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VOL. 1. No. 6.

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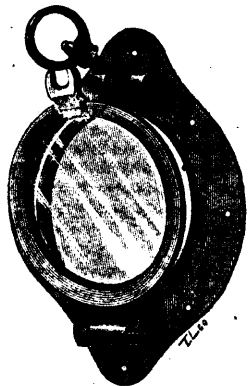
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VOL. I., No. 6.

TORONTO, CANADA, AUGUST, 1898.

\$1 A YEAR.

The Grand Trunk President.

Sir Charles Rivers-Wilson, C.B., K.C.M.G., is the son of the late Melville Wilson & was born in London, Eng., 1831. He was educated at Eton & at Balliol college, Oxford, where he took his B.A. degree. He entered the British Civil Service as a clerk of the Treasury in 1856; was Private Secretary to the Earl of Beaconsfield from 1868 to 1873; a Royal Commissioner to the Paris Exposition in 1878; & Finance Minister of Egypt, 1878 to 1879. He has been Comptroller General of the Office for the Reduction of the National Debt since 1874 & was appointed President of the G.T.R. of Canada in 1895. He holds the Medjidie order of the 1st class. He was created a C.B. in 1876 & a K.C.M.G. in 1880. He married 1st, in 1860, Caroline, daughter of R. Cook, who died; & 2nd, in 1895, the Hon. Beatrice Violet Mary Mostyn, sister of the 7th Baron Vaux of Harrowden. His principal residence is 71 Pont street, London, S.W. Eng., & he is a member of the St. James, Marlborough, Arthurs and Garrick clubs.

A U. S. View of Canadian Lines.

Lucius Tuttle, President of the Boston & Maine Ry., was recently interviewed in regard to the relations of the C.P.R. to New England interests, & said:—

"When you come to analyze this hue & cry against the C.P.R., it will be found that selfishness, pure & simple, is at the bottom of the whole business. All this talk about the Canadian Pacific having extraordinary opportunities to prey upon its American competitors, & that it is guilty of demoralizing rates, is the dust that is thrown into the eyes of our people to blind them to the motive that lies beyond.

"The assertion constantly made by the northwestern lines & those in the central & trunk line territories, to the effect that the Canadian Pacific is the only sinning party in the matter of rate reductions to the Pacific coast & intermediate points, is puerile & with no justification whatever. What have we seen within the past 20 years or more in the relation of these American lines to one another? Is it not a fact that they have come together on innumerable occasions, after rates have been whittled to the line of bankruptcy, & entered into the most solemn pledges to go back to established tariffs, only to break their word before the ink on the signatures to the agreements had had time to dry? They cannot live in peace together. This has been demonstrated time & time again, & I, therefore, reiterate that it is unjust & misleading to attempt to throw all the blame for the present rate trouble between the Canadian property & its competitors on our side of the line upon it.

"Another thing that appears to have been lost sight of is that whatever comment is

directed toward the Canadian Pacific applies with equal force to the Grand Trunk, but it is rarely the latter road is mentioned when this matter of foreign competition is discussed. There appears to be a special antagonism for the Canadian Pacific on the part of many who profess to understand the traffic relations of our railway systems & are privileged to spread their views before the public, as they rarely, if ever, admit that the Grand Trunk is a considerable factor in a competitive sense. I can see no justification on the part of certain American roads & the editors of technical railroad journals to make the Canadian Pacific the scapegoat. Nor am I so dull as not to see that the Northwestern roads are using the Canadian Pacific to pull chestnuts out of the

concerned. It will, therefore, be seen that these New England railroad properties, together with Boston's export interests, are vitally concerned in whatever affects the Canadian Pacific or the Grand Trunk railways.

"I have seen it stated that the Government should interfere in behalf of our American roads, & afford them the same measure of protection against this 'foreign' rail competition as it accords the merchant marine. This is urged by certain New York interests, but it is evident that those who take this position forget that the New York Central operates largely through Canadian territory, & that any curtailment of the privileges that the Canadian road enjoys in the handling of American products would also operate to the disadvantage of New York. I look upon the Canadian Pacific as essentially an American line. Much of its tracking runs through our territory, & it is within the jurisdiction of the Interstate Commerce Commission."

Mr. Hays Endorsed.

In a recent interview in Montreal, Vice-President Jos. Price, of the G.T.R., said: "I have no hesitation in saying that Mr. Hays enjoys the fullest confidence of every member of the board of directors, all of whom appreciate the services which he has rendered & is rendering, services which have resulted already in a wonderful increase of material value. It is felt on all hands that Mr. Hays is the right man in the right place. From the start his work has been appreciated by the board. Now that he has been in office for some time his value is thoroughly understood. This is a specially pleasing feature of the present regime, that there should be such a perfect understanding between the Manager & the board in London. He has shown since his advent to office that he understands how to employ those powers in the best possible way so as to ensure the highest results. I am especially anxious that it should be known that in Mr. Hays the board is convinced they have a man who is bringing at once much experience & ability to bear upon the duties of the responsible position he occupies, with results which are already seen in the appreciation of Grand Trunk values."

A telephone line has been erected at Dawson City, Yukon, by the Klondike Telegraph & Telephone Co., which is said to have 40 miles of wire on the ground, & expects 20 miles more at once. The Co. is putting in the plant under the charter of the Canada Western Co. At first the line will be strung to the forks of El Dorado & Bonanza creeks, with the intention of later on running it up to Dominion, Silver & Hunker creeks, & eventually to connect with the parent line, the Canada Western. The Co. is essentially a mining one. A. McDonald is General Manager.



SIR CHARLES RIVERS-WILSON, C.B., K.C.M.G.

fire of demoralized rates, & thereby escape the responsibility that justly belong to them.

"The great importance of these Canadian lines to the commercial existence of New England can hardly be measured. They afford us the only direct connection with the great northwest & many of the gateways in the middle west. We can operate over them entirely independent of the Vanderbilt interests, or any of the other great systems that work to the advantage of the seaboard points where they have their termini. Without these Canadian connections the Boston & Maine & the Fitchburg would be practically bottled up, so far as our relations to the agricultural sections of Canada & our country are

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TORONTO, CANADA, AUGUST, 1898.

PASSENGER MATTERS.

The Interstate Commerce Commission Inquiry.

In view of the importance of the recent enquiry into passenger rate matters by the Interstate Commerce Commission we devote considerable space in this issue to the proceedings at Chicago. The papers of that city published very imperfect reports. Not one of them gave even a complete summary of the evidence, confining themselves to scrappy extracts, evidently selected to make the most of the case for the U.S. lines & to the disadvantage of the Canadian Pacific, "the foreign road."

As Sir Rivers-Wilson says, in an interview published elsewhere in this issue, the fight is really one between the transcontinental roads, & we will narrow this down still further by localizing it as between the Canadian Pacific & Great Northern (U.S.), with President Hill, of the latter, as the aggressor. It has been pretty well understood in railway circles for a good many years that there is no love lost between the managements of these two systems. When Mr. Van Horne made his first trip to Manitoba at the end of 1881, just prior to assuming the General Managership of the Canadian Pacific, it was in company with Mr. Hill, on whose recommendation, it was said, Mr. Van Horne, then the successful General Superintendent of the Chicago, Milwaukee & St. Paul, was selected for the position. Mr. Hill was then a director of the C.P.R. as well as of the St. Paul, Minneapolis & Manitoba, Mr. Geo. Stephen being President of both lines.

It is said, & pretty generally believed, in well-informed quarters, that very soon after Mr. Van Horne got to work at Winnipeg, Mr. Hill tried to use him to carry out schemes for the advancement of the St. P., M. & M. at the expense of the C.P.R. But the man from Milwaukee was not to be handled in that way. He had thrown his whole energy into the C. P.R.; he realized the magnificent opportunities before it, & with him its interests were paramount. Then came a struggle in which Mr. Hill came out second best, & in the course of which he is said to have resorted to methods which revived the story told in his flat-boat days on the Red River, when it was said there were three notorious prevaricators in St Paul, — was one & "Jim" Hill was the other two; but "prevaricators" was not the exact word that was used. We have digressed somewhat, but it has been for the purpose of showing that Mr. Hill's policy is one of revenge & uncompromising hostility towards the Canadian Pacific, from the councils of which he retired years ago, foiled.

Vice-President Clough's speech before the Commission, reported further on in this issue, clearly shows that what the Great Northern wants is not a settlement of the rate question, but the absolute exclusion of Canadian lines from participation in U.S. traffic, & particularly to keep out Canadian Pacific competition. As a matter of fact, the speech did not deal at all with passenger matters, but was a

talk to the gallery, a deliberate attempt to arouse national feeling. But Mr. Clough will undoubtedly find that public opinion is not with him. It certainly is not in Minnesota or Dakota, which have benefited to a great extent by Canadian Pacific competition, as is shown by the article from a leading Minneapolis paper, published elsewhere in this issue. President Tuttle, of the Boston & Maine, has, in a recent interview, shown what the feeling of the New England railway managements is, & the Railway World, of Philadelphia, denounces Mr. Clough's proposal as "sheer nonsense."

The Chicago Times-Herald, in its issue of Aug. 3, said: "Before the Interstate Commerce Commission, in the Federal court-rooms in this city, the Canadian Pacific Railway is fighting against being barred from carrying a pound of American freight or a single passenger from American soil. Arrayed against it are the most prominent railroad men of the West, each of whom hammers home vigorous arguments against the continuance of a system that, it is alleged, diverts annually millions of dollars from American workmen, & many millions more from America's taxpaying railroads. Begun only with an idea of bringing to an end a disastrous & costly passenger rate war, the inquiry of the Commerce Commission has proceeded to a stage in which the expulsion of the foreign road from participation in strictly American traffic is practically demanded."

Legislation such as is indicated could not be directed against the C.P.R. alone. It would have to strike at all Canadian lines running into the U.S., & it would hit the Grand Trunk & Michigan Central more seriously than the Canadian Pacific. In view of this we cannot help thinking that the Grand Trunk management would do well to consider whether it may not carry its U.S. alliances too far for the shareholders' interests. It is undoubtedly suffering a very considerable diminution of revenue at present in consequence of having allied itself with the U.S. transcontinental lines, & there is no reason to doubt that if, by its so doing, the rate cutting is perpetuated, the showing for the current half-year will be a very unsatisfactory one.

General Passenger Agent Davis, of the Grand Trunk, in a recent interview, said: "Mr. Clough's proposal had not the support even of the U.S. railway men, & there is no danger of Congress adopting any such adverse legislation." As shown by President Tuttle, it has not the support of eastern lines, but what of the west? Mr. Clough's speech was delivered in the presence of dozens of representatives of U.S. lines, & it seems strange, if they did not agree with it, that they did not promptly repudiate the proposal.

If this was simply a rate fight between the Grand Trunk & Canadian Pacific, we should occupy a neutral position, but it is far more; it is an unconcealed attempt to exclude Canadian railways by unfriendly legislation in the interest primarily of the Great Northern, & secondly of other transcontinental lines. Our deep regret is that in such an issue there should be even the suspicion of a single Canadian line siding with the U.S. conspirators against Canadian interests.

The Call for an Enquiry.

At a session of the U. S. Interstate Commerce Commission in Washington, July 14, the following order was made:

In the matter of the alleged disturbance in passenger rates by the Canadian Pacific Railway Co.:

Whereas, it has come to the attention of the Commission that there exists at the present time a contest in passenger rates between the Canadian Pacific Ry. Co., a corpora-

tion of the Dominion of Canada, upon the one hand, & certain American lines & their connections, including the Grand Trunk Ry. Co. of Canada, upon the other; & whereas, it is charged by the American lines that the C.P.R. Co. has been & still is, in open violation of the Act to Regulate Commerce, making unreasonably low rates between various points in the U.S., not as a measure of legitimate competition, but as a means of retaliation for the purpose of exacting certain unreasonable demands upon its part, & that such illegal conduct on the part of the C.P.R. will result, if persisted in, in the utter demoralization of passenger rates over a large portion of the U. S. & in incalculable damage to the interests of the American lines, all of which is either denied or justified by said Canadian Pacific Railway Company; & whereas, it seems advisable that the Commission should be fully informed of the whole situation in respect to passenger rates as induced or affected by the competition of the C.P.R., as above set forth, with a view to determining what, if any, relief can or ought to be applied or suggested, or what action should be taken in the premises; now, therefore, it is ordered, that an investigation into the above matters be made, & that this cause be set down for hearing at the Federal Court Room in Chicago, Ill., on Aug. 1, at 10 a.m., at which time & place all parties interested in the matters under investigation will be heard, & at which time & place the following named companies are directed to appear by their general passenger agents or those persons having in charge the passenger traffic of the respective lines.

Following is a list of the lines included in the notice:—Vichison, Topeka & Santa Fe, Burlington & Missouri River Railroad in Nebraska, Burlington, Cedar Rapids & Northern, Chicago & Alton, Chicago & Northwestern, Chicago, Burlington & Northern, Chicago, Burlington & Quincy, Chicago Great Western, Chicago, Milwaukee & St. Paul, Chicago, Rock Island & Pacific, Chicago, St. Paul, Minneapolis & Omaha, Colorado Midland, Denver & Rio Grande, Fremont, Elkhorn & Missouri Valley, Sioux City & Pacific, Hannibal & St. Joseph, St. Louis, Kansas City & Northwestern, Kansas City, St. Joseph & Council Bluffs, Illinois Central, Iowa Central, Jacksonville & St. Louis, Missouri Pacific, Minneapolis & St. Louis, Michigan Central, Oregon Railway & Navigation Co., Oregon Short Line, Rio Grande Western, Rock Island & Peoria, St. Joseph & Grand Island, St. Louis, Iron Mountain & Southern, St. Louis & San Francisco, Southern Pacific, Southern California, Santa Fe Pacific, Texas & Pacific, Union Pacific, Wabash, Wisconsin Central, Great Northern, Northern Pacific, Boston & Albany, Fitchburg, Toronto, Hamilton & Buffalo, Chicago & Grand Trunk, Grand Trunk & the Canadian Pacific.

The Proceedings at Chicago.

The Commission opened its session in the Federal Court rooms, Monadnock Building, Chicago, Aug. 1, the whole of the members being present as follows: M. A. Knapp, Chairman; J. C. Clements, J. D. Yoemens, C. A. Prouty & W. J. Calhoun.

The Canadian Pacific was represented by Passenger Traffic Manager D. McNicoll & Attorney H. R. Raymond. There were also present General Passenger Agent Davis, of the Grand Trunk, & representatives of a large number of western U. S. lines.

At the outset Mr. Raymond desired it to be distinctly understood that the C. P. R. was not present as a defendant, or to officially answer to any complaint which might have been filed by the U. S. interests. The C. P. R. had violated no law of the U. S., & had uniformly obeyed the requirements of the

Interstate Commerce Law as well as any of the lines in the U. S. President Knapp replied that the C. P. R. could not be regarded as formally on trial.

THE U. S. CASE.

The whole of the day was occupied by P. S. Eustis, General Passenger Agent of the Chicago, Burlington & Quincy Ry., who presented the case of the U. S. lines. He reviewed the history of C. P. R. influence upon U. S. business, from the opening of the transcontinental line in 1886 to the present. He asserted that at no time since the C. P. R. entered the field as a competitor for transcontinental business had it been disposed to treat fairly with U. S. lines, & it had secured what concessions had been granted it by mere force & threats of retaliation if what it asked was not granted. Early in its career the C. P. R. began cutting rates and continued that policy for two years, when the Transcontinental Passenger Association agreed to allow it a differential on the traffic to the Pacific coast, simply because the U. S. lines could by no other method prevent a demoralization of rates by the C. P. R. He claimed that this agreement became void when the U. S. Court ruled a few months ago that all such compacts were contrary to the anti-trust law. The Transcontinental Passenger Association died in 1895, and the U. S. lines claim that with it ended all its agreements, including that of a differential to the C. P. R. Since that time no U. S. railway or association of railways has agreed to allow the C. P. R. a differential rate. When it was originally granted a differential the rate did not apply to any business, but to lower Pacific coast points. When the Klondike gold discoveries started travel in that direction the C. P. R. demanded a differential rate to North Pacific coast points & Alaska. At first the U. S. lines only reduced their rates to those of the C. P. R. on Alaskan travel. Further rate cutting by the C. P. R., ostensibly to maintain its differentials, induced the U. S. roads to reduce theirs to meet reductions to all points. Authority to do so was granted the U. S. lines by the Interstate Commerce Commission last February, & extended on July 12 last.

