31 ft. 2 ins.
Extreme width of bridge, including roadways.....	66 ft. 8 ins.
Height from water at centre to underside of bridge.....	60 ft.
Grade of trusses to centre.....	1 in 130
Total weight of superstructure.....	44,000,000 lbs.
Cost of bridge (new work).....	\$2,000,000.

**RAILWAY FINANCE, MEETINGS, &c.**

**Baie des Chaleurs.**—The annual general meeting which was called for Montreal recently was not held, Archibald Campbell, a creditor of the company, having secured a writ of injunction to prevent it. Mr. Campbell says: "What I object to is the proposed gratuitously saddling of the Baie des Chaleurs section of the road with a claim of £80,000, said by Mr. Galindez to have been by his firm advanced to the Atlantic & Lake Superior section, being about 20 miles of the far-off end, & the voting away as security for that claim Baie des Chaleurs Ry. 1st mortgage bonds for some \$900,000 placed specially some years ago, partly with the Federal Government & partly with the Provincial Government, as security for the completion of a hundred miles of the road to Paspébiac. It is stated & admitted, I believe, that the amount of subsidies voted by the Government is quite sufficient to finish the road, & that the Government is willing to sign a contract to that end on being satisfied the money will be judiciously applied for the purpose intended. That being accomplished, the bonds will thereby be released from the Governments & should be cancelled, not as proposed, handed over to create preferred liability to a preferred creditor without value, to the great loss & injury of other creditors."

**Brockville, Westport, & Sault Ste. Marie.**—The adjourned annual meeting has been further adjourned from time to time, owing to Receiver C. J. Mooney being ill & unable to present his report.

**Calgary & Edmonton.**—Net earnings for June, \$11,287.70, against \$12,424.66 in June, 1899. Net earnings for July, \$6,229.66, against \$6,605.26 in July, 1899. Net earnings for Aug., \$15,285.82, against net loss of \$8,596.49. in Aug., 1899.

**Canada Atlantic.**—At the annual meeting held recently the following directors were elected:—C. J. Booth, C. McLachlin, J. F. Booth, W. Anderson, N. McIntosh, J. A. Seybold, G. W. Mitchell.

**Central Ontario.**—S. J. Ritchie, of Akron, Ohio, is suing S. Burke, of Cleveland, President of the Central Ontario Ry., to recover among other securities 225 \$1,000 bonds of the Co., which he alleges he gave Burke as collateral. Ritchie is also suing C. W. Bingham, administrator of the estate of H. B. Payne, to recover 500 preferred shares, 1,200 common shares, & 653 1st mortgage bonds of the Co., which he also alleges were handed over as collateral. (July, 1899, pg. 201.)

**Central Vermont.**—At a meeting of the shareholders of the Montreal & Province Ry. at Montreal, Sep. 12, the directorate was authorized to issue \$200,000 of bonds to be secured by a mortgage deed on the property, assets & revenue, the bonds being guaranteed

by the Central Vermont Ry. Co. The M. & P. line extends from St. Lambert to the International Boundary, 3 miles south of Freleighsburg, Que., & will become a part of the C. V. line.

**Dominion Atlantic** net earnings, Jan. 1 to Aug. 31, \$519,489, against \$449,290 for corresponding period.

**English Stocks.**—The London Statist says it regrets it cannot recommend purchases of English railway securities, even at their present low level of prices, unless buyers are prepared to hold for two or three years. The Midland declared 23 3/4% for the year, with £21,850 carried forward, against 34%, with £20,993 forward a year ago. The Northeastern declared 5 3/4% against 6 last year. The Great Northern will pay full dividends with £10,175 over, against £47,163 last year. The Lancashire & Yorkshire paid 4 1/2%, against 5 last year. The Chatham Co. declared nothing on its 2nd preference stock, which paid 4 1/2% last year.

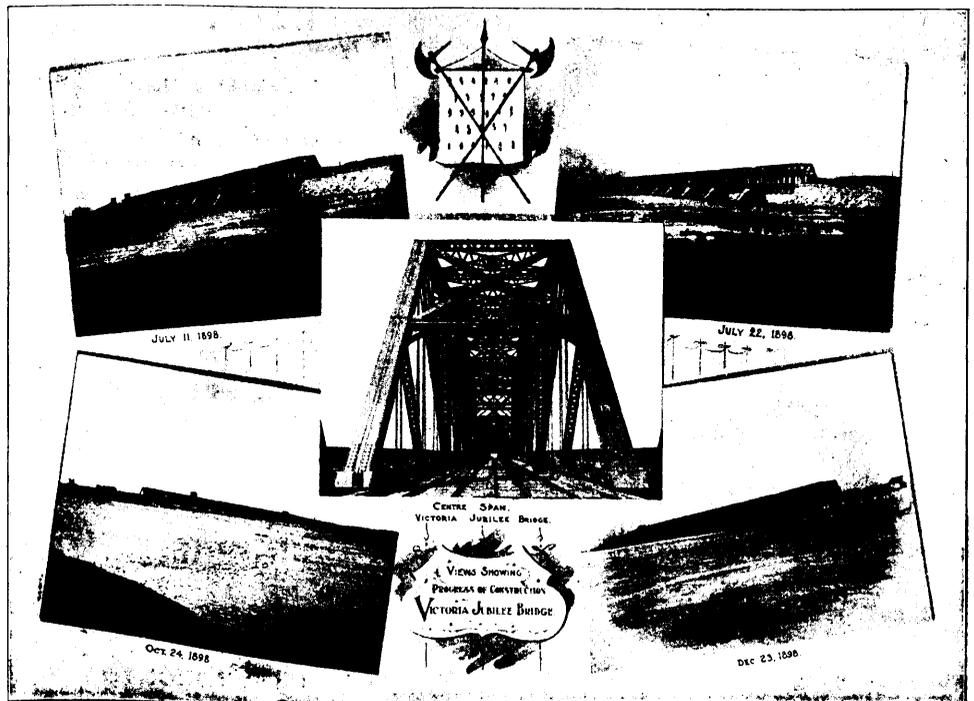
**Great Northern of Canada.**—Notice is given that an agreement for the sale of the property, &c., of the Lower Laurentian Ry. Co. to the Great Northern Ry. Co. of Canada has been assented to by the shareholders of both companies, & that a draft deed of conveyance has been approved by the shareholders & directors of both companies; & that on Dec. 10 application will be made by both companies jointly to the Governor-General in Council for his approval thereof.