In reply to Mr. Raymond, Mr. Eustis said he did not claim that the U. S. railways had always acted harmoniously, & admitted they had engaged in rate wars in which the C. P. R. had no interest. He said in effect that the U. S. railways were tired of being practically forced to subsidize the C. P. R., a foreign institution, in order to get a partial share of their rights.

Against the protest of the C. P. R. representatives, Mr. Eustis was permitted to put in as evidence a letter written by Sir Wm. Van Horne to the press, in March last, in connection with the application for a charter for the Kettle River Valley railway, in which he argued against the proposed line, on the ground that it would divert Canadian trade into U. S. channels.

TRANSCONTINENTAL ROADS HEARD FROM.

At the second day's session General Passenger Agent Whitney, of the Great Northern (U. S.), gave evidence. He declared, among other things that, figuratively speaking, the C. P. R. always went to conferences on rate matters with a shotgun & persisted in holding up the U. S. roads under threat of annihilation if they did not accede to its demands. It was in pursuance of such a plan, Mr. Whitney stated, that the C. P. R. first secured a differential from the U. S. lines, which had been compelled to grant it as the price of maintenance of rates. Asked regarding the extent to which U. S. roads had suffered on account of the rate war precipitated by the C. P. R., the witness stated that it was incalculable, mounting up into millions of dollars. The rate war, which began last December, had cost the Great Northern from

\$500,000 to \$750,000, assuming that they could have obtained regular tariff rates for the business which they carried at the cut rates forced on them. He gave a history of the relations between his road & the C. P. R. prior to the completion of the G. N. to the Pacific Coast. Then the C. P. R. controlled the transcontinental business over the two roads & dictated the policy to be pursued. The C. P. R. then made up four-fifths of the route & therefore had by far the larger interest in the business. He produced telegrams to show that the C. P. R., at the outset of the trouble, had declined to discuss the question of differentials. In explaining why his line refused to arbitrate, he said that experience had shown that the result of arbitration was always a compromise, which satisfied none of the interested parties.

As a final statement Mr. Whitney said: "The C. P. R. asks us to put a perpetual mortgage on American roads; to give to it a perpetual subsidy by granting to it a differential, because it would argue forever after that it was given by agreement."

GENERAL PASSENGER AGENT FEE, of the Northern Pacific, followed, practically reiterating all the charges previously made against the C. P. R. He produced statistics which he claimed showed that after the C. P. R. had forced the U. S. lines to give it a differential, its traffic from & to points in the U. S. increased to a wonderful degree.

T. H. GOODMAN, General Passenger Agent of the Pacific Division of the Southern Pacific, claimed that his line had been obliged to reduce passenger rates eastbound from San Francisco on account of unwarranted C. P. R. competition. He stated that some years ago, on account of the conduct of the C. P. R., his line suspended all traffic arrangements with it.

THE C. P. R. SIDE OF THE CASE.

Passenger Traffic Manager McNicoll followed, his evidence occupying the balance of the day, as well as considerable of the next. After declaring that the C. P. R. was as close an observer of the Interstate Commerce Law as any of the U. S. roads, he began his statement from the time the Klondike business first appeared & told how, finding his road was getting little business to Alaska, he made an investigation, which showed conclusively that the Great Northern & Northern Pacific roads were cutting rates to Alaska, not only from points within the U. S., but also from Canada & Europe. These rates, he said, were \$20 below these lines' published tariffs & \$15 below the C. P. R. tariff. The cut was not made by the payment of an excessive commission to ticket agents, but openly across the counters of these roads' ticket offices. He presented a batch of evidence of this secret rate-cutting by U. S. lines, & declared he could produce many times as much if it were necessary. An agreement which prevailed prior to 1897 had been deliberately violated by U. S. roads. The C. P. R. had two courses open, either to ignore the Interstate Commerce Act & meet these rates illegally, or do so openly by published tariffs. Knowing that it was useless to ask assistance from the eastern roads, the C. P. R. published its tariffs & took the fight upon its own shoulders. Mr. McNicoll proceeded to argue that the eastern lines had stubbornly kept out of the present fight, with one or two exceptions, & that at a conference at Montreal a committee of the trunk lines had suggested that the matter in dispute between the C. P. R. & the western lines should be arbitrated. This Mr. McNicoll said his road had been perfectly willing to do, but the western roads had persistently refused to acknowledge that there was anything to arbitrate. He said the Great Northern & Grand Trunk had been permitted to dominate the conferences held in New York & Chicago, & that but for their obstructive attitude the fight might have been ended. He further

charged that the U. S. lines did not really desire to settle, having an ulterior motive in allowing the present demoralization to continue. Mr. McNicoll said he was still willing to arbitrate the question of differentials at any time, & that General Passenger Agent Eustis, of the Burlington, had admitted to him that the refusal of the U. S. lines to arbitrate was based on their belief that the Canadian road would surely get some differential.

Dealing with the statements that the C. P. R. had been taking an immense amount of revenue from U. S. lines, Mr. McNicoll said that out of \$20,000,000 gross earnings of his road for 1897 the revenue derived from business originating at or destined to points in the U. S. was about \$1,300,000. These figures referred to the C. P. R. system proper, and not to the "Soo," line, which Mr. McNicoll claimed was a U. S. road, a statement from which the U. S. roads represented at the meeting strongly dissented. Against this revenue of \$1,300,000 Mr. McNicoll said that his road spent more than \$3,500,000 in the U. S. last year for supplies, & added that he would willingly trade his business from the U. S. for the business which the U. S. lines derived from the C. P. R. Asked as to the business his road had carried to the Pacific coast since the rate war began, Mr. McNicoll said he was satisfied with it & believed the road had received its share. Mr. Eustis thereupon tried to make him admit that since these rates were the same on both the U. S. & Canadian roads there could be no good reason why the C. P. R. should have any differentials on this business. Mr. McNicoll declined to admit anything of the kind, saying his line was selling tickets at first rates, whereas the U. S. roads were using the rebate plan, which gave the Canadian road an advantage. He also said the superior steamship facilities enjoyed by the C. P. R. drew a good deal of business. Throughout his examination he strenuously denied that the question of differentials had anything at all to do with the present rate war, which was caused solely by the quarrels among the U. S. lines. He charged these roads with attempting to rob the present investigation of its business features in order to introduce sentimental matters dealing with the question of international privileges.

Mr. McNicoll having stated that B. D. Caldwell, Chairman of the Western Passenger Association, had changed the official record of the proceedings of the Association's Immigrant Bureau in New York, so as to make it appear that all transcontinental lines, including the C. P. R., had agreed to ask no differentials on immigrant traffic, Mr. Caldwell was sworn at his own request & declared that the charge was absolutely false.

"I never agreed to such a proposition as you incorporated in the record of the proceedings," said Mr. McNicoll. "No such proposition was offered in my presence & I never even heard of it."

"It was made in your presence," replied Mr. Caldwell; "I can even tell you just where you sat in the room at the time, & I can prove by a host of witnesses that you were there, & made no objection to the proposition."

"That," says the Chicago Inter-Ocean, "closed the incident. At the same time ended a strong personal friendship which has existed for many years between Mr. Caldwell & Mr. McNicoll."

WHAT THE U. S. LINES REALLY WANT.

W. P. Clough, Vice-President of the Great Northern (U. S.), presented the political & economic side of the case for the U. S. lines. He insisted that the position which the U. S. Government suffers the C. P. R. to occupy, with regard to the domestic carrying trade of the U. S., is altogether exceptional, illogical & unjust to the U. S. people. From its very birth the Union Congress followed the settled policy of Great Britain by declaring that no foreign vessel should ever trade between one

U.S. port & another. For years this policy was followed, even on the great lakes. Then it was relaxed for a time until experience showed its wisdom & fairness, & it was restored by order of the President. If sound policy demanded the exclusion of Canadian vessels from the trade, no good reason could be advanced for admitting Canadian railroads to a share in that trade. Nevertheless, the U.S. Government had said, for the advantage of the Canadian railway owner solely, that the protection & encouragement invariably afforded by it to U.S. vessel property shall not be afforded to U.S. railroad property. In working out the U.S. protective tariff system it always had been the rule that to every industry the expenses of which are enhanced by the need of using the protected products of some other U.S. industry a corresponding & indemnifying protection against the foreign competitor should in turn be given. Yet this had been abandoned in respect to one solitary U.S. industry, & one having vastly more capital invested in it, having a vastly larger pay roll & of vastly more importance to the common welfare, in peace or in war, than any other—the railway carrying trade. All materials used by U.S. railways are of the highly protected class; but the Canadian railways had long been able to buy their track metal from U.S. makers at a price less than demanded of the U.S. roads by an amount practically equalling the tariff duty.

On account of this protective system, Mr. Clough argued, U.S. railways were compelled to pay the highest wages in the world, the tariff making living so high that corresponding wages must be paid. The railway must bear a full share of the burden incident to the protection of the other industries, it must stand the direct & large increase in the cost of materials, supplies & wages, which it is the very end of the protective system to accomplish, & after all this it must stand alone in naked exposure to the unlimited & unconditioned competition of the foreigner. He contended that the amount of the discrimination against U.S. railways was stupendous & constantly growing. The statistics of the Customs Department showed that the freight traffic diverted to the Canadian roads already amounted to nearly or quite 10,000,000 tons a year, & represented a loss to the U.S. lines of not less than from \$20,000,000 to \$25,000,000 in money every 12 months. Statistics of passenger traffic were not so complete, but its volume was likewise known to be large. The U.S. lines had not lost a pound of traffic on account of want of facilities for handling it.

It had not been lost to them because of unwillingness to handle it at fair rates. In the U.S. nearly two-thirds of the gross earnings were paid out in operating expenses. Practically, the whole of this expense was for wages in some department. It was obvious therefore that every time foreign lines diverted from the U.S. lines \$21,000,000 of traffic they took \$14,000,000 directly out of the pockets of U.S. workmen. Mr. Clough contended that the C.P.R. did not fit into the system which U.S. national legislation had devised for preventing the use of unjust discriminations between persons & places in the conduct of the railway transportation business. Congress might prevent the C.P.R. from discriminating between points wholly in the U.S., but it could not prevent a rebate being given for the haul on Canadian soil before re-entry into U.S. territory. If such discrimination was discovered Congress was unable to punish the offense. To work out a fair indemnification to the U.S. lines for the burdens of the protective tariff system put upon them Mr. Clough suggested several ways. The simplest & most practical way would be to put transportation by rail on the same footing as transportation by water. There was no good reason why both kinds of transportation should not be upon the same basis & every reason why both should. Another method, which he urged as perfectly fair, would be the imposition of a duty upon goods passing across Canadian territory, in transit, at a scale sufficient to equalise the condition made by the U.S. tariff. It would not be difficult to fix such a scale. It might be on the ad valorem basis or according to quantity. Either would be perfectly practicable & would abolish the unjust discrimination against the rail transportation business now exercised by the U.S. Government. Mr. Clough did not expect that the privilege of competing for the U.S. trade would be wholly withdrawn from the Canadian roads at once. A little notice in advance of a proposed change of policy in this regard might well be given. But the early withdrawal of the privilege should be notified without delay. In the meantime there were some details of this competition as now carried on which ought to have immediate attention. There was no reason why railway equipment, liable to very substantial customs duties, should be suffered to enter U.S. territory free. Yet outside of law, or even of departmental regulation, the practice had crept in of suffering cars, both freight & passenger, to cross the frontier without the slightest question being raised. This practice, plainly illegal, had had the effect of

putting into regular service over thousands of miles of lines in the U.S. freight & passenger cars used in foreign countries, & which had never paid a dollar of duty. The law making power of the Government had never consented to such a practice. It should be stopped immediately. No freight or passenger car should be permitted to enter U.S. territory without payment of the duties which the tariff imposed on imported articles. The U.S. roads were forbidden to bring into the country either cars or the materials from which cars were made, without paying duties. Why should the Canadian roads be allowed to bring their equipment across the boundary free? The laws had not provided for any such additional favor to the foreigner. The practice had grown up in the face of the law. Foreign railways should ultimately be prohibited from carrying U.S. traffic, freight or passenger, if reasonable experiments, under more restrictive laws, demonstrate that they cannot be compelled to do business on terms of strict equality with the U.S. lines. For purposes of this experiment new legislation that will give the Commerce Commission control over the Canadian lines must be enacted. If the Commission could not then control the foreign roads it should have the authority to at once bar them from handling U.S. freight & passengers. Mr. Clough stated further that he would at once prepare the draft of a bill embodying his ideas, & file it with the Commission.

THE COMMISSION'S POWERS.

Before the adjournment of the session, President Knapp said it was not within the power of the Commission to issue any order, or to compel any certain course on the part of any of the lines represented, because of the fact that the hearing was not in any sense a court proceeding, but only an informal one. It was, however, the desire of the Commission to make an early report, in the hope that it might have some influence in bringing to an end the disastrous rate war. He asked, therefore, that if either side desired to submit written briefs, they should be presented within 10 days. The Commission would then make some recommendation. For purposes of the annual report and recommendations to Congress the lines were given 50 days in which to submit briefs.

CLOSING PROCEEDINGS.

At the 4th day's session, Attorney Raymond, for the C.P.R., declared that differences such as exist between the U.S. lines & the C.P.R. can be settled only by arbitration, &

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if necessary, continued arbitration. No other method, he insisted, could be a fair one to all interests. The C.P.R. stood ready to arbitrate.

In closing the case for the U.S. lines Mr. Eustis outlined the position of the roads he represented as follows:

U.S. lines do not ask that Canadian lines be barred from a share of U.S. traffic.

Differentials have been failures wherever used.

The C.P.R. can set up no fair claim to a differential.

If the C.P.R. is entitled to a differential, many U.S. roads are more entitled to like concessions.

According to the argument of the C.P.R. respecting the participation of U.S. roads in Canadian business the C.P.R. has no right to do business in San Francisco at all.

U.S. lines do not ask any advantage where the C.P.R. can fairly compete with them, but deny that the C.P.R. is entitled to any advantage over U.S. roads.

They believe that the burden of proof is upon the C.P.R. to show that it is entitled to a differential, & that unless a clear case has been made by it no differentials should be allowed.

"I can guarantee for the west that if the C.P.R. will stop its shotgun policy we can get along together & it will secure a fair share of any business to which it is entitled. If it does not Congress is going to interfere."

This last statement was made by Mr. Eustis because of Mr. McNicoll's testimony that Mr. Eustis had threatened the C.P.R. unless it would settle its difficulties with the U.S. roads. "I told Mr. McNicoll," said Mr. Eustis, "that if the C.P.R. would stop making unreasonable demands & be fair it will have no trouble in getting along in this country, but that if it persisted in its unreasonable demands the U.S. would probably pass laws that would tend to control seriously the extent to which all Canadian railroads may do business in this country."

Mr. McNicoll states that the C.P.R. handed in its brief to the I. C. Commission on Aug. 13 along with the other railways interested in the investigation.

Mr. Clough Repudiated.

The Minneapolis Journal says: "Ever since the controversy concerning who ate the first apple, it seems to have been human nature to shirk responsibility for questionable transactions. Whenever a railway cuts rates & is taken to task by its associates for having violated its agreements, it falls back on the excuse that some other road has previously cut the rate. The standing argument of the railways, when they do something which they recognize as improper, is to charge the blame to the Canadian Pacific. They must have some scapegoat, & to save trouble with some home competitor they charge it up to the Canadian Pacific.

"It was not surprising, therefore, because it was according to custom, when a prominent road cut the rates from the twin cities to Chicago, a few days ago, to see an authorized interview appear simultaneously in all the papers announcing that the cut was made to meet the rates of the Canadian Pacific. The Canadian Pacific has no road from the twin cities to Chicago, but that makes no difference in the accusation. If the Czar of Russia should appoint an American railroad manager to take charge of the Siberian railway, the manager would undoubtedly, from mere force of habit, cut the rates in order to compete with himself, & charge it up to the nefarious conduct of the Canadian Pacific, because it runs a steamship line from Vancouver to Hong Kong. This would be as sensible & as brilliant a display of common sense as holding

the Canadian Pacific responsible for the cut between the twin cities & Chicago.

"The Soo, which is one of the United States connections of the Canadian Pacific, has always maintained an independent position, refusing to be bound by combinations & the pools, & has thus proved a thorn in the flesh. This policy has proved of great advantage to the public, & in reverse ratio to the public advantages obtained through the Soo the hostility of the other lines has been incurred. Consequently, no matter what comes up, they see only the ghost of the Canadian Pacific & the Soo.

"The jobbers & manufacturers of the twin cities, & the farmers of the Northwest, know & appreciate the services which the Soo has rendered them, both directly by carrying their freight, & indirectly as a leverage which has prevented combinations & extortions they would otherwise have had to endure. No higher compliment could be paid to the Soo & Canadian Pacific for what they have accomplished on behalf of the public, than the universal & unanimous effort to hold them responsible for everything which occurs in the railway world. If the Soo could only be dragged into coming into the combination to fleece the public there would be no further outcry concerning the Canadian Pacific. The public is to be congratulated upon the situation, & will consider itself protected so long as the Soo & Canadian Pacific continue in their present independent position."

A Western Rate War.

A passenger rate war that will affect directly every fare in the western states & indirectly half of the tariffs of eastern & southern U.S. lines, was started Aug 8, when the Chicago Milwaukee & St. Paul reduced the rate between Chicago & St. Paul & Minneapolis from \$11.50 to \$8. The rate between Chicago & Omaha was cut from \$12.75 to \$9.25, & between Chicago & Kansas City from \$12.50 to \$10.50. Of course other lines met the rates of the C., M. & St. P., which charges the C. P.R. as the cause of making the cuts necessary. In its notice the C., M. & St. P. says the C.P.R. brought about a war of rates to Alaska points. The application of these low rates—about 60% below authorized tariffs—affected the Chicago-St. Paul situation to such an extent that Chicago brokers have had no difficulty in selling tickets for either St. Paul or Minneapolis for \$8. & \$8.50, & the same rates have been made by brokers from St. Paul to Chicago. The same war of Alaska rates has affected regular fares between Chicago & Omaha because the trans-Missouri lines also quoted low rates to Alaska. Brokers were, therefore, able to greatly under-sell the railways between Chicago & Omaha. To a limited extent the same is true as regards the Chicago-Kansas City traffic, though that is affected most seriously by a form of round trip ticket in use, which permits of a natural scalp of \$5. The C., M. & St. P. says it is weary of having the brokers doing its business, & that for this reason it makes the open reductions quoted.

"Sheer Nonsense."

Under the above heading the Railway World, Philadelphia, says in its issue of Aug. 13: "Railway officials are discussing the probable effects of the Interstate Commerce meeting at Chicago last week. They, as a rule, are anxious to have not only the Canadian Pacific, but all foreign roads, shut out of American territory, except where they can compete with them on equal terms. They are in favor of the highest tariff to prevent foreign cars coming into America & taking business from one point to another. They be-

lieve that the same rule that applies to foreign ships plying between American ports should work in the case of the railways. Some pretend to think that the exclusion of Canadian lines would enable Americans to maintain rates. Before the Canadian lines were constructed the American lines could not maintain rates, & are unable to do so in territory where there is no foreign competition. They have been at war with each other for months on packing-house-product rates from Kansas City, & are constantly cutting rates between Chicago & the seaboard. Tariffs are made only to be cut within a short time; in many instances before they are in print."

The Grand Trunk View.

Interviewed at Montreal, Aug. 3, Sir Rivers Wilson, President of the G.T.R., said:—"The rate war is of great concern to us, & our earnest hope is wiser counsel will prevail & a settlement be reached at an early date. I deny the charge that we are responsible for the trouble. We are all desirous of being on good terms with the C.P.R. The fight is really one between the trans-continental roads, & I am sure I have no influence with Mr. J. J. Hill, of the Great Northern. There is no justification for the C.P.R. demand for differentials. There may have been at one period, but the C.P.R. is now more than able to compete on equal terms. In regard to the trouble between the G.T.R. & C.P.R., respecting the North Bay line, the explanation is simple. The arrangement between the roads was liable to modification. We simply gave notice of its discontinuation in order to make a new arrangement with the C.P.R., but our proposals were not met."

One on Mr. McNicoll.

At the recent session of the Inter-State Commerce Commission in Chicago, General Passenger Agent Fee, of the Northern Pacific, produced some statistics about C.P.R. passenger traffic, based on reports from his agents, who he said had counted the passengers at Winnipeg & Pacific Coast points.

"How could your agents tell whether our passengers came from the U.S., or from our local points in the Northwest?" said Mr. McNicoll, of the C.P.R.

Before Mr. Fee could reply, General Passenger Agent Eustis, of the Burlington System, answered:—"Because you have no local business in the Northwest, Mac!"

Of course, as everyone knows, the answer was ridiculous, but it brought down the house.

A Railway Accident Case.

In the Divisional Court at Toronto, July 26, in the case of Chandler vs. Mich. Cen. Ry. Co., Judges Falconbridge & Street gave judgment on motion by plaintiff to set aside nonsuit entered by Meredith, J., at the trial at St. Thomas, & for a new trial. The action was brought by W. Chandler, a youth, who was severely injured by being run into by a train of defendant's while crossing a railway track near Tilsonburg late at night, & whose vehicle was also broken, for damages for his injuries & loss. The plaintiff contended that there was no evidence of negligence to go to the jury & nothing to show contributory negligence. Held, that every element of negligence of any statutory duty on the part of defendants was absent, & the nonsuit was properly entered. Wakelin v. London & Southwestern Ry. Co., 12 App. Cas. 41, followed. Motion dismissed with costs. J. A. Robinson (St. Thomas) for plaintiff. D. W. Saunders for defendant.

FINANCE, MEETINGS, &c.

Six Months Railway Increases.

The following table gives the percentage of increase in gross earnings of a number of the principal American railways for the 6 months to June 30 last :

Oregon Railroad & Navigation Co.	64
Northern Pacific	35
Rio Grande Western	32½
Chicago, Rock Island & Pacific	24
Illinois Central	23
Great Northern	23
Denver & Rio Grande	22
Canadian Pacific	19½
Cleveland, Loraine & Wheeling	19
Iowa Central	19
Wabash	18
Missouri Pacific	17
St. Louis & Southwestern	17
Buffalo, Rochester & Pittsburg	16
Chicago, Milwaukee & St. Paul	15
Texas & Pacific	15
St. Louis & San Francisco	15
Baltimore & Ohio Southwestern	14
Union Pacific, Denver & Gulf	14
Grand Trunk	11¼
Louisville & Nashville	11
Mobile & Ohio	11
Southern Railway	9½
Chicago, Indianapolis & Louisville	9
C., C., & St. Louis	7
Michigan Central & Canada Southern	6½
Lake Shore	6¼
Norfolk & Western	6

C.P.R. Earnings & Expenses.

The gross earnings, working expenses, net profits & increases over 1897 from Jan. 1, 1898, are as under :

	Earnings.	Expenses.	Net Profits.	Increase.
Jan.	\$1,672,372.04	\$1,156,744.45	\$515,627.59	\$142,284.49
Feb.	1,494,596.98	1,070,929.62	423,667.36	38,844.28
Mar.	2,079,479.06	1,326,245.55	753,233.51	233,020.67
April.	1,958,461.88	1,241,371.19	717,090.69	89,973.35
May.	2,252,999.16	1,326,336.85	926,662.31	51,092.47
June.	2,138,110.04	1,320,714.67	817,395.37	68,731.93
	\$11,596,019.16	\$7,442,342.33	\$4,102,584.36	\$623,947.19

The approximate traffic earnings for July 1898, were \$2,024,000, against \$2,106,000 in July, 1897, a decrease of \$82,000.

AUXILIARY LINES.

MINNEAPOLIS, ST. PAUL & SAULT STE MARIE.—The approximate earnings for July were \$290,743, as compared with \$324,271 in July, 1897, a decrease of \$33,528.

DULUTH, SOUTH SHORE & ATLANTIC.—The approximate earnings for July were \$173,925, as compared with \$169,411 in July, 1897, an increase of \$4,514.

MINERAL RANGE & HANCOCK & CALUMET.—The approximate earnings for July were \$35,056, compared with \$27,383 in July, 1897, an increase of \$7,673.

Grand Trunk Earnings.

These figures include the G.T. of Canada, the Chicago & G.T., & the Detroit, Grand Haven & Milwaukee Rys.

	1898	1897	Increase.	Decrease.
Jan.	\$1,916,332	\$1,639,614	\$276,718	
Feb.	1,674,453	1,522,246	152,207	
Mar.	2,048,970	1,803,279	245,691	
April.	1,918,477	1,776,840	141,637	
May.	1,940,980	1,774,802	166,178	
June.	1,880,402	1,912,185		\$31,783
July.	1,860,884	1,992,628		131,744
	\$13,240,498	\$12,421,594	\$928,431	\$163,527

Financial Notes, &c.

Buffalo & Lake Huron.—The report for the half-year ended June 30 states, that after meeting interest on the bonded debt, the balance of revenue of £14,145 os. 5d. for the half-year will allow of a dividend of 5s. 3d. a share, carrying £360 7s. 2d. to the current account. The dividend will be payable early in September. The dividends for the past 31 half-years have been at the same rate. The line is leased in perpetuity to the G.T.R., for a rental of £70,000 a year. The Co.'s office has been removed to 3 Great Winchester Street, London, Eng., & the English Asso-

have been appointed London agents of the Co. ciation of American Bond & Shareholders
Calgary & Edmonton.—The net earnings for June were \$5434.20, against \$1555.98 in June, '97.

Canadian Pacific.—At a meeting of the Board, Aug 8, dividends of 2% on the preference stock & 2% on the common stock for the half-year ended June 30 last were declared, payable Oct. 1. Last year the dividends paid Oct 1 were, on preference stock 2%, on common stock 1½%. The dividends paid April 1 were, preference 2%, common 2½%.

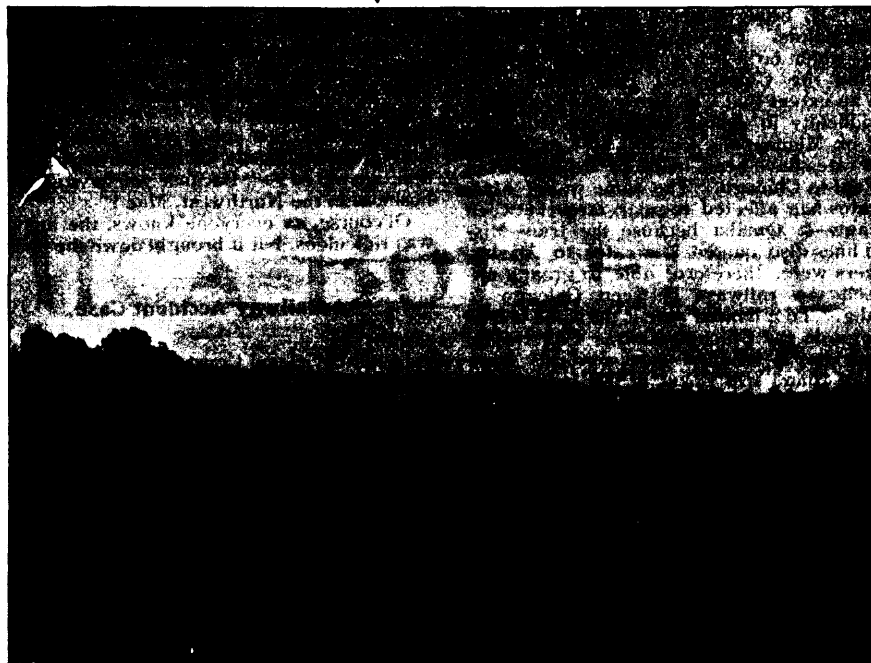
Cobourg, Northumberland & Pacific.—The final instalment of £37 on each perpetual 1st mortgage debenture is due at Barclay & Co.'s bank, London, Eng., August 20. (See June issue, pg. 100; July, pg. 126.)

Elgin & Havelock.—The annual shareholders' meeting will be held in London, Eng., Sept. 7.

Grand Trunk.—A London cable dated Aug. 12 says:—The accounts of the G.T.R. for the half-year ended June, which have just been issued, show the balance available for dividend to be £106,900 sterling, admitting the payment of a full dividend for the ½ year of 2% on the 4% guaranteed stock, leaving about £2,500 to be carried forward.

Several of the English papers comment on the report.—The Financial News says it is disappointing. Relatively it is much worse than the most cautious expected, & creates grave suspicions as to managerial methods. The statement, however, shows improvement over the statement of 1897, which was better than that of 1896, & encouraging to General Manager Hays, who has reduced expenditure without impairing efficiency. Unless he is going to reverse his reputation for able, economical management, the future ought to give better results. The Manager's statement is extremely disappointing to those who made optimistic calculations.

The Statist says the report is an unpleasant surprise. But the general opinion is that Mr. Hays' management is excellent, & the best that can be done for the road.



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705 Main St., Winnipeg.

Grand Trunk & Wabash.—The visit of a number of Wabash officials to Montreal recently gave rise to a report that a rearrangement of the running privileges over the Southern Division of the G. T. was being effected. This is incorrect, as the Co.'s are operating under the contract originally entered into for the use of the line between Detroit & Suspension Bridge. (Official.)

Great Northwest Central.—J. B. Delap has obtained a judgment in Manitoba against this Co. for \$243,986.

Intercolonial.—An Ottawa dispatch says: "An estimate of the financial result of the operations of the Intercolonial Ry. for the past year places the probable deficit at \$250,000. The loss last year was \$59,940, & for the previous year \$55,187. There has therefore been an increased deficiency, if the reported estimate is well founded, of \$200,000. It is attributed to the failure of the business of the Montreal extension to come up to the expectations of the Government. When the year ended, the line from Levis to Montreal had only been in operation four months. The rental accruing in that period would be \$70,000. The loss is equal to three times the rental of the line. On this basis, if operated for a whole year, a very substantial deficit would be built up. In the face of the loss this year the Government will, it is probable, not ask next session, as was intended, for the ratification of the permanent contract. It will operate the extension for another year, & if the results are no better may abandon the project altogether." In reference to the foregoing, it is only fair to add that the dispatch was to an Opposition paper & may not have been free of political bias.

Kaslo & Dunsmuir.—The 1st annual meeting of shareholders will be held at Kaslo, B.C., Sept. 6, to elect 5 directors & transact other business.

Kaslo & Slocan.—Kaslo papers think a change in the ownership of this line is imminent & it is also rumored that the C.P.R. has purchased it, which is doubtful, as the ownership has always been looked upon as very closely allied to the Great Northern (U.S.) The President is D. J. Munn, New Westminster, B.C., & the Vice-President, A. Guthrie, St. Paul, Minn.

A prominent official of the K. & S., who certainly should be in a position to speak with authority, assures us he has absolutely no knowledge of any change in the ownership of the line, & that he does not anticipate any at the present time.

The line runs from Kaslo to Slocan, B.C., 28 miles, with a branch from Junction to Cody, 3 miles. The share capital is \$1,000,000, of which \$600,000 is subscribed & paid up. Its authorized bonded debt is \$954,000, of which \$600,000, bearing 6% interest, is issued & sold. Its capital from other sources is \$279,805 paid up, making a total capital subscribed & paid up of \$1,479,805. It had a floating debt of \$279,805.92. The total cost of the railway & rolling-stock was \$778,816.49. These figures are up to June 30, 1897. It received a land grant from the B.C. Government. The gross earnings for the year ended June 30, 1897, were \$117,488.22 & net earnings, \$66,093.04.

Lake Manitoba Ry. & Canal Co.—The annual shareholders' meeting will be held at Portage la Prairie Sept. 1.

New Brunswick.—Coupons due Aug. 1, on N.B.R. 5% 1st mortgage bonds, have been paid by Melville, Fickus & Co., London, Eng.

Pontiac & Pacific Jet.—In our July issue, pg. 118, it was stated that the Quebec Government has issued executions against this & the Gatineau Valley roads in connection with a judgment secured in the Superior Court in 1884 for taxes. An Ottawa dispatch of Aug. 11 said P. W. Resseman, who is Superinten-

dent of both lines, had received a communication from the government's solicitor settling the matter, that all proceedings had been withdrawn, the papers being cancelled on July 30, & that the sales advertised would not take place.

Port Arthur, Duluth & Western.—The annual meeting announced for Aug. 2, to be held in Toronto, was adjourned for 30 days.