**Great Northern, U. S. A.**—The report for the year ended June 30 shows that, after paying dividends amounting to 7% on the capital, & transferring \$1,200,000 to improvements and renewals, & \$600,000 to the construction of the Cascade tunnel, there is a balance of \$2,684,240 to be carried forward.

The gross earnings for Sept. were \$2,876,000, or \$237,000 less than for the corresponding period, making for the 3 months to Sept. 30 \$7,553,402, or \$124,442 less.

The Co. announces the usual quarterly dividend at the rate of 7% per annum on the preferred stock, payable November 1.

**Great Northwest Central.**—A case of considerable interest to railway men throughout Canada was recently decided by the Chief Justice of Manitoba. It arose out of the construction of the G. N. W. C. Ry. in Manitoba



& the N.W. T. The suit was brought by a contractor named Preston against his solicitor, F. S. Nugent, to recover his share of \$40,000, for which sum several claims were settled at by Nugent. The latter paid \$9,000 to Preston & his partner, but maintained he was entitled to retain the balance under a written agreement for costs & disbursements. Nugent also maintained that for some years he had devoted almost his whole time & attention to the interests of the plaintiff in connection with multitudinous litigation in almost all the courts in Ontario, Manitoba, the N.W. T. & before the Privy Council of England. Preston offered to pay Nugent's taxed costs, but contended that the amount charged was altogether too high, & swore that the agreement referred to had been obtained from him & his partner by Nugent under duress. The judgment voids this agreement, & orders costs to be taxed by the master, who is to take the accounts as between the parties. An application will now be made to compel Nugent to pay the balance of the \$40,000 into court until the litigation in connection with the building of the railway, which has now extended over many years, be finally disposed of.

**Halifax & Yarmouth.** - In reference to the rumor that this line, now under construction, is likely to be amalgamated with the Dominion Atlantic, the Chief Engineer & Superintendent of the H. & Y. informs us that so far as that Co. is concerned the matter has not been talked of or considered in any way by any of the directors or stockholders.

At the recent annual meeting the following were re-elected:—President, T. Robertson; Vice-President, W. B. Ross; other directors, J. Burritt, W. Lovitt, G. A. Cox, A. M. Hatfield.

**Kootenay Ry. & Navigation Co.**—The Great Northern Railway Company, U.S.A., has acquired the majority of the shares of the

K.R. & N. Co., & has agreed to guarantee the payment of both principal & interest of the existing debenture stock of the latter company, & of such additional debenture stock as may be issued, subject to the consent of the G.N. Co.

Lord Revelstoke & T. Baring, of London, Eng., have been appointed by the holders of K.R. & N. Co.'s debenture stock as trustees in place of the Stock Conversion & Investment Trust.

The English offices of the K.R. & N. Co. have been removed to 2 Cophall Buildings, London, E.C.

**Masawippi Valley.**—At the annual meeting in Montreal recently the following were elected:—President, W. White; Vice-President, J. G. Foster; Treasurer, J. H. Williams; other directors, O. Edwards, A. Speare, A. Barnes, C. H. Kathan, C. W. Case, J. W. Dunklee; Secretary, S. Stevens. This line is operated by the Boston & Maine.

**Michigan Legislation.**—A special session of the Michigan Legislature adjourned Oct. 12, after sitting three days. The Legislature passed both of the measures which were submitted by the Governor; a joint resolution to submit to the people at the election next month a constitutional amendment authorizing the taxation of railways at the actual value of the property, instead of basing the taxes on the earnings, & a bill repealing the special charters of the Michigan Central, the Lake Shore & Michigan Southern, & the Detroit, Grand Haven & Milwaukee railroads. These repeals do not take effect until the end of next year, & meantime the roads are given leave to bring suits for damages.

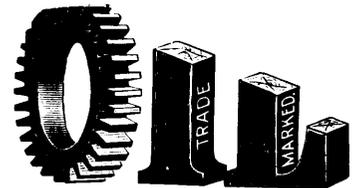
**Montreal & Atlantic.**—At a general meeting of shareholders in Montreal recently the Royal Trust Co. was appointed trustee, to whom the mortgage will be made for securing the bonds of the Co.

**New Brunswick.**—At the recent annual meeting at St. John, N.B., the following were elected:—President, R. Meighen, Montreal; Vice-President, J. K. Todd, New York; Solicitor, H. H. McLean, St. John; other directors, Lord Strathcona & Mount Royal, J. Turnbull, G. Hardisty, J. S. Kennedy, S. Thorne, D. W. James, New York; E. R. Burpee, Bangor, Me.; J. McMillan, St. John, N.B.; Secretary-Treasurer, A. Seely, St. John; Land Agent, W. T. Whitehead, Fredericton. The working results for the 12 months ended June 30 enabled the directors to announce a dividend of \$1.80 per share against \$1.75 for the year ended June 30, 1899.

**New Brunswick & Prince Edward Island.**—At the annual meeting held recently at Sackville, N.B., the directors were re-elected. This line has been in operation some 18 years, & has done a large lumber transportation business, but no dividend has been declared.

**THE QUEEN CITY OIL CO. LIMITED**  
SAML. ROGERS PRES. TORONTO

SPECIAL  
**STEAM - BOAT**  
LUBRICATING



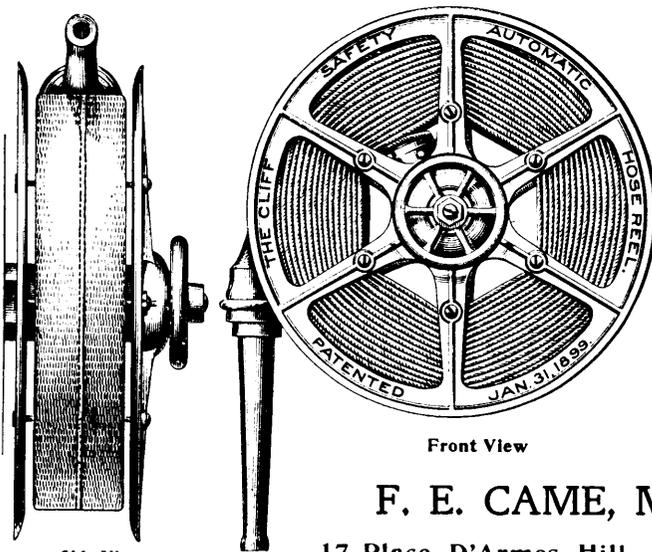
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Raw Linseed,  
Boiled Linseed,  
Spirits Turpentine,  
"Sarnia" Benzine,  
"Sarnia" Gasoline,  
Castor Oil,  
Cotton Waste,  
Lubricators, &c., &c.