Qu'Appelle, Long Lake & Saskatchewan.—The net loss in operating for June was \$6,689.33, as against a net loss of \$714.48 in June, '97. About \$5,000 had to be expended on account of damage by freshets, part of the bridge over the South Saskatchewan, at Saskatchewan, having been swept away. A considerable further amount will have to be expended in repairing this bridge. (Official.)

Quebec Central.—The net earnings for the 6 months to June were \$57,102, against \$19,615 for corresponding period.

Quebec, Montmorency & Charlevoix.—The annual shareholders' meeting will be held at Quebec Sept. 30.

St. Lawrence & Adirondack.—The annual shareholders' meeting will be held in Montreal Sept. 7.

Spokane Falls & Northern.—The Spokane Falls & Northern Ry. & its allied roads, the Columbia & Red Mountain & the Nelson & Fort Sheppard, were formally turned over to the Great Northern, (U.S.) at Spokane, Wash., Aug. 8. President Hill, of the latter road, was present at the transfer. The new officers of the Spokane & Northern are: J. J. Hill President, & Cornelius Shields, Vice-President, & General Manager. (See July issue, pg. 117.)

Tilsonburg, Lake Erie & Pacific.—The annual meeting of shareholders will be held at Tilsonburg, Ont., Sept. 13.

Toronto, Hamilton & Buffalo.—The Co. recently took up the award in the arbitration between H. J. Gonder & E. W. Fares & the Co., over a dispute as to the value of a little over 5 acres of land expropriated by the Co. for freight yards at Welland, Ont. The T., H. & B. offered \$350 for the land, but \$3,000 was claimed as a fair price therefor. The arbitrators decided the property was worth only \$389, a dollar less than the company offered in the first place. The arbitrators' fees amount to \$623, & the costs of the case, which go to the T., H. & B., amount to \$500 more.

Vanderbilt Lines.—The Railway World, Philadelphia, says:—"Before the end of this year—much earlier perhaps—we are likely to have announcements of certain corporation consolidations of far greater consequence than any recently printed. We have it, on the authority of a member of the foremost banking house of this country, that the return of W. K. Vanderbilt to this country will probably be the signal for extraordinary developments. Wall Street used to have a notion that W. K. Vanderbilt was at odds with J. Pierpont Morgan, but that idea has gone glimmering. These two are not only enjoying fuller satisfactory understanding, but it can be relied upon that between them there is now a relationship of greater consequence than any similar alliance known in American financial history."

Westinghouse Air Brake Co.—At a meeting of directors, July 12, it was voted to increase the capital stock from \$5,000,000 to \$11,000,000, of which increase \$1,000,000 will be retained in the treasury for the purchase of property or other uses as may be deemed best by the board. The action was taken in the form of the adoption of the following resolution: "Resolved, That of the 120,000 shares (\$6,000,000) of new capital stock authorized by this meeting, the stockholders recommend that the directors should distri-

bute 100,000 shares, that is \$5,000,000 at par, to the stockholders as a stock dividend out of the surplus earnings of the company not heretofore divided among the stockholders, & that the remaining 20,000 shares (\$1,000,000) remain in the treasury & be issued by the board of directors from time to time for the purchase of property upon such terms & in such manner as they shall deem for the best interest of the Co.

RAILWAY APPOINTMENTS, &c.

Brookville, Westport & Sault Ste. Marie.—At the annual meeting July 12, R. G. Murphy, Elgin, Ont., was elected a director, vice W. G. Parish, Athens, Ont. The officers were re-elected.

Canadian Government System.—It has recently been announced in a number of papers that J. E. Price, Superintendent of the Intercolonial at Truro, has been appointed Assistant General Manager of the system, & that W. Rennels, Superintendent at Campbellton, has succeeded him at Truro. The Deputy Minister and the General Manager advises us that these changes have not taken place. Later Maritime Province exchanges say the changes are to be made & that Train Dispatcher Jarvis at Moncton will succeed Mr. Rennels at Campbellton.

Grand Trunk.—F. T. Byrne has been appointed Commercial Agent at St. Louis, Mo., & H. A. Richards has been appointed Traveling Freight Agent there. These appointments, with headquarters at that point, are due to the fact that the National Dispatch & Great Eastern lines have withdrawn their agencies from St. Louis.

J. H. Burgis has been appointed Acting City Passenger & Ticket Agent, Chicago City Office, vice L. R. Morrow, resigned.

Northern Pacific.—W. L. Darling, heretofore Division Engineer, with headquarters at St. Paul, Minn., has been appointed Assistant Chief Engineer.

Ottawa & New York.—It is officially announced that the general offices of this Co. & of the New York & Ottawa Ry. Co. have been removed from Moira, N.Y., to Ottawa, Ont., & that the following appointments have been made:—Auditor, G. B. Colpas; Treasurer, W. Chance; General Freight & Passenger Agent, G. H. Watson; Trainmaster & Chief Dispatcher, S. W. Derrick; Roadmaster, M. Keefe; General Agent, J. O. Hibbard; Freight Soliciting Agent, C. Haggarty; Passenger Agent, J. W. Boyd. A. W. Flack has been appointed Travelling Agent, with headquarters at Cornwall, Ont.

Spokane Falls & Northern.—The new organization is as follows:—President, J. J. Hill; Vice-President & General Manager, C. Shields; General Freight Agent, C. G. Dixon.

Personal Mention.

Grant Hall, recently removed from the Mechanical Foremanship of the I. C. R. at Moncton, N.B., has removed to Montreal.

On Aug. 12 Traffic Manager Reeve, of the G.T.R., received a cablegram announcing the death of his mother in London, Eng., at the age of 93.

Robt. McGuire, Foreman in the G. T. R. Bridge & Building Department at Windsor, Ont., with territory extending to St. Thomas, died recently.

Wm. Mackenzie, President of the Toronto Street Ry. Co., left Toronto early in August for the Pacific coast, in connection with his various railway enterprises.

W. H. Price, formerly Travelling Passenger Agent of the Intercolonial & now chief clerk in the Passenger Department at Monc-

ton, was married at Richmond, Que., Aug. 16, to Miss A. E. Smith.

P. G. Denison, Freight Agent for the C.P. R. at Rossland, B.C., has been appointed Station Agent & Contracting Freight Agent. C. W. Mount, who has been Station Agent for the Columbia & Western for the past 2 years, has gone to Butte, Montana. The Rossland ticket office will be maintained in charge of A. B. Mackenzie.

H. Tandy has resigned the superintendency of the Brooks Locomotive Works, Dunkirk, N.Y., to accept the managership of the Canadian Locomotive Engine Co., at Kingston, Ont., with which he was formerly connected. The foremen of the Brooks Works presented him with a gold-headed ebony cane.

H. G. Gorman, late locomotive foreman in the C. P. R. shops at Winnipeg, has been transferred to Field, B.C., where he takes the place of R. Inches. M. J. Collins, of Broadview, Assa., has been appointed in charge of the Winnipeg shops.

J. W. Kimball has been appointed Auditor of the Construction Department of the Columbia & Western Railroad, from Robson to Midway, B.C., under W. F. Tye's management. Mr. Kimball was Secretary & Auditor of the C. & W. under the Heinze management.

C. Shields has been appointed Vice-President & General Manager of the Spokane Falls & Northern & other lines of the Corbin System, recently acquired by the Great Northern (U. S.). Mr. Shields was one of the first C.P.R. dispatchers at Winnipeg, & was afterwards Superintendent at Moose Jaw. He followed J. M. Egan from the C.P.R. to the Great Northern as Superintendent of Construction, again following Mr. Egan to the Chicago Great Western, of which he became Asst. Gen. Supt. in 1888, resigning in 1891 to take the General Superintendency of the Great Northern in 1891 & returning to the Chicago Great Western in 1893, & remaining with it till a few months ago, when he resigned the General Superintendency.

On removing from Toronto to London, Ont., recently, Superintendent Williams of the C.P. R. took with him as dispatchers, A. L. Smith, W. Killingsworth & J. K. Savage. Superintendent Price has as his dispatchers at Toronto, W. H. Allison, S. Robins & J. S. Duff.

Vice-President Shaughnessy.

"The Auditor" writes in the Railway Age as follows:—"At the recent investigation before the Interstate Commerce Commission in Chicago, more than one representative of American lines testified sincerely, but regretfully, to the fact that the Canadian Pacific was managed by discouragingly able men. In the issue of Mar. 4, 1898, an admirable portrait of Sir Wm. Van Horne, with some remarks upon his personality, was published in The Railway Age. Next to Sir William, the railway man in Canada who is of most interest to us over here is T. G. Shaughnessy, the Canadian Pacific's Vice-President. Like Sir William, Mr. Shaughnessy was born in the U.S., having seen the light in Milwaukee 45 years ago, & it was in the purchasing department of the Chicago, Milwaukee & St. Paul that he began his railway career, when 16 years of age. He was storekeeper on the Milwaukee & St. Paul when Sir William (then Mr. Van Horne) persuaded him to go to the C.P. when that Co. was struggling with the difficulties of construction. Those difficulties were at times considerable, & on more than one occasion it looked to the men on the inside as if the Co. would have to throw up its hands. It is said to have been in one of these crises that Mr. Shaughnessy finally demonstrated the ability which was in him. Debts had accumulated, creditors were vociferous, & it looked as if construction would have to stop, when, so

the story goes, Mr. George Stephen (now Lord Mount Stephen) succeeded in getting a temporary loan of a million dollars from the Government at Ottawa, & Mr. Shaughnessy was told that he would have to make that million pay five millions of debt. He is said to have done it, or at least to have so impressed creditors with the immense resources of the C.P. that few of them cared to accept any payment on their accounts from a company so ostentatiously solvent, & those that did took only a small instalment. The whole story may be purely mythical, but it is current among C.P. officials, & it is said to have been the ability which Mr. Shaughnessy showed in that emergency that created his career. Whatever truth there may be in it, it is certain that if the opportunity had not come then of demonstrating his capacity, it must have come in some other way, for no man could come in contact with him without recognizing that he was a man of unusual ability & force, & a man for whom, sooner or later, success & conspicuous position were inevitable. He has now been Vice-President & a Director of the C.P. since 1891. Whenever rumors of Sir William's retirement become current it is always accepted as a matter of course that Mr. Shaughnessy will succeed him. This will doubtless be so, & there is no human doubt that Mr. Shaughnessy is going to be (if he is not already) one of the most powerful & most honored men in Canada.

Port Arthur, Duluth & Western.

The Toronto General Trusts Co., representing the estate of the late Jno. Leys, and other Toronto interests, has sold the P.A.D. & W. Ry. to Mackenzie, Mann & Co. (W. & R. J. Mackenzie & D. D. Mann), for about \$250,000. The sale includes nearly the whole of the shares & bonds of the Ry. Co., with the exception of a few small holdings.

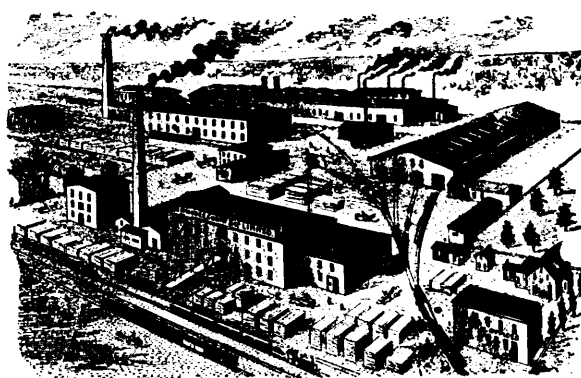
The P.A.D. & W. R. (first known as the Thunder Bay Colonization Ry.), which was completed in 1894, runs from Port Arthur, via Fort William, connecting at both places with the C.P.R. southwesterly to Gunflint Lake, on the Minnesota Boundary, 85.50 miles, with an extension of about 6 miles to Gunflint Mines, on the U.S. side of the line. The contractors were Conmee & Middleton. When the road was constructed it was intended to operate it in connection with the iron mines of that region of the country, & large contracts for the haulage of ore were entered into with the original owners of the road. But unfortunately owing to a general collapse of the iron mining interests & the failure of the parties with whom the contracts were made the road has proved a costly failure. In view

of the facts that the road ended practically nowhere, had no connection for traffic at its southern end, & was of no use without the expenditure of considerable money to extend it, we think the Toronto General Trusts Co. made an excellent sale of the interests of its clients, who are no doubt glad to be rid of the burden on their hands. Mackenzie, Mann & Co. ought to be able to run it to advantage. They will use the first 16 miles from Port Arthur to Stanley as part of the Ontario & Rainy River Ry., the construction of which has just been commenced from the latter point westward, & it is said they are likely to extend the P.A.D. & W. from its present terminus at Gunflint Mines to Ely, Minn., 114 miles from Duluth, where connection will be made with the Duluth & Iron Range Ry., thus affording a through line from Port Arthur to Duluth.

The following statistics of the P.A.D. & W. Ry. Co. are up to June 30, 1897: Ordinary share capital subscribed and paid up \$1,200,000; bonded debt authorized, issued & sold, \$1,392,000 at 5%; Dominion Government Aid \$271,200; Ontario Government Aid \$255,571; Municipal Aid \$40,000; total capital paid up \$3,158,771; floating debt \$43,771.71 at 6 & 7%. Total cost of railway & rolling stock \$2,910,879.75. This is the theoretical cost, the actual cost having been about \$1,400,000. The total gross earnings for the year ended June 30, 1897, were \$9,313.61, & the expenses \$14,042.87, a loss of \$4,729.26. We are informed that there was an improvement for the year ended June 30, 1898, earnings having about met working expenses. The line is laid with 56 lb. steel rails. The radius of the sharpest curve is 573, & the heaviest grade is 95 ft. per mile. It has 4 locomotives, 2 passenger coaches, 2 baggage cars, 10 freight cars, 4 conductors' vans, 80 flats & 1 flange.

The present Superintendent of the line is Ross Thompson, Port Arthur.

The Arctic Express Co., of Seattle, Wash., has been registered in British Columbia as an extra-provincial company, with F. M. Rattenbury, architect, Victoria, as its attorney. The capital is \$100,000, the time of the existence of the Co. is 50 years. The objects of the Co., besides doing an express business, include acquiring estates, franchises & privileges of every denomination, to acquire & operate vessels, & to carry on a general transportation business of freight & passengers upon the navigable waters of the State of Washington, Province of British Columbia, Territory of Alaska, & the Canadian North-West Territories, & the Pacific Ocean; to build & operate railways, street railways & tramways, & to acquire & operate telegraph & telephone lines.



Rhodes, Curry & Co.,

Ltd.,

Railway and Street Cars

of all descriptions.

Special Cars for Coal, Ore,
Lumber, &c., with Ball-
Bearing Wheels.

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

Lake Erie & Detroit River Ry.

It has been known for some months that this Co. was negotiating for the purchase of the Erie & Huron Ry., & it was also said that the Michigan Central had similar views. However, the L. E. & D. R. was successful & has made a straight purchase of the property, the transfer having been made on Aug. 19. The parties to the transfer have not made the price public, but it is rumored at Chatham, the E. & H. headquarters, that it was in the neighborhood of \$750,000.

The E. & H. line runs from Rondeau, Ont., to Sarnia, 76 miles, connecting with the L. E. & D. R. at Blenheim, 8 miles from Rondeau; at Fargo & Courtright with the Michigan Central & at Chatham with the C. P. R. & G. T. R. The following statistics of the E. & H. are up to June 30, 1897: Ordinary share capital, authorized, \$150,000; paid up, \$109,000. Bonded debt, \$740,000 at 5%. Dominion Government aid, \$96,000; Ontario Government aid, \$83,000; municipal aid, \$257,500; capital from other sources, \$61,028.75; total capital subscribed and paid up, \$1,346,528.75; floating debt, \$61,028.75; total theoretical cost of railway & rolling stock, \$1,346,528.75. The gross earnings for the year ended June 30, '97, were \$107,891.19, & the net earnings, \$25,408.44. The line is laid with 54 & 56 lb. steel rails, & the radius of the sharpest curve is 661 ft., & the heaviest grade is 52 ft. to the mile. It has 5 locomotives, 8 first-class coaches, 5 baggage, mail & express cars, 25 cattle & box cars & 17 flat cars.

The directors of the E. & H., of which E. H. Bickford, Toronto, was President, & J. G. Ross, Chatham, Managing Director, resigned, & a new board was elected with the following officers: E. C. Walker, President & Managing Director; Dr. S. A. King, Vice-President; J. H. Walker, Treasurer; J. H. Coburn, Solicitor; W. Woollatt, General Superintendent & Traffic Manager. These gentlemen all hold precisely similar positions on the L. E. & D. R. The Secretary of the E. & H., J. E. Foreman, Toronto, was re-elected. The officials of the L. E. & D. R. have been placed in charge of the E. & H. & are operating it. In addition to Messrs. Bickford & Ross, above mentioned, who retire, the other officials of the E. & H. under the old management were: E. H. Edwards, Freight & Passenger Agent; C. H. Crofts, Storekeeper; F. Stamelen, Master Mechanic, & J. G. Entwistle, Roadmaster.

A new time-table will probably be put in effect about the middle of September, when some changes will be made in operating, & trains will run between Walkerville & Chatham & between Ridgeway & Sarnia. The L. E. & D. R. now connects with the E. & H. at Blenheim Jct., & that will be the junction used to & from Chatham.

In addition to the E. & H. just acquired, the L. E. & D. R. consists of its main line from Walkerville, Ont., to Ridgeway, 84 miles, the line following the Lake Erie shore line a few miles back from it. The Co. also operates the London & Port Stanley line between those towns, under lease.

A rumor has been current that the L. E. & D. R. has purchased the London & Port Stanley Ry. We are authorized to say that this is absolutely foundationless. The lease has yet 15 years to run & nothing further has been considered.

There is nothing definite as to the proposed extension of the L. E. & D. R. from Ridgeway to St. Thomas. The management hopes to secure a subsidy next session, in which event construction will go on without delay.

The new slip docks at Port Stanley, the contracts for which were awarded by the L. E. & D. R. Co. late in May, will be completed & ready for use early in September. The contracts called for their completion on Aug. 1, but unavoidable delays prevented their being finished in that time. The docks are

being constructed immediately to the west of the lighthouse piers, & with the tracks & grading of the approaches will cost in the neighborhood of \$55,000, the estimated cost of the docks alone being \$45,000 & of the approaches \$10,000.

The main objects of the Co. in having the slip docks built are to get a good connecting link between the coal & iron regions of Ohio & Pittsburg respectively, & the west, by means of a car ferry service & the Port Stanley line to London. During the past 2 years the Co. has handled a large quantity of coal & iron for London by the lake route, but the greatest drawback, especially in the coal trade, was experienced in the trouble of having to remove it from the schooners & on to the cars. This meant a heavy expense for labor & also a loss of time, & to remove these obstacles the L. E. & D. R. decided to build the docks & operate the car ferry Shenango no. 1, which for 3 years has run between Conneaut, Ohio, & Port Dover, Ont. The Shenango is a very large vessel, costing \$150,000, & has a capacity of 26 cars, having 4 tracks, the 2 centre tracks holding 7 cars each, & the 2 outside ones 6 cars each. In addition to this she can carry on her upper deck 1,200 excursionists & she is fitted for regular passenger business with staterooms. The Shenango made her first run from Conneaut to Port Stanley Aug. 18.

The distance from Conneaut to Port Stanley is 58 miles, Port Stanley to St. Thomas 9 miles, & Port Stanley to London 24 miles. It will thus be seen by this new route Western Ontario is practically placed in direct connection with Pittsburg & the central States, from which a large amount of business comes into Canada. The L. E. & D. R.'s direct connection at Conneaut is the Pittsburg, Bessemer & Lake Erie Ry. (largely owned by the Carnegie Co.), which works direct with the Baltimore & Ohio, the Pennsylvania & other railways running out of Pittsburg. The L. E. & D. R. has already completed traffic arrangements with the C. P. R., & similar arrangements are pending with the G. T. R., M. C. R., & Wabash. (Official.)

The principal owners of the L. E. & D. R. are Hiram Walker & Sons, the millionaire distillers of Walkerville, so that the Co. will not want for capital to work its property to the fullest advantage.

The Quebec Conference.

Several questions of special importance to the interests represented by THE RAILWAY & SHIPPING WORLD will come before the representatives of Great Britain, Canada & the U. S. sitting at Quebec. These are referred to by the Toronto Globe as follows:

"While it is a large question, there should be no great obstacle in the way of coming to an understanding in regard to the bonding privilege, the continuance of which is recognized as an advantage both to the U. S. & Canada, & it would seem that all that is called for in this matter would be the careful drafting by experts of a series of clauses covering all possible conditions of transportation for incorporation in the treaty.

"The proposed revision of the treaty stipulation in regard to the maintenance of war vessels upon the great lakes seems to present no time-consuming difficulty. If it is the wish of the U. S. merely to be allowed to construct war vessels on the upper lakes for ocean service, & not to maintain a fleet in the inland waters, it is probable that no serious objection will be offered.

"The alien labor question, which has been the cause of so much irritation, will, doubtless, find an easy solution.

"The anomalies of the wrecking laws of both countries have long been felt by the shipping trade & recognized by public men, & there

being a manifest disposition to wipe out small causes of difference, this one will be removed with the rest. In short, if the three questions of prime importance relating to reciprocity in trade, the Bering Sea seal fishery & the Atlantic fisheries are disposed of, there can be little doubt that the solution of the other differences will follow."

A few days later the Globe said in reference to the question of war vessels on the lakes: "The crucial question will be one of transit, rather than construction. The vessels contemplated are, we suppose, destroyers, and other small but deadly craft, capable of passing through the Canadian canals. The Globe said when this subject was first broached (July 25) that it was opposed to the maintenance of armed fleets on these waters & to giving the Americans any territorial rights in our canals, for that or any other purpose, & it adheres to that view."

A correspondent of the Globe, writing from Quebec, Aug. 22, says: "A city which is early in the field is Ogdensburg, represented here by State Senator Malby, of the New York Legislature. Ogdensburg wants to see the Welland canal thrown open free to all vessels, a tonnage fee of 2½ cents a ton being at present collected on all vessels, Canadian or U. S., passing through. With this tax removed he thinks Ogdensburg would get a lot of the grain that now goes over the Erie Canal to eastern points by way of Buffalo. He admits that Buffalo & New York will object to free canal navigation into Lake Ontario but thinks the grain-shippers of the west & the grain-users of New England will support his position. Canada, he thinks, would gain heavily also by the diversion of grain bound for Europe from the Erie route to the St. Lawrence. The benefit to Montreal, however, is not what Senator Malby is here to put to the front. Buffalo & the Erie are what Ogdensburg is out after."

Toronto Street Railway Taxation.

The application of the Toronto Ry. Co. for leave to appeal from the decision of the Court of Appeal of Ontario, holding that the rails, poles & wires of street railway companies were land, & assessable as realty, came on to be heard before the Privy Council in London, Eng., Aug. 2. Hon. E. Blake, Q. C., appeared for the T. Ry. Co., & C. Robinson, Q. C., for the City of Toronto. The position taken by the city was that leave to appeal should not be granted, because the legislature of this country & its courts should have the right to settle their own domestic questions of taxation, & that no broad general question of general law was therefore involved. The Privy Council gave effect to this contention, & refused the leave to appeal. The refusal of the leave does not settle the question as to whether rails, poles & wires are assessable as land. The Toronto Ry. Co. intends to further contest the question by paying its taxes under protest, & then suing the city to recover back the same. It will then be entitled to the decision of the Privy Council upon the assessability, as a matter of right, without special leave.

Smoke, Noise, Vibration & Bustle.

In Toronto, Aug. 22, Judge Rose gave judgment in the appeal of the T. H. & B. Ry. against the award of \$5,000 made by Arbitrators Judge C. J. Snyder & W. Bell, of Hamilton, in favor of the trustees of the McNab Street Presbyterian Church, Hamilton, for damages to land & for "the smoke, noise, vibration & bustle" consequent upon the running of the railway past the church. The judgment confirmed the \$500 land damages, but referred back to the arbitrators the balance of the award, \$4,500, to eliminate "any amount allowed for smoke, noise or bustle."

Up-to-Date Advertising.*From the Toronto Daily Papers.***No. 1.****Always travel by the Grand Trunk, when you can. S. S. S.: Scenery, Safety, Speed.****No. 2.****All sensible people travel by the C.P.R. H. H. H.; Ha! Ha! Ha!****No. 3.****All sensible people travel by the C.P.R. V. V. V.; Veni, Vidi, Vici.****No. 4.****Then there are few sensible people in Canada. O. O. O.; Oh! Oh! Oh!****A Canadian Case at Duluth.**

U. S. District Judge Lachlan of Minnesota has just decided a somewhat peculiar case. In Oct., 1892, the Canadian steamer Arabian carried away a lock in the Welland canal & the escaping water broke the lines of the Canadian schooner Minnedosa below & jammed the schooner against the lock wall. The Minnedosa was damaged something like \$15,000, & claim was made on her underwriters for about that sum. In the fall of 1895 one of the underwriters on the Minnedosa, the Marine Insurance Co., which had paid \$8,000 on account of this damage, libeled the Arabian in the district court at Duluth, claiming of the Arabian \$8,051.20, under the subrogation clause in its policy. The repairs actually made to the Minnedosa were trifling in amount, nearly all of the damage claimed being on account of a disalignment in her side & keel, & which was not repaired. Both vessels were Canadian; the damage occurred in Canadian waters & the Insurance Company libeling was a foreign company. Objection was made to the court entertaining jurisdiction & was overruled, a court of admiralty being one open to all the world & having the right to exercise jurisdiction in such cases or not at its discretion. The case was heard; the court fixed the damage at \$8,000 & decreed that amount to the Insurance Company. The case will doubtless be appealed.—Marine Review.

Spokane & Northern Organization.

The Great Northern has now completed the formal taking over of the Spokane & N. Ry. & the other lines of the Corbin System. The directors chosen were: J. J. Hill, C. Shields, J. D. Farrell, W. H. Thompson, F. H. Mason & T. G. Thompson. The directors immediately elected officers as follows: President, J. J. Hill; Vice-President & General Manager, C. Shields; General Freight Agent, C. G. Dixon. Columbia & Red Mountain Ry.: President, C. Shields; Vice-President, W. H. Thompson; Directors, C. Shields,

J. D. Farrell & W. H. Thompson. New officers for the Nelson & Fort Sheppard Railroad will be chosen at once. The men who are now in the management of the tributary lines are nearly all well-known Great Northern men. C. Shields is an old Great Northern man & is well-known on the coast in the operating department. C. G. Dixon, who is made General Freight Agent, is well known on the Western Division. He went to Seattle several years ago, but was, after a stay of a few months, transferred to Spokane, where he has been nearly ever since in the employ of the Co. as General Agent. J. D. Farrell is well known as a skilful & genial Superintendent. W. H. Thompson is a Seattle man, in the law department, & has charge of much of the G.N.'s legal business on the Pacific coast.

A New York Passenger Meeting.

Passenger Traffic Manager McNicoll, of the C.P.R., & General Passenger Agent Davis, of the G.T.R., attended in New York Aug. 19 a meeting of passenger officials of lines east of Chicago, held for the purpose of trying to restore rates, which are in a somewhat demoralized condition at present. The gathering did not represent any particular association, but was a special gathering of all lines interested. It had no satisfactory result, however, & the gathering broke up, the subject to be continued at their next meeting.

Speaking of the condition of things in the West, Mr. McNicoll stated that the rate from Chicago to St. Paul was now practically \$5 for a ride of nearly 400 miles. It is a secret rate, but it shows how the Western lines are fighting among themselves. Shortly after the recent meeting of the Inter-State Commerce Commission an open rate of \$8 was announced, but now it is down to the first-named figure. Mr. McNicoll considers the existing state of affairs an evidence of the hollowness of the claim that the C.P.R. was the cause of the passenger rate cutting.

Express Rates in the West.

With a view to encouraging the growing of fruit in British Columbia, & to supplying the demand for fruit at points west of Winnipeg, which could not be met satisfactorily from the present fruit shipping centre, the Dominion Express Co. has put in force very low rates on fruit from the Pacific Coast to points as far east as Winnipeg, the maximum rate on the main line being \$2.40 per 100 lbs to Winnipeg; with the result that the growers in British Columbia have marketed all the fruit they could produce this season in excellent condition, realizing prices that were highly satisfactory to them. The growers state that on the results of this year's business they will increase their orchards as rapidly as possible, & it is expected that in the course of a few years they will supply the demand for fruit in

the Northwest, & that the arrangement will be a mutual advantage to the grower, the Express Company & the consumer.

Aliens on the Canada Atlantic.

An Ottawa dispatch says: "The locomotive engineers of the Canada Atlantic & Ottawa, Arnprior & Parry Sound railways are waging a war against aliens. Some time ago these companies leased a number of locomotives from the Central Vermont Ry. for aiding in the hauling of the extensive lake grain trade from Parry Sound. At the same time a number of men were imported to run the locomotives, thus giving to aliens the work which should have belonged to Canadians. At present the engineers are provided with pilots, but these will shortly be removed, & with their removal the old employes of the lines state they will insist on the new men being sent back. It is stated the C.V. Ry. refused to lease the engines to the C.A. unless C.V. men were employed."

C.P.R. Land Sales.

Acres.		Amount.	
1898	1897	1898	1897
Jan. 22,044	9,443	\$ 73,924.00	\$33,872.00
Feb. 20,650	8,163	66,399.00	27,573.00
Mar. 33,421	8,727	100,010.00	29,080.00
April. 43,145	10,785	140,275.00	37,145.00
May. 43,148	15,802	137,835.00	51,508.00
June. 49,113	18,964	160,199.00	63,160.00
July. 39,512	17,083	123,011.00	55,949.00
Totals. 2,510.33	88,967	\$687,872.11	\$242,897.49

Two trains a day each way are being run on the Ottawa & New York, between Ottawa & Cornwall, Ont.

The general traffic agent of the Northern Pacific Ry. states that the excursion on that road from Dakota towns to the Winnipeg Industrial Exhibition this year carried 3,000 people, as against 1,600 in 1897. On the first section of the train alone 225 went from Pembina, 239 from Grafton, 69 from Cashel, 306 from the little town of Drayton, 23 from Pittsburg, 64 from Bowsement, & 31 from Joliet. These are Dakota towns & villages from 10 to 50 miles south of the Canadian boundary; & these people travelled, therefore, from 70 to 120 miles to get to Winnipeg.

The new freight tariff of the C. P. R. on grain, from the west to Lake Superior points, issued in connection with the Government agreement on the Crow's Nest Pass Ry., has been officially promulgated. The reduction on the former rate is 1½c. per 100 lbs. The tariff also contains the storage charges of the elevators at Fort William, which have a capacity for 5,250,000 bushels, effective Sept. 1, as follows: elevating (including 20 days storage) per bushel ¾c., storage for each succeeding 30 days, or part thereof, per bushel ½c., cleaning & blowing, per bushel, ¼c.

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CONSTRUCTION & BETTERMENT.

Work on Various Lines.

The Canada Western has built an up-to-date station at Fredericton, N.B.

Coast Ry. of Nova Scotia.—The U.S.-Spanish war seriously interfered with negotiations which were about completed in connection with this line when war was declared. Surveys have been completed for the entire line to Halifax, which satisfies the Chief Engineer that his Co. has the shortest rail line between Yarmouth & Halifax, & that it will be the most attractive tourist route in the Maritime Provinces. A person directly interested in hotels & transportation in the Southern States is interesting himself in the matter of summer hotels along the route of the line, & it is hoped some favorable action on his part may result. (Official.) (April, pg. 40; May, pg. 66.)

East Richelieu Valley.—This line, which was built last year from Iberville, P.Q., to Henryville, 12 miles, is being extended a similar distance to a connection with the Canada Atlantic Ry., on the east side of the Richelieu river, near Lacolle. P. H. Roy, of St. Johns, P.Q., is the President. It is said this line is really an extension of the United Counties Ry., which runs from Iberville by way of St. Hyacinthe to Sorel. (Unofficial.)

Edmonton Bridge.—Tenders will be received by the Department of Railways up to Sep. 13, for the construction of the superstructure of a railway & traffic bridge over the North Saskatchewan River at Edmonton, Alberta. The piers are already in.

Irondale, Bancroft & Ottawa.—It is said this line has been extended this season from Baptiste to Bancroft, 5 miles, but up to the time of going to press we had no official information. (June, pg. 99.)