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AND SIDE BLOCKS,

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**LELAND HOUSE, Winnipeg Man. W.**  
D. Douglas, Proprietor. Rooms en suite with baths and all modern conveniences. Rates \$2 to \$4 a day. Special rates for families and large parties, according to accommodation and length of time. Though moderate in price the Leland is first-class in every respect. It is especially adapted to please the commercial trade. It is in the centre of the wholesale and retail district. It is in direct communication with all parts of the city by car lines. It is supplied with the purest spring water from flowing well on the premises.



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SAFETY  
AUTOMATIC  
REEL.**

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Opens Valve.  
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Send for Particulars.

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17 Place D'Armes Hill, - - Montreal, P.Q.

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Hamilton, Ontario.

White Oak Car Timber and  
Railroad Ties, Pine Decking  
and Bridge Timber cut  
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3x3-30 ft. B.C. Pine Decking and Cross  
Arms in Stock.

White Oak Piling furnished promptly.

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DESIGNERS, ENGRAVERS,  
ELECTROTYPERS.  
**92 BAY ST.**

**New Brunswick Railway Claims.**—Judge Barker, of New Brunswick, Judge Langelier, of Quebec, & D. Coulson, of Toronto, as arbitrators, recently heard the claim of New Brunswick against the Dominion. The amount of bonuses paid by the Province to the Eastern Extension Ry. was \$400,000. This was paid through the Dominion treasury in 1868 & 1869, & charged against a credit the Province then had. When the line was taken over on Nov. 1, 1869, the Province was credited with only \$202,500, & \$47,500 was paid by the Dominion to the railway, leaving a claim of \$150,000 still due to the Province, according to its contention. This amount was paid by the Dominion in 1884, & the Province now claims interest on it from Nov. 1, 1869. It claims that its annual subsidy from the Dominion would have been \$7,500 more each year if this \$150,000 had been credited to when the railway was taken over. The claim at compound interest, the method by which these accounts have always been kept, amounts to \$351,541, or by simple interest to \$236,968. The contention of the Dominion is that there never was any legal right in the Province to receive the \$150,000, & that the payment in 1884 was made on purely equitable grounds, & was intended to be a full settlement. The arbitrators' decision has not been announced.

the trackage agreement between the Co. & the Chicago, Milwaukee & St. Paul for the use by the latter of the St. Paul & Duluth division from St. Paul to Duluth.

President Melten, in speaking of the business conditions in the West recently, said that Washington, Idaho & Oregon were exceedingly prosperous, & that it was entirely due to the earnings of the western part of the road that the general showing was so good, as the Western division's surplus overbalanced the deficiency in the eastern part. On the Eastern division the traffic was 250 cars a day less than last year, due to the failure of the crops.

The addition of the St. Paul & Duluth's earnings should make an increase of about \$5,000 a day. If earnings for the next few months showed an average increase of less than this amount, it would have to be assigned to the failure of the Eastern division of the N. P. to keep up its earnings.

**Ontario, Belmont & Northern.**—The annual meeting was held at Toronto Oct. 1. It is said that R. C. Carter, of Deseronto, was added to the directorate, & that C. A. Masten was re-elected President. The O., B. & N. has 9.6 miles of line from a junction with the Central Ontario Ry. to iron mines in Belmont township. The line is operated by the C. O. R., in whose reports its earnings, &c., are included.

**Ottawa & Gatineau.**—At the annual meeting in Montreal Sept. 5 the following were elected directors:—H. G. Beemer, M. S. Lonergan, Hon. J. S. C. Wurtele, S. Finley, E. A. Hoare, W. Hanson & Dr. Duhamel.

The report for the 6 months ended June 30 is said to show an increase of 40% in the gross earnings, & 300% in the net earnings, against the same period a year ago.

**Ottawa & New York.**—The annual meeting was held in Ottawa Sept. 25. It is said that 765 passengers were carried on the line between Ottawa & Cornwall during the year, & that the amount of freight carried was 30,524 tons.

The gross earnings of the road during the year are said to have totalled \$63,890.04. The expenditure is said to have been about equal to that amount, but the receipts cover all expenses outside of in-



VICTORIA JUBILEE BRIDGE, COMPLETED 1899.



PORTAL VICTORIA JUBILEE BRIDGE.

**New York & Ottawa.**—Judge Lacombe, in the U.S. Circuit Court, has authorized H. W. Gays, receiver, to issue \$585,000 receiver's certificates.

**Northern Pacific.**—The annual report, recently issued, shows that the improvement of the property was continued on an extensive scale, both from appropriation of earnings & the proceeds of the issue of new capital. Of \$3,000,000 appropriated from the year's earnings for betterments, all but \$672,305 was expended. The largest items of expenditure charged against this fund were \$329,516 for bridge work, \$128,583 for new spurs, \$192,976 for changes of grade & line, \$300,666 for widening embankments, etc., the total for roadway work being \$1,686,114. For new equipment \$641,582 was spent, including the cost of 21 engines, 308 platform cars & miscellaneous equipment. Charges against capital account were \$3,374,047, of which \$724,146 was for real estate, \$1,584,901 for branches & extensions, the chief charge being \$750,437 for the Walmer cut-off; \$270,000 for purchase of securities of Portage & Northwestern Ry., & \$795,000 for additional equipment. Besides the cost of additional equipment provided by charges against capital, & the appropriation of income, referred to above, \$318,380 for new equipment, representing replacement, was charged directly to operating expenses.

The directors of the N.P. have approved

terest. The following were elected directors:—H. W. Gays, Ottawa; G. F. Peabody, G. B. Moffat, C. J. Peabody, A. M. White, jr., A. Nicholas, B. Moffat, S. Trask & H. S. Snow, New York.