Lake Manitoba Ry. & Canal Co.—When in Winnipeg recently W. Mackenzie said the extension will be pushed on this year as far as Swan River, a distance of 40 or 50 miles, the stations being placed 18 or 20 miles apart. Next spring construction will be rapidly pushed on to the Saskatchewan, & if the necessary aid can be got to finance the scheme, the road will be constructed to Hudson's Bay. No doubt steamboat companies can be induced to run to the Bay now, just as they were prepared to do at the time of the projected Winnipeg & Hudson's Bay Ry. scheme. He is fully satisfied navigation is perfectly open for a good part of the year in the Bay, quite so long as navigation to Montreal. The work on the extension is progressing rapidly, & track laying has commenced.

Manitoba & Southeastern.—When in Winnipeg recently, W. Mackenzie said that 40 or 50 miles would be completed this year, & if the traffic seemed to warrant it, the road would be put into operation so far as built. Just where the Winnipeg terminal was to be, he could not yet say, as he would have to look over the ground, nor could he say whether the terminal when fixed would be reached via the C.P.R. or N.P.R., or if an independent bridge would be built over the Red River. He could not tell anything about a possible connection between this road & the Dauphin road, as nothing had ever been said about it. At the eastern end it would connect with the Ontario & Rainy River Ry., which has already been commenced 16 miles west of Port Arthur on the P. A., D. & W. Ry., & he expected fully 20 miles to be graded this year. He did not know at what point the connection between the O. & R. R. & the M. & S. E. would be made, that not having been decided on. He was not aware that engineers were now at work on the Lake of the Woods to find out the best & easiest place to bridge the narrows. As for the report that the G. T. would use the

Mackenzie, Mann & Co.'s lines to reach Manitoba, there was absolutely nothing in it."

Midland.—The contractors are advertising for 500 men, 50 heavy double teams & 50 light carts. (April, pg. 40. June, pg. 99.)

Montford Colonisation.—The gauge of this line from Montford Jct. to Arundle, Que., has been changed from 3 ft. to standard, 56 lb. rails being used. (Official.)

Nelson & Redington.—This line from Bonner's Ferry, Idaho, to Kuskanook, B.C., will be 51½ miles long. We are officially informed that it will be owned & operated by English capital, & that the Great Northern Ry. (U.S. A.) is not interested in it.

The Rossland, B.C., Miner, says:—"It is now stated that the N. & B. Ry. will be constructed within a few months. It was presumed when the Great Northern acquired the Corbin system that this road would not be built. It is now learned that while the interests of the G. N. in this road are large they are secondary to those of Geo. Alexander, H. Foster, a member of the British parliament, & their associates. The N. & B. R. Co. has a trackage agreement with the G. N. by which it can reach Spokane. Bids for the construction of the line will be opened at Bonner's Ferry. The line is to be about 53 miles in length, running from Bonner's Ferry along the banks of the Kootenay River, crossing the boundary line & striking lower Kootenay Lake at a point somewhere south of Pilot Bay. It will cross the C.P.R. Crow's Nest Pass line, & will be through a rich country. It is expected boats will be run on the lake & a connection made with the Kaslo & Slocan Railway for reaching the richer portions of the heart of Kootenay. The intention is to make connections so as to enable passengers leaving Spokane in the morning to be landed in Sandon & other Kootenay points the same night. While there are no hard grades on the line, there is considerable rock & bridge work, which will make the construction expensive. In building the bridges required, over 4,000,000 ft. of lumber will be used."

Ontario & Rainy River.—A contract for clearing & grading the first 20 miles from Stanley, on the Port Arthur, Duluth & Western Ry., 19 miles from Port Arthur, following up the Kaministiquia & Matawin Rivers, has been let to E. Fauquier, of Toronto, who has sublet the first 10 miles to W. Heald, of Toronto. Work began on Aug. 10, & it is expected the 20 miles will be completed this year. Surveys are being carried on under T. H. White, C.E., & will be continued until the line is located to some point on Rainy Lake not yet selected. (Official.) (May, pg. 71; July, pg. 129.)

When at Fort Frances recently, D. D. Mann, speaking of the O. & R. R. & its western connection, the Manitoba & Southeastern, is reported to have said:—"The surveys are out now along the whole line, & while I do not care to say much as to the future construction work, I think it is altogether likely it will go on without interruption, which, if the route is feasible, will be within a short distance of Fort Frances." When asked if the line would come into the town Mr. Mann said:—"It is impossible to say until Mr. McCarthy, our engineer, who is now taking soundings across the north arm of Rainy Lake, makes his report. My own impression, however, is that the country & road would be better served by running the road from Fort Frances parallel to the river, as far as the mouth, thence across into Minnesota & around the southwest end of the Lake of the Woods to Winnipeg. This would open up a valuable agricultural land & timber belt & would give the settlers what they have been clamoring for, markets for their produce & means of communication with the outside world."

Ottawa & New York.—This line having been completed between Cornwall, Ont., & Ottawa, trains were run over it both ways July 29. The completion of the O. & N.Y. Ry. marks the realization in a slightly altered form of a scheme originated by the late Dr. Bergin, M.P., nearly 20 years ago, & in the furthering of which he spent many years of his life. The original scheme when it first came before the public was for the building of a line with the aid of Jay Cooke, of Philadelphia, & others from Cornwall, to Sault Ste. Marie, & thence to the Pacific Coast on pretty nearly the same route as is followed by the Northern Pacific. This scheme met with strenuous opposition, & was never carried out. Then for years Dr. Bergin strove against various obstacles, & on Aug. 14, 1896, a few months before his death, he had the satisfaction of seeing the contract signed with the representatives of the New York & Ottawa Co., who have since built the road. This Co. sub-let the grading of the road to Balch & Peppard, of Minneapolis, Minn., & the first sod was turned Aug. 23, 1897, by J. Bergin, Q.C., brother of Dr. Bergin, & President of the Ontario Pacific Railway Co. The grading was sub-let to numerous contractors, & with the exception of a few small sections was finished last fall.

Following is a list of stations with distances from Ottawa: Edwards 13.4, Russell 20.1, Embrun 23.6, Crysler 31.4, Berwick 34.7, Finch 37.1, Newington 41.3, Black River 48.6, Grand Trunk Jct. 55.9, Cornwall 57.0. It is expected the bridge across the St. Lawrence River at Cornwall will be completed about Oct. 1. Interlocking plants are being put in at the crossing by the O. & N.Y. Ry. of the G.T.R. tracks at Cornwall, Ont., & also at the crossing by the New York & Ottawa Ry. of the G.T. tracks at Helena, N.Y., on the Rouse's Point branch. (Official.) (April, pg. 38; June, pg. 99; July, pg. 122.)

On Aug. 5 this Co. applied to the Railway Committee of the Privy Council for entrance to its Ottawa freight terminals at the canal basin over the tracks of the Ottawa, Arnprior & Parry Sound. The Committee reserved its decision.

Pontiac Pacific Junction.—It is the intention of this company to build an extension from the present southern terminus of its line at Aylmer, Que., to Hull, this year, a distance of 10 miles. The contract had not been let up to Aug. 3. (Official.)

This Co., jointly with the Ottawa & Gatineau Ry. Co., is going on with the substructure for the interprovincial bridge between Ottawa & Hull, 2 piers of which are finished, a 3rd one-half finished & the excavation of sawdust being done for a 4th. Rock excavation is also going on on the approach to the bridge on the Ottawa side. The acting chief engineer is G. C. Dunn. (Official.)

Quebec Bridge.—This bridge, as projected, is to be a cantilever, about 3,300 ft. long, 150 ft. above high water, with a span of 1,600 ft. It is said tenders will be asked for shortly, on plans & specifications prepared by E. A. Hoare, C.E.

Restigouche & Western.—The first sod was turned Aug. 12 by Chief Engineer C. L. B. Miles, about 3 miles from Campbellton, N.B. The contractors, Malcolm & Ross, have about 300 men at work, & this force will soon be increased. The first 15 miles of the survey has been revised & 10 miles will soon have been located. Another 10 miles will then be located. (Official.) (July, pg. 122.)

Vancouver, Victoria & Eastern.—In connection with the construction of the portion of the line between Penticton & the Pacific coast, particulars of the bonus for which we gave in June, it may be added that one of the conditions imposed by the Provincial Government is that the Co. shall equip & maintain a ferry steamer, suitable for freight & passenger cars.

between the mainland & Vancouver Island. When in B.C., recently, Vice-President Shaughnessy stated that although the C.P.R. had nothing to do with the building of the line between Midway & Penticton it would probably be operated by that Co. (May, pg. 70. June, pg. 100. July, pg. 122.)

A Vancouver dispatch of Aug. 10 says: "All work has been ordered stopped on the survey for the V.V. & E.R., which has been in progress for some weeks under the direction of A. Hill, C.E. He completed the survey from Abbotsford to a height of land on the route towards the coast, & had made good progress towards Chilliwack, when orders came to discontinue the work, but for what reason is not yet made known."

The Rossland, B.C., Miner says Hugh Sutherland, of Winnipeg, who it speaks of as "a partner of Mackenzie & Mann," the owners of the V., V. & E. charter, is reported as saying that the construction of the Penticton-Boundary Creek branch will not be commenced until next year, & that it has good reason to believe Mr. Sutherland has spoken with definite knowledge. The B. C. Legislature voted a cash bonus of \$4,000 a mile for this line, & construction was to have been commenced by Aug. 8, but it is said the time has been extended, as the projectors want to obtain a Dominion subsidy in addition.

White Pass & Yukon Railway.

As previously described by us, this line is being built from Skaguay, Alaska, via the White Pass & Lake Bennett, the objective point being Fort Selkirk, Yukon. The line on the U.S. side of the line, or rather within the disputed territory, as it may turn out to be British, is owned by a U.S. Co., the Pacific & Arctic Railway & Navigation Co. The line within the limits of British Columbia is owned by the B.C. Yukon Ry. Co. & the line in Canadian territory, outside of B.C., is owned by the British Yukon Co. These three different lines will be operated by a company called the White Pass & Yukon Ry. Co., of London, Eng. Close Bros. & Co., of London, Eng., & Chicago, are the financial agents of the Co., & S. H. Graves, of that firm, is the representative on this side of the Atlantic. The Chief Engineer is E. C. Hawkins.

The distance from Skaguay to the Summit is about 20 miles, & from the Summit to Lake Bennett about 25 miles. The Pacific & Arctic Co. has about 1,500 men employed on construction, & would be glad to have double the number, & expects to get them as soon as the pressure of harvest work is over. Trains are now running to about half-way to the summit of the White Pass, & it is expected to reach the summit early in September & the Lakes about a month later. A heavy rock cut on Porcupine Hill, which has been such an obstacle to rapid progress, is finished,

THE CANADIAN PACIFIC RAILWAY COMPANY.

The undermentioned dividends have been declared for the half year ended June 30th, 1898:

On the Preference Stock, two per cent.

On the Common Stock, two per cent.

The Common Stock transfer books will close in London at 3 p.m. on Friday, 26th August, and in Montreal and New York on Friday, 9th September.

The Preference Stock books will close at 3 p.m. on Friday, 2nd September.

All books will be re-opened on Monday, 3rd October.

Warrants for the Common Stock dividend will be mailed on or about 1st October to shareholders of record at the closing of the books in New York and London respectively. The Preference Stock dividend will be paid on Saturday, 1st October, to shareholders of record at the closing of the books, and the warrants will be posted from the Company's London Office.

By order of the Board,

CHARLES DRINKWATER, Secretary.
Montreal, 8th August, 1898.

& trains are running through it. The heavy rock cut at the summit of the Pass is also about completed & ready for track, & much of the heavy work on the line at intermediate points is in such a forward condition that track-laying will from now on be much more rapid than it has been. It is practically all heavy rock work to the summit of the Pass from Skaguay. There are 2 or 3 long, heavy rock cuts & 2 short tunnels. The maximum grade is 3.9 ft. per hundred. The maximum curvature is a 16 degree curve, of which there is only one. There are several bridges, but none of them involving any difficult or unusual construction. The larger bridges will be of iron & the smaller ones trestle. The only other structures in connection with the first section of the line are the large wharf & customs warehouses, etc., which are being erected at the port of Skaguay, & alongside of which there will be 30 ft. of water at low tide. The gauge of the line is 3 ft., & it is being laid with 56-lb. steel rails.

The rolling stock is the best modern equipment for that class of work, & the line is specially constructed for winter operation, so as to avoid snow blockades, etc. Early in August the Chief Engineer wired the Manager in Chicago: "More business is in sight than we can handle. Urgent need more equipment quick." In reply he was wired to procure immediately all the extra equipment needed.

The steamers plying on the Upper Yukon have proved so successful this season as to completely demonstrate its advantages over the Lower Yukon, for safe & regular steamboat navigation. Several syndicates have already been organized for the purpose of running freight & stage lines during the coming winter between the end of the constructed railway & the interior. (Official.)

The Manager writes us from Chicago: "As regards continuing the line from Lake Bennett to Ft. Selkirk, the intention is to push on as fast as possible. It will not be possible to work during the winter on account of the shortness of the days & the severity of the weather in that northern latitude, but it is intended to commence work as soon as possible in the spring & to push it with the utmost possible speed. I hope that by having everything ready before-hand it may be possible to reach Ft. Selkirk before the end of next year, but this is a matter which, of course, one cannot speak with any certainty about; much will depend upon the nature of the line. We have survey parties running lines between the lakes & Ft. Selkirk, & the actual location of the road between those points will be decided after the survey parties come in this fall. You understand, of course, that running a railway survey in that country is an extreme-

ly different thing to running one down here. You will be better able to judge of this when I tell you that it took us 4 days to move one survey camp 4 miles, & that I have just received a letter from our Chief Engineer, who had returned from a 'flying' trip over one of the lines, in which he says that it took him over 2 hours to go half-a mile, unimpeded by instruments or baggage of any sort." (June, pg. 98. July, pg. 123.)

Canadian Government Railway System.

The new I.C.R. station at Moncton, built by Rhodes, Curry & Co., of Amherst, N.S., was opened Aug. 1. The ground floor is used for purely station work. On the 1st floor are the despatchers' & the Western Union Telegraph offices.

Rhodes, Curry & Co., of Amherst, N.S., have been awarded the contract for building the Intercolonial pier & sheds in Halifax. The contract calls for a pier 600 ft. long & 120 ft. wide, with a shed 80 ft. wide on it, having tracks through the centre. The contractors have started work. Tenders have also been asked for erecting a grain elevator, towards which the city of Halifax contributes \$50,000.

Mr. Fielding, acting Minister of Railways, has been in St. John, N.B., with General Manager Pottinger & Chief Engineer McKenzie about the proposed I.C.R. terminal facilities. He said the engineers were preparing the plans as rapidly as possible, & the work, when commenced, will be pushed to completion. He could not say whether the elevator would be built on the Long wharf or on the Harris property. Nor was he certain that the improvements could be completed in time for this winter's trade. Mr. McKenzie said the intention was to build berths, one at either side of the Long wharf. There would be some difficulties in connection with dredging, because of rock, & possibly, it might be necessary to acquire more property. That in the neighborhood is all held at a very high figure, & just what course will be pursued has not been determined on. It is thought that not a great deal will be done until the Minister, Mr. Blair, arrives. He will leave England Aug. 25.

J. M. LYON, General Passenger & Ticket Agent, Intercolonial Ry., Moncton, N.B., writes: "In enclosing my subscription I wish to say that THE RAILWAY & SHIPPING WORLD is worth looking forward for. I think the busy ones among its readers, which I trust are many, will find the time given to its perusal well invested."

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Work on the Canadian Pacific.