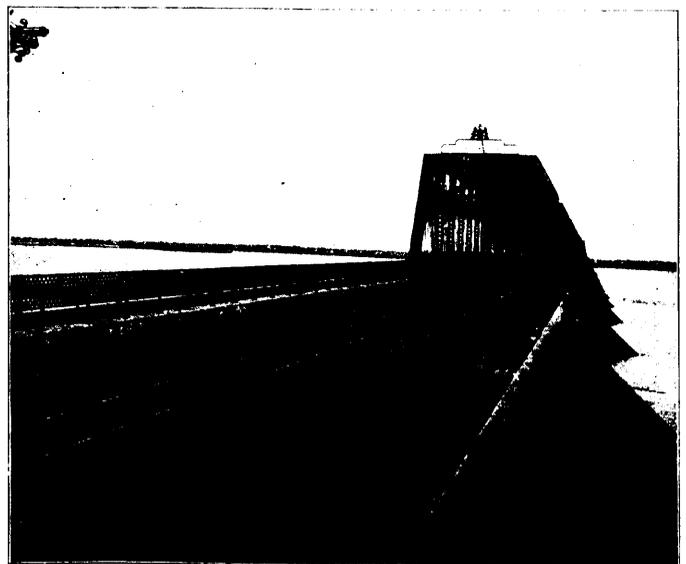
**Port Arthur, Duluth & Western.**—The annual meeting was recently announced to be held in Toronto. We are informed that, technically speaking, this line still exists, but that for all practical purposes it has been wiped out. The bondholders took proceedings & at a sale by the Court the railway & its undertakings & all other assets were sold, & the line now forms part of the Canadian Northern Ry.

**Qu'Appelle, Long Lake & Saskatchewan.**—Net loss in operating for June \$7,612.60 against \$952.97 in June, 1899. Net loss in July \$4,480.94, against \$3,677.77 in July, 1899. Net loss in Aug. \$1,271.85, against \$5,861.36 in Aug., 1899.

The Dominion Government subsidy for the 6 months ended June 30, together with the net earnings of the Co., to May 31 last, have permitted a distribution of £1 18.5% in respect of the interest due Aug. 1. Last year the distribution was £1%.

**Quebec & Lake St. John.**—Receipts Jan. 1 to June 30, \$40,146 more than for corresponding period of 1899.

**Quebec Bridge.**—At the annual meeting Sept. 6 the following were elected:—President, Hon. S. N. Parent; Vice-Presidents, R. Audette, Hon. R. R. Dobell. Other directors: H. J. Beemer, V. Boswell, J. Break-



APPROACH TO VICTORIA JUBILEE BRIDGE.

ASSESSMENT SYSTEM



# INDEPENDENT ORDER OF FORESTERS.

THE BEST FRATERNAL BENEFIT SOCIETY IN EXISTENCE.

### Cost to Join the I.O.F.

(For \$1,000 Mortuary Benefit.)

Initiation fee (minimum).....	\$1 00
Certificate fee.....	1 00
Registration fee.....	1 00
Medical Examination fee.....	1 50
<b>Total minimum cost.....</b>	<b>\$4 50</b>

(For more than \$1,000 Mort. Benefit.)

Cost to take \$2,000 Mort. Benefit.....	\$6 00
" " \$3,000 " " " " " " " "	7 00
" " \$4,000 " " " " " " " "	9 00
" " \$5,000 " " " " " " " "	10 00
Sick benefits, when required, cost extra.	

### Benefits given by the I.O.F.

- 1.—The Mortuary Benefit of \$500, \$1,000, \$2,000, \$3,000, \$4,000 or \$5,000.
- 2.—A Total and Permanent Disability Benefit of one-half of face value of policy, with exemption from further payment of premiums or Court Dues.
- 3.—An Old Age Benefit consisting of exemption from payment of premiums and Court dues after age 70.
- 4.—An Old Age Disability Benefit of one-tenth of face value of policy payable yearly for ten years, on being declared totally and permanently disabled by infirmities of age after the seventieth birthday.
- 5.—An Old Age Pension payable during disability, which may be taken as a substitute for the Old Age Disability Benefit.
- 6.—Free Medical Attendance by Court Physician where not dispensed with by Court by-law; also trained nurses in certain cases.
- 7.—A Sick Benefit of \$3 to \$5 per week, subject to provisions of the Constitution and Laws of the Order; optional, and when taken cost's extra.
- 8.—A Burial Benefit of \$100 at death of a Pensioner.
- 9.—A Funeral Benefit of \$50 at death of a member enrolled in Sick and Funeral Benefit Department.
- 10.—Social and Fraternal Privileges of the Court Room.

### The Members, the Benefits, and Their Assurance

At 31st December Each Year.

Year.	Total Membership.	Benefits Paid.	Total Surplus.	Surplus per Capita.	Death Rate per 1,000.
1881	1,019	\$ 1,300 00	\$ 4,568 55	\$ 4 48	4.50
1882	1,134	12,058 86	2,967 93	2 61	11.00
1883	2,210	9,493 68	10,857 65	4 91	4.73
1884	2,558	13,914 31	23,081 85	9 01	4.23
1885	3,642	26,576 99	29,802 42	8 18	7.76
1886	5,804	28,499 82	53,981 28	9 30	4.85
1887	7,811	59,014 67	81,384 41	10 44	5.78
1888	11,800	89,018 16	117,821 96	9 98	6.43
1889	17,349	116,787 82	188,130 36	10 84	5.85
1890	24,604	181,846 79	283,967 20	11 54	5.18
1891	32,303	261,436 21	408,798 20	12 65	6.40
1892	43,024	344,748 82	580,597 85	13 49	6.25
1893	51,484	392,185 93	858,857 89	15 76	5.47
1894	70,055	511,162 30	1,187,225 11	16 94	5.47
1895	86,521	685,000 18	1,560,733 46	18 03	5.67
1896	102,838	820,941 91	2,015,484 38	19 60	5.50
1897	124,685	992,225 60	2,558,832 78	20 52	5.56
1898	144,000	1,176,125 14	3,186,370 36	22 12	5.67
1899	163,610	1,430,200 33	3,778,543 58	23 09	6.30

For Further Information Respecting this Great Fraternal Benefit Society, Apply to

Oronhyatekha, M.D., S.C.R., Toronto, Ont.

James Marshall, 24 Charing Cross, London, Eng.

John A. McGillivray, Q.C., S.S., Toronto, Ont.

A. E. Stevenson, 6436 Kimbark Ave., Chicago, Ill.

Or Any Officer or Member of the Order.

ey, J. R. Laliberte, G. Lemoine, Hon. J. A. Paquet, H. M. Price, N. Rioux.

**Quebec Central.**—Earnings for 8 months to Aug. 31, \$116,245.59, against \$119,068.07 for corresponding period of 1899.

**Rutland.**—Application will be made to the next Vermont Legislature for an amendment to the charter permitting the Co. to buy & operate the Bennington & Rutland, the Rutland-Canadian, the Rutland & Noyan & the Ogdensburg & Lake Champlain R.R. companies, & the Rutland Transit Co. The proposed changes include an increase in the capital stock & the right to take over other connecting roads.

**Rutland & Noyan.**—The annual meeting was held Sep. 5. Following are the directors for the current year: President, F. H. Button; Vice-President, H. A. Hodge; Secretary-Treasurer, H. G. Smith; Chief Engineer, J. W. Burke; other director, P. W. Clement.