West St. John, N.B., Terminals.—The Co. is doing a large amount of work at its deep-water terminus at West St. John, formerly known as Carleton, on the west side of St. John Harbor, & which is reached by a branch line of 4 miles from Fairville, the 1st station west of St. John, & in fact, the 1st station on the eastern end of the system, as the Co. uses the I.C.R. station in St. John. Over \$600,000 is being expended in the extension of wharves, warehouses, &c. The city of St. John joined the Co. in the work & retains the ownership, leasing to the Co. for 999 years. To show the extent of the work, it may be stated that 14 acres are occupied by wharves & docks, of which 2½ acres is warehouse floor space. The wharf frontage extends 2,100 ft., forming 5 distinct steamship berths of over 400 ft. each, all of which will accommodate at the low state of the tide vessels drawing 28 ft. of water. There is one stretch of wharf 870 ft. long, with 28 ft. of water at low tide, that will easily accommodate the largest vessel afloat. Each of these wharves will be provided with conveyors that will enable vessels to take on grain & cargo without moving from the original position & will permit them at the same time to receive from & dispatch into the sheds their package freight without intermission or delay. The elevator, which has a capacity of 250,000 bushels, is being increased to 1,000,000 bushels capacity, at a cost of \$150,000 for the elevator & conveyors, there being 2,500 ft. of the latter. There are 4 conveyors, 1 being double decked. They have a loading capacity of 6,400 bushels an hour & can load 4 steamers simultaneously. Stock yards are being built to accommodate 1,000 cattle. The warehouse accommodation is of the most extensive & substantial character, & in viewing, as the writer did recently, these terminal improvements at West St. John, which, as before mentioned, cover an area of 14 acres, every portion of which is utilized to the fullest advantage, those interested in the steamship traffic & its development will heartily appreciate the efforts made by the Co., with the generous aid of the City, in affording so inexpensive & efficient means of accommodating it.

Atlantic Division Bridges.—In our June issue, pg. 97, we referred to the improvements being made on this division. It may be added that a considerable amount of bridge work is being done in Maine, between Megantic & Mattawamkeag. During construction the bridges were built with stone piers, steel superstructures & short wooden approaches. The piers are being made into abutments & the wooden approaches are being filled. Wooden structures are being replaced by stone abutments with steel superstructures. Two steel viaducts that had wooden approaches are having stone abutments put in & the approaches are being filled. Nine wooden trestles are having box culverts put in, & the whole structures are being filled in. One wooden trestle is being replaced by a 14 ft. stone arch, with filling.

Place Viger Station.—This station & terminal hotel in the east end of Montreal was opened Aug. 13. The building was erected in consequence of an agreement entered into between the Co. & the City Council. Rather than return to the C.P.R. some property that has long been used as a park, the City offered to buy a site for a new building & exchange it with the Co. for the park. The offer was accepted & the City purchased the site upon which the building now stands. The Co. faithfully carried out its part of the agreement by erecting one of the handsomest buildings in Montreal at the cost of \$350,000, & producing at the same time the finest & most modern hotel in Canada. It has been furnished with a regard only to good taste & not

expense, & is a credit to the city. The station occupies a whole block, & is situated on Craig St., facing the Viger Gardens; it is bounded on the west by Berri, south by Notre Dame, & east by Lacroix St. The Craig St. frontage is 300 ft., & the depth, measured along one of the wings, is 116 ft.; the depth of the main portion of the building is 50 ft. The tower rises 138 ft. above the curb, the whole structure forming a grand aggregate of 1,750,000 cubic feet.

The building is arranged after the idea so prevalent in England, with the hotel above the station proper, making it at once a haven of rest & comfort for the travelling public. The architecture is of the French Renaissance, partaking of the type of the old chateau found on the banks of the Loire. The general outline & effect of the building is one of great solidity combined with gracefulness, & with its numerous towers, turrets & quaint gables it forms altogether a most pleasing sky line. The situation, in fact, is of the very best, as it commands a splendid view of the Gardens & that portion of the city. The C.P.R. evidently does not agree with those people who think that the west end is the only place for a first-class hotel. The Co. has faith in the east & has built an hotel whose magnificence would command liberal patronage wherever the building was situated. The lower portion of the building is of Montreal gray limestone & the upper portion of Scotch buff fire brick with stone trimmings, all in complete harmony, & emphasizing the beauties of the noble & graceful style. The Craig Street facade is composed of the grand portico, with 21 elliptical arches, the portico being 228 ft. long by 16 ft. wide. It is crowned on the top by a beautiful balustrade, behind which can be seen the spacious balcony. The tower, raising from a graceful sweep into a great circle, is the central point of interest & with its numerous turrets & gables makes a telling picture. The arcade is lighted from the balcony with prismatic lights. This arcade is one of the most pleasing features of the building. It runs along the front of the hotel & has 21 arches. Broad granolithic steps lead up to it from the sidewalk. The arcade will be a delightful place for the guests to sit out the pleasant hours of a summer evening, & facing the Gardens, will command a pretty view. The 2nd storey comes out over the arcade. The building is 5 storeys high. The slate roofs are very steep, being at an angle of 50°, studied by copper & stone dormers & airy turrets, the whole mass making an unexcelled sky line. In the centre of the arcade large doors afford admittance to the general waiting room, which is circular in form & is in the centre of the whole building. It is 55 ft. in diameter. To the left, arranged along either side of a main corridor, are the offices of the executive officers, smoking rooms, ladies' waiting rooms, & lavatories, while farther along is the baggage room, & to the rear of the baggage room, occupying a whole wing of the building, is the express room. To the right of the main waiting room is the hotel department. All the upper floors are devoted to hotel purposes on plans arranged according to the most modern & up-to-date ideas. Passing out through the main waiting room the car tracks are found. The passenger platforms are covered over with roofs which run up to the rear of the building, thus putting the passengers to no inconvenience or discomfort during unfavorable weather. The station is one of the most completely equipped buildings of the kind on the continent. In the hotel portion, west of the central tower, are the reception room & offices just off the corridor, & off the same corridor are the smoking rooms, cafe, bar, billiard room & barber shop, parcel & cloak rooms. From the centre of the rotunda a grand marble staircase leads to the 1st floor, which is of Mosaic, with a Greek fret border round each room & the corridor. The build-

ing is wainscotted & trimmed with oak throughout. On the second floor are the dining rooms, breakfast room, writing rooms, parlors, etc., all finished in oak, besides the extensive corridor running the whole length of the building 10 ft. wide. Throughout the rest of the building are found ample sized parlors & bedrooms, making a total number of 150 bedrooms. These bedrooms are arranged to rent en suite or single, as required by guests. In this hotel will be found all the accommodation necessary, everything being modern & up-to-date, electric light wiring, wired throughout in iron-armored conduit, steam heating, electric elevators, & bells, & a kitchen service unsurpassed. An illustration of this hotel appeared in our June no., pg. 97.

Montreal & Ottawa Ry.—This line, having been completed, will be opened for passenger traffic Aug. 28, by 3 hours' service between the 2 cities, 2 trains a day each way. The rumor is revived that the Co. intends building a passenger station in Ottawa on the east side of Sapper's Bridge.

Point Fortune to Hawkesbury.—A number of daily papers have recently been asserting that the Co. had decided to extend the Point Fortune branch, from that place, 24 miles from Vaudreuil on the Montreal-Toronto line & 47 miles from Montreal to Hawkesbury, Ont., on the Ottawa River. We are officially informed that there is no truth in the statement.

Eastern Division.—In our July issue, pg. 123, we give a summary of work being done on this division. It is said \$80,000 are being spent between Cartier & Port Arthur in cleaning out old cuts & rebalasting. In fact, more work is being done than in any one year for the past 10 years. The few remaining trestles are mostly being filled, wooden bridges are being replaced by iron, & heavier rails are being laid.

Fort William to Winnipeg.—The work of replacing the few remaining old rails with new heavier ones is proceeding rapidly. The wooden bridge across the Kaministiquia River is being replaced by a massive stone arch similar to the one illustrated in our May issue, pg. 63. The long trestle near Finmark is being filled. A large number of additional side tracks are being put in & others are being changed; so that the distance between any 2 will not be more than 7 miles.

The Stonewall Branch, which runs from Winnipeg north to Stonewall, 19 miles, is being extended to Foxton some 18 miles further north. Neil Keith has the contract. G. H. Garden, C.E., is in charge of the surveys, &c., for the C.P.R. (Official.)

The Pipestone Branch, which runs from Menteith Jct., on the Souris Branch, to Reston, 31 miles, is to be extended west 25 miles this year. Neil Keith has the contract. It is the intention to build a further 40 or 50 miles next year, which will carry the line to about Carlyle, Assa. (Official.)

Branch from Hartney.—This is a sort of Will-o'-the-wisp that up to date we have been unable to locate. In our June issue, pg. 97, we stated a branch of 20 miles would likely be built from Hartney east, which would for that distance parallel the Belmont—Hartney branch now building by the Northern Pacific. Then it was announced in a contemporary officially that a branch would be built west from Hartney 20 miles, instead of east. So far work has not been started from Hartney in either direction. We understand the original proposition was for a spur from Hartney 20 miles eastward & a little south, with the idea that it might ultimately be connected with the Pembina mountain branch at Killarney. Winnipeg papers announced that Neil Keith had moved his outfit to Killarney to start work on this spur, but he afterwards moved it to Reston & put it at work on the extension of

the Pipestone branch. We have been unable to ascertain anything definite as to whether any work will be done either east or west with Hartnev as a starting point.

Mountain Yards, Shops, &c.—A large roundhouse is to be built at Field, B.C. M. Carlin has the contract for the excavation, which calls for the removal of some 25,000 yards of earth. The tracks at Field will be increased to the extent of some 4,000 yards, the rails being taken up at Donald to be re-laid at Field. Most of the plant at the Donald repair shop will be moved to Field. The new workshops at Revelstoke will be equipped with new plant. About 3,000 ft. of additional tracks will be put in at Laggan. Some of the railway buildings at Donald will be removed & re-erected at Field & Laggan. (Unofficial.)

Crow's Nest Railway.—Up to Aug. 22, rails had been laid 203 miles west of Lethbridge, Alberta. (Official.)

From Macleod to Bull Head a regular train is run 3 times a week, & passengers can travel in comparative comfort that far. To Bull Head the track is in good shape, & the trains invariably make their time. From Bull Head to Coal Creek, now called Fernie, where the extensive coal mines are located, is probably the most interesting part of the trip. It is between these points that the celebrated loop is located. This is a nice piece of engineering, the line dropping several hundred feet from the mountain side into the valley in the form of a letter S. The track around the loop is not in extra good shape yet, though large gangs of men are constantly employed lifting, surfacing, etc., & every day sees a marked improvement. The contractors on the Moyie portion of the road have practically finished their work, & are turning off their men & preparing to leave. J. Haskins has left for the lower end of the road to finish his contract near there. McBeath & Peters are practically through with their work & will soon be pulling out. Cowan & O'Neil, who have had the tunnel contract, have moved their outfit & left for Vancouver. R. Balfour's bridge gang has completed the bridge crossing the Moyie River at the foot of the lake, & is working on the bridge at the head of the lake. (Unofficial.)

A branch line of about 16 miles is being built to the North Star & Sunderland group of mines north of Cranbrook, from which big ore shipments are expected. (Unofficial.)

It is said the Dominion Government has notified the C.P.R. Co. that in cases on the Crow's Nest construction where contractors failed to meet their obligations to workmen regarding wages, the Co. will be held liable. (Mar., pg. 15; Apl., pg. 39; May, pg. 67; June, pg. 97; July, pg. 123.)

Robson to Boundary Creek.—It is said there is a scarcity of men on this work. J. E. Stevens, Chief Engineer for the contractors, has stated that until they could have some assurance that the supply of men could be increased, no effort would be made to scatter the work, but that it would be concentrated on the worst portions of the road during the good weather. He expected to have about 2,000 men at work at the summit near the North Fork during August, & possibly at other points on the Boundary side of the divide. Mr. Stevens was Chief Engineer for the Great Northern Ry., but resigned to go into this contract with Mann, Foley Bros., & Larsen. McLean Bros. have the contract to bore the big tunnel, & also for the several miles of approaches to it. The tunnel is 3,100 ft. It is expected that over 100 men will be employed for a year in the boring of this tunnel. Besides this, McLean Bros. have the contract for constructing the several miles of track that will constitute the switch & over the summit, which will be used until the tunnel is finished. P. Genelle & J. Poupore have the contract for timber work. (Unofficial.) (July, pg. 124.)

Nakusp & Slocan Extension.—We mentioned last month that H. B. Walkem, C.E., was making a final location of this proposed line in the direction of the Whitewater Basin. We have since been informed that the line had previously been located, & that Mr. Walkem was simply sent over to see if it could be improved. The Nakusp & Slocan branch runs from Nakusp, on the east side of Upper Arrow Lake, southeasterly to Sandon, 40 miles. The proposed extension would start from Three Forks, the next station to Sandon & 36 miles from Nakusp, going up Carpenter Creek past Bear Lake, then following the north fork of Kaslo River to Whitewater, a distance of about 9 miles. This extension would help the McGuigan, Bear Lake & Whitewater districts, which are now entirely tributary to the Kaslo & Slocan Railway. No definite decision as to construction has been announced, but it is expected it will be gone on with at an early date. (Official.)

Grand Trunk Work.

The Co. will erect a 100 x 50 ft. building on car shop property at London, Ont. Mr. Mills, Hamilton, Ont., has the contract. (Unofficial.)

Tenders have been asked for the erection of the round-house & other improvements at Sarnia, & it is expected to have the work well in hand by the beginning of September. The cost will be in the neighborhood of \$70,000. Improvements at Port Huron will be deferred till a little later on. (Official.) (July, pg. 123.)

VICTORIA JUBILEE BRIDGE.

The work of connecting the two portions of the temporary erection truss for the centre span was completed Aug 7, & the last pin was put in its place Aug. 19, practically completing the work on the superstructure proper of the bridge. The work on the new bridge was started in the summer of 1897 with the widening of the piers, so as to admit of the placing of the new structure, which, in addition to the two railway tracks, also provides sufficient space for roadway & a footwalk on each side. Each pier was widened to the extent of about 7 ft. The construction of the superstructure was commenced in Nov., 1897, with the erection of the 1st span at the west end, which was completed on Nov. 27. The delay to traffic during the construction of the first span was but 25 minutes. The winter weather interfered with further construction operations, & the 2nd span was not commenced until Mar. 23, when the temporary erection truss (around which the new superstructure was built) was moved out to the 2nd span, occupying but 7½ minutes, & closing the bridge to traffic but 1 hour & 52 minutes. During April 3 spans were completed, during which the traffic was interfered with but 3 hours & 50 minutes. In May 3 more spans were completed, causing a delay to traffic of but 2 hours & 25 minutes. During June 4 spans were completed, including the last span from the west end, delaying traffic but 2 hours and 20 minutes. At the east end the construction of the 1st span was commenced April 24. During May 3 spans were constructed. During June 5 spans were constructed, & by July 15 the 3 remaining spans were completed; the total delay being but 9 hours & 21 minutes during the entire work of constructing the east end, & the total delay to traffic on account of the construction of the east & west ends, excepting the middle span, being but 20 hours & 13 minutes. The entire time occupied in moving the temporary erection trusses from span to span, referred to above, was but 3 hours; the average time for each span being about 7 minutes.

The construction of the center span, on account of the different character of the work, was carried on upon the cantilever principle. A very complete description of the bridge

appeared in our Mar. issue, pg. 7. Some statistics regarding the new & old structures may be of interest.

	New Bridge	Old Bridge
Number of spans.....	25	25
Length of ironwork.....	6592	6592
Weight of ironwork.....	22,000 tons	9,044 tons
Covering area one inch thick of... ..	25 acres	11½ acres
Masonry in piers & abutments.....	97,983 cub. yds.	
Covering an area one foot thick of	61 acres.	

Work will be at once commenced on the placing of the roadways at the side, but the most important part of the business is to get the double tracks down before the heavy travel commences in the autumn. In order to do that it will be necessary to rush with all possible speed the work of removing the old tube. Pneumatic machines are being made to expedite the work, which would otherwise have to be done by hand, which naturally would consume a lot of time. Night & day gangs of men will be kept at work on the drilling out of the thousands of rivets in the old structure, & it is hoped to have the double tracks in operation by the middle of October.

At the Point St. Charles Yard & on the St. Lambert end of the bridge the roadbed is being lowered & widened to suit the level & increased facilities of the new bridge. The Victoria Park Station, near the bank of the river in St. Lambert, has been removed to permit of the widening of the roadbed.

THE MONTREAL HEAD OFFICES.