**St. Mary's River.**—The annual meeting was held at Lethbridge, Alta., Oct. 1. Following are the officers elected:—President, P. L. Naismith; Secretary-Treasurer, J. E. Lethbridge; other directors: C. A. Magrath, H. McBeth, W. R. Cunningham. All these are officers of the Alberta Ry. & Coal Co., of which the S.M.R.R. Co. is a subsidiary. Other questions before the meeting were the authorizing of the issuing of 1st mortgage bonds of the Co. & the approving of an agreement between the Co. & the A. R. & C. Co. for the regulation & interchange of traffic, & generally in relation to the management & working of both railways.

**Shuswap & Okanagan.**—Earnings Jan. 1 to June 30, \$15,067, expenses \$8,039, net earnings \$7,028.

**Temiscouata.**—The interest due Sept. 1, on the 5% 1st mortgage bonds has not been paid. This is not a surprise to those who know the position of the Co. The bonds were guaranteed, as to interest, for 10 years from March, 1890, so that this is the first payment due after the lapse of the guarantee. By this default the bonds become in the same position as the main line bonds, the interest upon which has not been paid since July, 1898.

### The Central Vermont in Canada.

An Act passed at the last session of the Dominion Parliament gives the Central Vermont Ry. Co., which is incorporated under the laws of the State of Vermont, all the powers, privileges & rights, as a corporation, necessary for the convenient & proper carrying on of the business & undertakings in Canada mentioned below.

The Co. may purchase the capital stock of, & may purchase, lease & operate the Montreal & Province Line Ry., the Stanstead, Shefford & Chambly Ry., & the Montreal & Vermont Jct. Ry. Co.

The corporations owning these railways may enter into agreements with the C.V.R. Co. for conveying or leasing them to that Co., together with the franchises, works, plant & other property belonging to them, or for an amalgamation with the C.V.R. Co., on such terms & conditions as are agreed upon, & subject to such restrictions as to the directors seem fit: provided that each such agreement has been first approved by two-thirds of the votes at a special general meeting of the shareholders of each of the said corporations called for the purpose of considering it—at which meeting shareholders representing at least two-thirds in value of the stock of each of the said corporations are present or represented by proxy—and that such agreements have also received the sanction of the Governor-in-Council.

The Co. shall have an office at or near Montreal, & service of process or legal documents

may be effected upon any clerk or officer employed therein, or upon the person then in charge thereof.

The Co. & its undertakings shall be subject to The Railway Act, except sections 32 to 89, & to the laws of Canada.

Nothing in this Act contained, or done in pursuance thereof, shall take away or prejudice any claim, demand, right, security, cause of action or complaint which any person has against the Montreal & Province Line Ry. Co., nor shall it relieve such Co. or its properties from the payment or performance of any debt, liability, obligation, contract or duty.

Nothing in this Act contained shall take away, annul or affect any agreement or stipulation made, in relation to railway belonging to the Montreal & Province Line Ry. Co., with any municipality which granted or which was part of a territory granting any bonus, aid or assistance to either of the said lines; but the C.V.R. Co. shall, in the event of such lease, sale or amalgamation, carry out the conditions under which such bonus was granted.

The C.V.R. Co., in purchasing, leasing & operating the Montreal & Province Line Ry. Co., shall assume & be liable for the charges & rights secured to J. Franchère, M.D., & others, of Marieville, by deed of sale passed June 19, 1877, which are mentioned in the deed granted by the Sheriff of Montreal to F. S. Stranahan, in trust, in 1896, by which deed the Sheriff sold & handed over to Stranahan, in trust, the railway belonging now to the Montreal & Province Line Ry. Co.

The Co. may, after acquiring the said roads as herein provided, enter into an agreement to transfer or lease them to the G.T.R. Co. of Canada.

### Early Navigation of the St. Lawrence.

Jos. Reynar, of Three Rivers, Que., who has made a study of the very important question of having the St. Lawrence kept open for navigation a couple of weeks later every season, & opened a month earlier every spring, up to the port of Montreal, writes as follows: "Referring to my article in your July number, I have much pleasure in sending you a pamphlet giving detailed descriptions of some strong ice-breaking steamers built for Russia by Sir Wm. Armstrong, Whitworth & Co., of Newcastle-on-Tyne. I hope that many Canadians, of the progressive type, will call at your office & make a study of the question I am placing before the people of Canada, which is of such vital importance to our commerce, & study carefully the results already obtained in many Russian ports.

"I recommend that the Canadian Government should, without any delay, order the construction of a strong ice-breaking steamer, something of the Sampo type, viz., length about 250 ft., breadth about 50 ft., depth about 22 ft. A vessel of these dimensions should not draw over 14 feet, with one week's coal supply on board, & with twin screws & the best engines & boilers in use, should clear the St. Lawrence of ice between Quebec & Montreal early in April every year.

"In my former article I explained how our ice-breaking steamer would be of great service in summer, by having her stationed at Sydney, N.S., ready to start at an hour's notice by orders from Ottawa, to assist any stranded vessel on Anticosti, the coast of Labrador, or elsewhere. We have lost many vessels for want of such a steamer. Last year she would have possibly been able to save the Scotsman, or at least a portion of her cargo. It is about time for the Dominion Government to wake up & take prompt & definite action in the matter. Russia has taken the lead, & we should not be too far behind."

### British Columbia Telephones, Limited.

Following is the 2nd annual report presented at the annual meeting at Huddersfield, Eng., Oct. 9:—

On Oct. 1, 1899, the Co. acquired the business of the Victoria & Esquimalt Telephone Co., Limited, & in order to pay the purchase price, issued £10,000 debenture stock; £10,000 preference shares, & £10,000 ordinary shares (£7,500 paid up). The premium obtained on the debenture stock & shares, amounting to £1,088 7s. od., has been credited to the reserve fund.

The new switch-board referred to in the last report has been put in at Vancouver, & is now in successful operation. Very satisfactory progress has been made during the year. There has been a net gain to all the subsidiary companies of 609 subscribers, being an increase of about 30% on last year's figures, & there has been a further increase of 49 in July this year.

Besides the usual expenditure for renewals & repairs, which during the past year has been of an exceptional character, it has been found necessary during the same period to undertake considerable works of construction & additions to plant, involving the expenditure of about £14,500. A portion of this sum will shortly fall due for payment, & it may be found necessary to make a call upon the ordinary shares to provide for this outlay. In the meantime the directors are glad to be able to report that all the companies' lines are in a high state of efficiency.

The profits for the year (including £425 4s. 3d. brought from last year's account), after deducting the expenses of the English offices, amount to £7,696 10s. 10d., from which the following deductions have to be made: Interest on purchase money of shares in the Victoria Co. to date of payment, less adjustment of exchange £192 14s. 6d.; Interest on debenture stock to June 30, 1900, £1,010 12s. 2d., leaving a balance of £6,493 4s. 2d.

The directors recommend that this be disposed of in the following manner, viz.:

Dividend on preference shares to June 30, 1900 (already paid).....	£1,475 5 0
Interim dividend of 8% per annum (free from tax) to December 31, 1899, on the ordinary shares (already paid).....	951 14 6
Dividend on ordinary shares at 8% per annum (free from tax) to June 30, 1900.....	1,200 0 0
To add to the reserve fund.....	2,000 0 0
To provide for directors' remuneration & to carry forward to next year's account.....	866 4 8
	<u>£6,493 4 2</u>

### ASSETS, JUNE 30, 1900.

Shares in The Victoria Esquimalt Telephone Co., Ltd., & The New Westminster & Barrard Inlet Telephone Co., Ltd., which include the shares in subsidiary companies.....	£87,250 0 0
Profits from & amounts owing by Subsidiary Companies.....	9,215 4 0
	<u>£ 96,465 4 0</u>

### CAPITAL AND LIABILITIES, JUNE 30, 1900.

Nominal Capital: £100,000, divided into 3,000 6% preference shares of £10 each and 7,000 ordinary shares of £10 each.	
Issued: 3,000 6% preference shares, fully paid.....	£30,000 0 0
4,000 ordinary shares, £7 10s. od. per share paid.....	30,000 0 0
Debenture stock, bearing interest at 4%.....	30,000 0 0
Sundry creditors.....	276 14 10
Cash due bank.....	33 17 6
Reserve fund.....	2,088 7 0
Profit & loss account—	
Balance from last year's account.....	£825 4 3
Less voted as directors' remuneration.....	400 0 0
	<u>£ 425 4 3</u>
Profit for the year.....	7,271 6 7
	<u>7,696 10 10</u>
Less Interest on purchase money of shares in the Victoria Co., to	

date of payment less adjustment of exchange	192 14 6
Interest on debenture stock	1,010 12 2
Dividends paid, viz.: On preference shares to June 30, 1900	1,475 5 0
Interim dividend on ordinary shares	951 14 6
	3,630 6 2
	4,066 4 8
	£66,465 4 0

The directorate of the Co. is composed of E. Gray, F. Priestman & J. Wheatley, in England, & W. Farrell, in Vancouver, B.C. The chief officers in British Columbia are R. K. Houlgate, Comptroller, & H. W. Kent, Construction Superintendent & Manager, both with headquarters at Vancouver.

# STEEL

## LaBELLE STEEL CO.

Pittsburgh, Pa.

MANUFACTURERS OF  
**FINE TOOL STEEL**  
For Railway Purposes  
**Track Tools, Punches, Dies, Drills, Magnets, etc.**

And all purposes where requirements are exacting.  
**Steel Forgings. Case Hardening Steel.**  
**W. G. BLYTH,**  
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THE WONDERFUL MEDICINE

They relieve Distress from Dyspepsia, Indigestion and Too Hearty Eating; are a perfect remedy for Dizziness, Nausea, Drowsiness, Bad Taste in the Mouth, Coated Tongue, Pain in the Side, TORPID LIVER.

They regulate the Bowels. They Cure Sick Headache. A Single One Gives Relief.

**WANTED**

A case of bad health that RIPANS will not benefit. RIPANS, 10 for 2 cents, or 12 packets for 48 cents, may be had of all druggists who are willing to sell a low-priced medicine at a moderate profit. The banish pain and prolong life One gives relief. Accept no substitute.

Note the word RIPANS on the packet.  
Send 5 cents to Ripans Chemical Co., No. 10 Spruce St., New York, for 10 samples and 1,000 testimonials.

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THE RAILWAY AND SHIPPING WORLD:  
March to December, 1898, price... \$1.00  
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Address  
THE RAILWAY AND SHIPPING WORLD,  
33 Melinda St., Toronto, Canada.

**All Cuts** used in the RAILWAY AND SHIPPING WORLD, and owned by the Publishers, are  
.....For Sale.

**Picketing During Strikes.**—The High Court of Justice, in England, recently enjoined the General Secretary & the Organizing Secretary of the Amalgamated Society of Railway Servants from watching & besetting the Great Western Ry. stations & approaches, with the view of inducing non-unionists to refrain from taking the places of Taff Vale Ry. strikers.

The wire connecting Manitoulin Island & the Georgian Bay with the C.P.R. Telegraph System on the main line was interrupted in a curious manner recently. During a wild electric storm the horns of a moose became entangled with the wire, & the repairers found him dead. The ground around showed that there had been a furious fight; the wire, however, held him, but two poles were broken.

# ENAMELED IRON PLATES

For Doors, etc., in Stations, Steamships, Ferries, Hotels, Offices, etc., carried in Stock for Prompt Delivery.

Any of these Plates can be shipped on the day an order is received.

## SMOKING ROOM

Size 23 x 3½ inches. Oblong, fancy ends, white ground, blue letters, lined & tipped:

Agent's Office.	Waiting Room.
Express Office.	General Waiting Room.
Freight Office.	Ladies' Waiting Room.
General Offices.	Men's Waiting Room.
Private Office.	Dining Room.
Ticket Office.	Lunch Room.
Telegraph Office.	Restaurant.
Baggage Room.	Ladies' Toilet.
Smoking Room.	Men's Toilet.
Smoking Prohibited. No Admittance.	Trespassers Prosecuted.

## NO ADMITTANCE

Size 10 x 2½ inches. Oblong, oval ends, white ground, blue letters, lined & tipped, hollowed:

Bar Room.	Men.
Luggage Room.	Private.
Office.	No Admittance.
Refreshments.	No Road.
Exit.	Boarding House.
Fire Escape.	Private Board.
Lavatory.	Dressmaking.
Ladies.	Fresh to Day.
Women.	Teas Provided.
Gentlemen.	Please Shut the Gate.

Size 14 x 3 inches. Oblong, oval ends, white ground, blue letters, lined and tipped.

No Admittance.

## STICK NO BILLS

Size 18 x 3½ inches. Oblong, square ends, white ground, blue letters, lined & tipped.

Furnished Apartments. Stick no Bills. Please Shut the Door.

## PUSH PULL

Oval, size 2 x 3 inches, white ground, blue letters, tipped, hollowed, lettered **Push, Pull**, as above.

Oblong, square ends, size 3 x 1½ inches, white ground, blue letters, tipped, lettered **Push, Pull**, as above.

Perpendicular, square ends, size 12 x 3 inches, white ground, blue letters, lined & tipped, lettered perpendicularly, **Push, Pull**.

Oblong, square ends, size 12 x 3 inches, white ground, blue letters, lined and tipped, lettered horizontally, **Push, Pull**.

Oblong, fancy ends, size 3 x 1⅝ inches, white ground, blue letters, lined and tipped, lettered **Push, Pull**.

# ENAMELED IRON SIGNS.

For Steam & Electric Railways, Steamship, Express, Telegraph, Telephone & Advertising Purposes, of every description, size & color, made to order.

Railway Station Names, Switch Targets, Semaphore Arms, Whistle & Diamond Crossing Signs, Numbers for Railway Bridges, Sections, Mileage Signal Houses, etc.; Street Car Route Signs; Steamship & Ferry Signs; Express, Telegraph & Telephone Office Signs; Agency, Office, Store, Wagon, Cart & Advertising Signs; Street Names & Numbers; Door Numbers.

These signs last practically for ever, they never fade or tarnish, they are ever bright and attractive, they are absolutely impervious to heat or cold, they are the only signs that will withstand the effects of weather in all climates.

For Prices, Illustrated Catalogues, etc., address

**THE ACTON BURROWS COMPANY,**  
29 Melinda Street, - - Toronto, Canada.

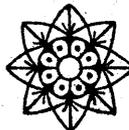
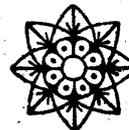
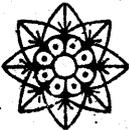
# The Purchasing Agents' Guide

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<b>Aerated Waters</b> E. L. Drewry..... Winnipeg.	<b>Hardware</b> Rice Lewis & Son..... Toronto. The Hudson's Bay Company.....	<b>Shipbuilders' Tools &amp; Supplies</b> Rice Lewis & Son..... Toronto.
<b>Air Brakes &amp; Fittings</b> Westinghouse Mfg. Co..... Hamilton, Ont.	<b>Headlights</b> Noah L. Piper & Sons..... Toronto.	<b>Ships</b> Polson Iron Works..... Toronto.
<b>Ales</b> E. L. Drewry..... Winnipeg.	<b>Hose</b> Rice Lewis & Son..... Toronto.	<b>Shovels</b> James Cooper..... Montreal. The Hudson's Bay Company..... Rice Lewis & Son..... Toronto.
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<b>Axles</b> James Hutton & Co..... Montreal. Rhodes, Curry & Co..... Amherst, N.S.	<b>Iron</b> Rice Lewis & Son..... Toronto.	<b>Signals</b> Noah L. Piper & Sons..... Toronto.
<b>Babbit</b> Rice Lewis & Son..... Toronto.	<b>Iron Signs</b> Acton Burrows Co..... Toronto.	<b>Signs</b> Acton Burrows Co..... Toronto.
<b>Blankets &amp; Bedding</b> The Hudson's Bay Company.....	<b>Japans</b> McCaskill, Dougall & Co..... Montreal.	<b>Snow Ploughs</b> Rhodes, Curry & Co..... Amherst, N.S.
<b>Block &amp; Tackle</b> Rice Lewis & Son..... Toronto	<b>Lager Beer, &amp;c.</b> E. L. Drewry..... Winnipeg.	<b>Spikes</b> Rice Lewis & Son..... Toronto.
<b>Boat Fittings &amp; Hardware</b> Rice Lewis & Son..... Toronto.	<b>Lamps &amp; Lanterns</b> The Hudson's Bay Company..... Rice Lewis & Son..... Toronto. Noah L. Piper & Sons..... Toronto.	<b>Station Name Signs</b> Acton Burrows Co..... Toronto.
<b>Boiler Covering</b> Mica Boiler Covering Co..... Montreal.	<b>Launches</b> Polson Iron Works..... Toronto.	<b>Steamboats</b> Polson Iron Works..... Toronto.
<b>Boilers</b> Polson Iron Works..... Toronto.	<b>Life Insurance</b> Independent Order of Foresters..... Toronto. Travelers' Insurance Co..... Montreal.	<b>Steamboat Signs</b> Acton Burrows Co..... Toronto.
<b>Bolts</b> Rice Lewis & Son..... Toronto.	<b>Linoleum and Floor Coverings</b> The Hudson's Bay Company.....	<b>Steam Shovels</b> James Cooper..... Montreal.
<b>Brake Shoes</b> F. E. Came..... Montreal.	<b>Locomotives</b> Baldwin Locomotive Works... Philadelphia, Pa. Richmond Locomotive & Machine Works..... Richmond, Va.	<b>Steel</b> James Hutton & Co..... Montreal. Rice Lewis & Son..... Toronto.
<b>Bridge Numbers</b> Acton Burrows Co..... Toronto.	<b>Lubricators</b> Rice Lewis & Son..... Toronto.	<b>Steel Castings</b> F. E. Came..... Montreal.
<b>Buckets</b> Rice Lewis & Son..... Toronto.	<b>Lumber</b> The Haliburton Lumber Company..... Toronto.	<b>Switch Targets</b> Acton Burrows Co..... Toronto.
<b>Carpets</b> The Hudson's Bay Company.....	<b>Matches</b> The Hudson's Bay Company.....	<b>Switches</b> F. E. Came..... Montreal. Canada Foundry Co..... Toronto.
<b>Cars</b> Rhodes, Curry & Co..... Amherst, N.S.	<b>Milepost Numbers</b> Acton Burrows Co..... Toronto.	<b>Telegraph Office Signs</b> Acton Burrows Co..... Toronto.
<b>Car Wheels</b> Rhodes, Curry & Co..... Amherst, N.S.	<b>Mohair</b> The Hudson's Bay Company.....	<b>Telephone Office Signs</b> Acton Burrows Co..... Toronto.
<b>Castings</b> Rhodes, Curry & Co..... Amherst, N.S.	<b>Numbers</b> Acton Burrows Co..... Toronto.	<b>Timber</b> The Bradley Company..... Hamilton, Ont. The Haliburton Lumber Company..... Toronto.
<b>Chains</b> Rice Lewis & Son..... Toronto.	<b>Oakum</b> Rice Lewis & Son..... Toronto. The Hudson's Bay Company.....	<b>Tires</b> James Hutton & Co..... Montreal.
<b>Cross Arms, Top Pins &amp; Side Blocks</b> The Firstbrook Box Co..... Toronto.	<b>Oils</b> Galena Oil Co..... Franklin, Pa. The Imperial Oil Company..... Toronto. The Queen City Oil Company..... Toronto. Signal Oil Company..... Franklin, Pa.	<b>Tobacco and Cigars</b> The Hudson's Bay Company.....
<b>Curtains</b> The Hudson's Bay Company.....	<b>Office Signs</b> Acton Burrows Co..... Toronto.	<b>Toilet Paper</b> The Hudson's Bay Company.....
<b>Cuts</b> Acton Burrows Co..... Toronto.	<b>Packing</b> The Fairbanks Co..... Montreal.	<b>Tools</b> Rice Lewis & Son..... Toronto.
<b>Door Signs</b> Acton Burrows Co..... Toronto.	<b>Pipe Covering</b> Mica Boiler Covering Co..... Montreal.	<b>Track Jacks</b> Duff Manufacturing Co..... Allegheny, Pa. A. O. Norton..... Coaticook, Que.
<b>Dry Goods</b> The Hudson's Bay Company.....	<b>Plushes</b> The Hudson's Bay Company.....	<b>Track Tools</b> F. E. Came..... Montreal. James Cooper..... Montreal. Rice Lewis & Son..... Toronto.
<b>Electric Car Route Signs</b> Acton Burrows Co..... Toronto.	<b>Pneumatic Tools</b> F. E. Came..... Montreal.	<b>Tramway Equipment</b> J. J. Gartshore..... Toronto.
<b>Enameled Iron Signs</b> Acton Burrows Co..... Toronto.	<b>Porter</b> E. L. Drewry..... Winnipeg.	<b>Trucks</b> Rice Lewis & Son..... Toronto.
<b>Engines, Stationary &amp; Marine</b> Polson Iron Works..... Toronto.	<b>Portland Cement</b> Rice Lewis & Son..... Toronto.	<b>Union Couplings</b> E. M. Dart Manufacturing Co., Providence, R.I.
<b>Engraving</b> Acton Burrows Co..... Toronto. Toronto Engraving Co..... Toronto.	<b>Printing</b> The Hunter, Rose Co..... Toronto. The Mail Job Printing Company..... Toronto.	<b>Varnishes</b> McCaskill, Dougall & Co..... Montreal.
<b>Express Office Signs</b> Acton Burrows Co..... Toronto.	<b>Pumps</b> Rice Lewis & Son..... Toronto.	<b>Vessels</b> Polson Iron Works..... Toronto.
<b>Fencing</b> Page Wire Fence Co..... Walkerville, Ont.	<b>Rails (New)</b> James Cooper..... Montreal. J. J. Gartshore..... Toronto. Rice Lewis & Son..... Toronto.	<b>Waste</b> Rice Lewis & Son..... Toronto. Noah L. Piper & Sons..... Toronto. The Queen City Oil Co..... Toronto.
<b>Ferry Signs</b> Acton Burrows Co..... Toronto.	<b>Rails (for relaying)</b> James Cooper..... Montreal. J. J. Gartshore..... Toronto.	<b>Water Meters</b> Westinghouse Mfg. Co..... Hamilton, Ont.
<b>Flags</b> Rice Lewis & Son..... Toronto. The Hudson's Bay Company.....	<b>Rail Saws</b> F. E. Came..... Montreal.	<b>Wheelbarrows</b> James Cooper..... Montreal. Rice Lewis & Son..... Toronto.
<b>Foghorns</b> Rice Lewis & Son..... Toronto.	<b>Rope</b> Rice Lewis & Son..... Toronto. The Hudson's Bay Company.....	<b>Window Blinds</b> The Hudson's Bay Company.....
<b>Gas &amp; Gasoline Engines</b> Northey Manufacturing Co..... Toronto.	<b>Scales</b> The Gurney Scale Company..... Hamilton, Ont.	<b>Wines and Liquors</b> The Hudson's Bay Company.....
<b>Gates</b> Page Wire Fence Co..... Walkerville, Ont.	<b>Semaphore Arms</b> Acton Burrows Co..... Toronto.	<b>Wire &amp; Wire Rope</b> Rice Lewis & Son..... Toronto.
<b>General Supplies</b> The Hudson's Bay Company.....	<b>Shafting</b> Rice Lewis & Son..... Toronto.	<b>Yachts</b> Polson Iron Works..... Toronto.
<b>Grain Elevators</b> John S. Metcalfe Co..... Chicago, Ill.		
<b>Groceries</b> The Hudson's Bay Company.....		
<b>Half Tones</b> Acton Burrows Co..... Toronto.		

# HUDSON'S BAY COMPANY

INCORPORATED 1870



## TRADE DEPARTMENT

THE COMPANY HAS GENERAL STORES AT

BAIE DES PERES  
 BATTLEFORD  
 BISCOTASING  
 CALGARY  
 DELORAINÉ  
 FORT FRANCIS      DINORWIC  
 GLENORA      EDMONTON  
 KAMLOOPS      FORT WILLIAM  
 LOWER FORT GARRY  
 LETHBRIDGE  
 MACLEOD  
 MATTAWA  
 PINCHER CREEK      MISSANABIE  
 PORTAGE LA PRAIRIE      NELSON  
 PORT SIMPSON, B.C.      NEPIGON  
 PRINCE ALBERT  
 QU'APPELLE  
 TESLIN      QUESNELLE  
 TOUCHWOOD HILLS      RAT PORTAGE  
 VANCOUVER      SHOAL LAKE  
 VERNON  
 VICTORIA  
 WABIGOON  
 WHITEWOOD  
 WINNIPEG  
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Intending purchasers will find at these Stores the BEST GOODS AT MODERATE PRICES, imported direct from all the principal markets of the world.

## LAND DEPARTMENT

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AND THE

**Great North-West of Canada**

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**7,000,000 ACRES**

These Comprise Some of the Best

**Farming, Stock-Raising and Coal Lands in the Country**

They are offered For Sale at MODERATE PRICES ON EASY TERMS OF PAYMENT, and without any CONDITIONS OF SETTLEMENT.

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WINNIPEG      RAT PORTAGE      ROSEMOUNT  
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Full and accurate descriptions of Lands will be furnished on application to the

HUDSON'S BAY COMPANY

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And to the Commissioner

HUDSON'S BAY COMPANY

Winnipeg, Canada