Plans prepared by R. A. Waite, of Buffalo, N.Y., for the head office building to be erected on the property given the Co. by the City of Montreal, & the principal frontage of which is on McGill St., have been accepted by the management. The building will be 5 unusually high stories, covering a 200 ft. frontage. It will present a most imposing & effective appearance. It will be larger than the Montreal Board of Trade building. The windows will be as large as most store windows. The vital lines of the frontage are carried upward—that is, instead of producing a belittling, horizontal effect they are all vertical. They carry the eye upward. This will add greatly to the impressiveness of the general effect. The extent of the frontage would have a certain dwarfing effect were it not for the provision which gives an added height to the general appreciation through the vertical lines. Each floor of the 5 stories will be devoted to a separate department of work. That is to say, the 1st will be devoted to the audit department & all co-related work, & will contain 20,000 ft. of space. The 2nd floor will be given to the General Manager's offices & all the officials who have immediately to do with the supreme direction of the G.T.R. system. The rooms are so arranged upon each floor that each will be in plain view from the elevator. The corridors will be wide & light; the central authority in each department will, so to say, be able to have all his subordinates immediately under his direction, the idea being to realize concentration, & obviate all cause of delay. The head officials will thus be in touch with all the men with whom they sustain official relations, & in this regard the department will be most economical & efficient. This idea is wrought out upon the 5 floors, & the result will be a smooth running of the great official machine, impossible under less favorable conditions. Some beautiful freize work has been provided for along the top storey, while above the colonades along the tops of the windows in each storey there will be also embellishments of a highly artistic character.

The contracts for the carcass of the building will be let & the architect expects the foundation will be complete before bad weather sets in. The building is to be completed in 1900. These figures will appear upon the front of the building, as well as the date of the inception of the G.T.R. system in Canada, while the seal of the Co. will be set forth over

the main entrance opposite the 2nd story, as well as the words "Grand Trunk Railway," cut in the stone. The building will be fireproof throughout, & all the material, external & internal, will be of the best & most modern character. The original estimate of cost was \$250,000, but it is expected this will be at least doubled. It is said the building will be the 2nd largest railway office building in the world, the largest being the Philadelphia & Reading offices in Philadelphia.

EQUIPMENT.

Ottawa, Arnprior & Parry Sound Ry.

The illustration on this page shows one of the locomotives recently built at the Baldwin Locomotive Works, Philadelphia, Pa, for this line. The following are the general dimensions :

CYLINDERS.

Diameter, high pressure, 14 ins.
 " low " 24 ins.
 Stroke, 26 ins.
 Valve, Balanced piston.

BOILER.

Diameter, 60 ins.
 Thickness of sheets, $\frac{5}{8}$ & $\frac{11}{16}$ ins.
 Working pressure, 180 lbs.
 Fuel, soft coal.

Total engine, 24 ft. 9 ins.
 " " & tender, 51 ft. $3\frac{1}{2}$ ins.

WEIGHT IN WORKING ORDER.

On drivers, 117,000 lbs.
 On truck, 34,000 lbs.
 Total engine, 151,000 lbs.
 " " & tender, 239,000 lbs.

TENDER.

Tender wheels, diameter, 33 ins.
 Journals, 5 x 9 ins.
 Tank capacity, 4,000 gals.
 Weight, empty, 40,500 lbs.

SERVICE.

Freight. Guaranteed to haul a load of 750 to 800 tons (2,000 lbs) of cars & lading on a grade of 1% combined with curves of $4\frac{1}{2}$ degrees, track & cars being in good condition.

Another Westinghouse Victory.

In addition to the decisions of the U.S. courts, requiring the removal of about 1,100 infringing New York air brakes from the Buffalo, Rochester & Pittsburg Ry., & of 3,200 such brakes from the cars of the Great Northern Ry., the U.S. Circuit Court for the district of New Jersey has rendered its decision in the case of the Westinghouse Air Brake Co. vs. the Central Car Trust Co. & the Commerce Despatch Co. By this latter

ped with the brake of the New York Air Brake Co., with notice that it was an infringement on the claims of the patent in suit. . . . If they now suffer inconvenience through being obliged to discontinue the use upon their cars of the complainant's patented device, it will not be greater than they might have anticipated."

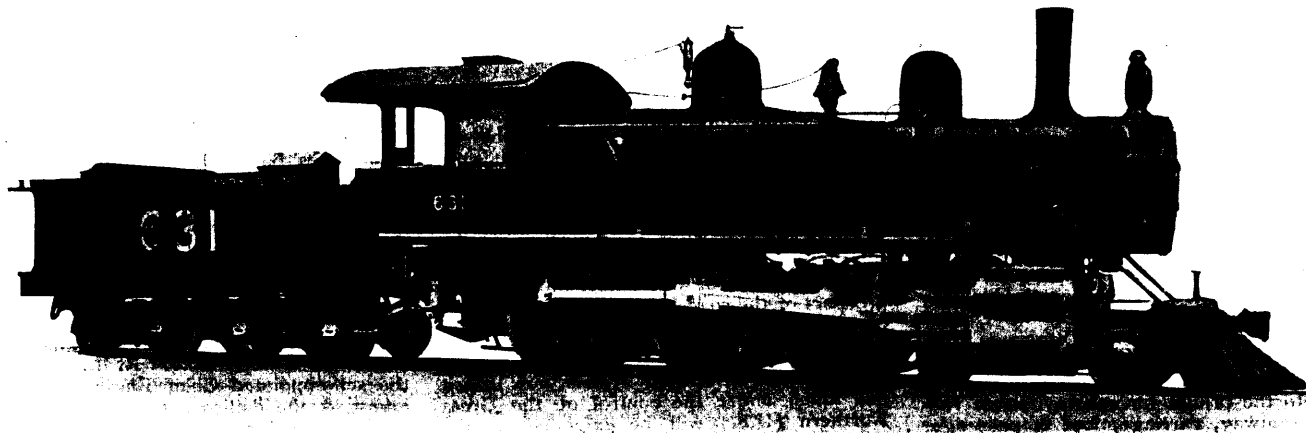
Equipment Notes.

The Intercolonial Ry. has invited tenders for 400 box cars, 60,000 lbs. capacity, & 100 flat cars.

The C.P.R. is building 2 dining cars in the Montreal shops, which will be unique in design & finish & will contain several new features.

The Northern Pacific has recently sent 1,000 new grain cars, of 70,000 lbs. capacity, on to the Manitoba division. A number of new locomotives have also arrived at Winnipeg. They can each haul 1,300 tons from Winnipeg to Grand Forks, Dakota.

In the recapitalization of the Westinghouse Air Brake Co. it is understood that the 20,000 shares set aside in the treasury are to be used for the acquirement of the Boyden & American Brake Co., the former a Baltimore & the latter a St. Louis company. Six thousand of the 20,000 shares will, according to the arrangement, be given to the Boyden people.



OTTAWA, ARNPRIOR AND PARRY SOUND RY'S COMPOUND TEN-WHEELED LOCOMOTIVE.

FIRE BOX.

Material, steel.
 Length, 102 $\frac{1}{8}$ ins.
 Width, 42 ins.
 Depth, front, 69 $\frac{1}{2}$ ins.
 " back, 58 $\frac{1}{2}$ ins.
 Thickness of sheets, sides, $\frac{3}{8}$ in.
 " back, $\frac{3}{8}$ in.
 " " crown, $\frac{1}{2}$ in.
 " " tube, $\frac{1}{2}$ in.

TUBES.

Number 280.
 Diameter, 2 ins.
 Length, 14 ft. 4 $\frac{1}{2}$ ins.

HEATING SURFACE.

Fire box, 154.0 sq. ft.
 Tubes, 2,108.0 sq. ft.
 Total, 2,262.0 sq. ft.
 Grate area, 29.75 sq. ft.

DRIVING WHEELS.

Diameter, outside, 56 ins.
 " of centre, 50 ins.
 Journals, 8 $\frac{1}{2}$ x 11 ins.

ENGINE TRUCK WHEELS.

Diameter, 30 ins.
 Journals, 6 x 10 ins.

WHEEL BASE.

Driving, 13 ft. 0 ins.

decision New York air brakes are required to be removed from 1,400 cars controlled by defendants. The Circuit Court of Appeals of the second circuit, in affirming the decision of the Circuit Court against the Great Northern Ry., says, in conclusion: "In Oct., 1894, the attention of the defendant was called by a general circular to the decision of the Circuit Court of Appeals; & in May, 1895, its attention was particularly called to the infringement by a written proposition from the complainant for a purchase of its valves & an indemnity against claims for infringement. It has paid no attention to the subject for about 3 $\frac{1}{2}$ years, & it now thinks that it is a hardship to be prohibited from further infringement. It has been a deliberate user of a large number of valves, & has preferred to run the risk of an injunction than to displace its present equipment." The Circuit Court in New Jersey, in enjoining the Central Car Trust Co., says: "There does not appear upon the record in this case any special matter which commends the defendants to the special consideration of the court. . . . The complainants requested them to remove these brakes, & offered to supply their own device upon reasonable terms; but both the request & offer were declined. . . . For purposes of economy, as charged in the bill & not denied, they purchased these cars equip-

The Ottawa & New York Ry. recently received from the Pullman Co. 2 passenger trains, each consisting of 2 passenger coaches & a baggage, mail & express car. The Co. has a number of other passenger train cars. The locomotive equipment consists of three 10 wheelers, recently built by the Baldwin Locomotive works, & 3 other engines which have been used during construction.

The Baltimore & Ohio Southwestern Ry. has solved the problem of cooling sleeping cars in stations at night. At Cincinnati, Louisville & St. Louis this line has sleeping cars placed in the stations at 10 p.m., which do not depart until after midnight, & in order to make them comfortable & cool 16-inch rotary electric fans have been placed in each end of the sleepers, thus removing the heated & impure air from all parts of the car.

In our July issue, pg. 120, we gave some information about the Cleveland cylinder which has been in use on an I.C.R. locomotive between Moncton & St. John for some months. We have since been informed by the Department of Railways that arrangements have been made for the trial of some of these cylinders. This is just about what we expected, as we hardly thought it likely that any arrangement would be made for their general use without tests first being made in an exhaustive manner.

The Chantilly, the 1st of the new C.P.R. sleepers, was turned out about the end of July. It is decorated, as will be the others, from the designs of the French artist, Theodore Jongey, & the beauty of its fittings certainly suggests the hand of a master. It contains 8 sections, 2 drawing-rooms, & at one end a large smoking & toilet-room. The smoking-room & the main body of the car are finished in mahogany & gold, the ceiling being of stamped leather, & the panels of the upper berth are of the same material. The upholstery is of terra cotta & green brocaded plush, imported from France. The 2 drawing-rooms are most artistic. The seats & ceilings are covered with brocaded plush of old ivory & green, & the furnishing is a beautiful white wood, known as primavera, or white mahogany. The toilet-rooms are arranged after the latest designs.

APPLICATIONS FOR INCORPORATION.

Kettle River, B.C.—Bodwell & Duff, Solicitors, Victoria, B.C., give notice of application to the Dominion Parliament for the incorporation of a company to build a railway from a point on the International Boundary Line, at or near Cascade City, B.C., thence westerly, following the valley of the Kettle River to a point on the boundary line, at or near Carson, also from another point on the boundary line, at or near Midway, northerly following the valley of Boundary Creek to a point about 20 miles north of Midway, with power to construct & maintain branch lines, & at the Boundary Line to connect with, & to operate the whole in conjunction with the railway line of the Spokane Falls & Northern R. Co., with power to construct telegraph & telephone lines for commercial purposes, as for the business of the railway, & for all other necessary & usual powers.

Ottawa River Bridge.—Perkins & Fraser, solicitors, give notice of application to the Dominion Parliament for the incorporation of a company to construct & operate a railway & general traffic bridge across the Ottawa River between the cities of Ottawa & Hull, with the necessary approaches from any station which the Co. may erect in those cities to the bridge for railway, street railway, tramway, carriage, foot & passenger traffic purposes, with power to expropriate lands; to amalgamate with or enter into arrangements with railway, street railway or any other corporation for the use of the bridge; & to charge toll, subject to the approval of the Governor-in-Council. The height of the arches of the bridge to be not less than 35 ft., & the interval between the abutments or piers to be not less than 150 ft., & for other purposes.

West Coast of Vancouver Island.—S. P. Mills, solicitor, Victoria, gives notice of application to the B. C. Legislature for the incorporation of a Co. to construct a railway from Victoria, via Sooke, San Juan & Alberni, along the west coast of Vancouver Island, to the vicinity of Hardy or Nahwitti Bays, on the extreme north end of the Island.

The Ottawa & Gatineau Valley Ry. has a party of photographers going over the line taking views of the beautiful scenery which will be distributed to advertise the summer resorts along the line.

FOR SALE

Relaying Steel Rails.

About 1,500 tons, 65 pound, with splices, for delivery in Canada. Reply to **R. L. Ginsburg & Sons, Detroit, Mich., or Buffalo, New York.**

RAILWAY PROJECTS.

Amherst & Eastern.—In our July issue, pg. 129, it was stated that the surveying of a route for the proposed line from Amherst, N.S., to the North Shore via Truemanville & Chapman Settlement, had been decided on by this Co. Nothing definite has yet been done, & it is by no means certain that the survey will be started this year. (Official.)

Brandon & Southwestern.—It is said this charter is now controlled by D. H. Purdon, of Toronto, who was at one time Chief Despatcher of the C.P.R. at Winnipeg, afterwards Assistant to General Superintendent Whyte, of the Western Division, & still later Despatcher at Moose Jaw. Mr. Purdon is said to have been between Brandon & the International Boundary recently with a survey party, & is said to have stated that work will be gone on with at once. This line, if built, would compete with both the C.P.R. & Northern Pacific, & unless it made connection with the Great Northern (U.S.) south of the Boundary Line, would have no outlet for its wheat traffic. It has a land grant of \$6,400 a mile for 17 miles, but, of course, could not be financed on that, & we do not see how it is going to be built unless the promoter has got the Great Northern interested in it. (July, pg. 129.)

Cobourg, Northumberland & Pacific.—We are officially informed that the final location for this line is being completed & amended, & that it is expected grading will be completed very soon.

Musquodobbet.—A director of this company writes us under date of Aug. 1:—"A survey is now being conducted jointly by the Nova Scotia Government & the Co, & it is expected the report of the Engineer will be handed in within the next fortnight. As everything depends on this report it is impossible to make any definite statement as to the future until it is fully discussed. I may, however, say that from what I hear there is every prospect of the road being constructed." (See our July issue, pg. 129.)

Spokane Falls & Northern.—It is very probable that the Corbin system, now that it has fallen under the control of the Great Northern (U.S.) will be extended at the

earliest possible date to Republic Camp, on the Colville Indian reservation, via Bossburg & the Kettle River valley & it is not improbable that it may be continued southward from Republic down the San Poil River, & across the Columbia to connect with the main line of the Great Northern in the Big Bend country, Washington. The completion of such a line would form a loop of railway that would monopolize the traffic of the northern portion of the State of Washington, a region as rich in agricultural, mineral & other resources as any tributary to the Great Northern east or west. —Rossland Miner.

Toronto & Hudson's Bay.—W. T. Jennings, C.E., who left Toronto July 7 on behalf of this Co. to examine the country to the north of the C.P.R. main line, returned to Toronto Aug. 10, after travelling some 700 miles by canoe. From North Bay he examined the country some 15 miles north, & then went via Mattawa to the head of Lake Temiscamingue, examining the district northward about 40 miles nearly to the watershed, after which he went along the Wabis River as far as possible. From Hailebury, on the west of the lake, he went on to Shark Lake, & reached Montreal River. From Bay Lake, an expansion of the rivers, he turned southward again, & followed in a general way the projected line of the old James' Bay Ry. to Lake Temogami, then on to Lakes Wickstrad & Morten, & got into a surveyed district. Then, directing his course westward, he reached the south shore of Lake Temogami. This district, about 25 miles north of the C.P.R., was examined for terminal purposes. Bending his way north, he reached the Montreal River again, passed the great Northwest bend, & crossed the height of land, arriving at the waters that empty into James' Bay. On the return journey he took in as much of the country as possible, & came out at Wahnapietoe on the C.P.R. Mr. Sankey, C.E., who accompanied him from Toronto, went on to James' Bay, by way of Lake Abittibi, to look over the ground for harbor purposes.

Woodstock & Brantford.—This "project," briefly mentioned in our July issue, has turned out to be a huge fake. R. L. Middleton, the self-appointed Chief Engineer, is under arrest, & the dailies are full of the details, which we need not repeat.

Established 1831. Annual Capacity 1,000.

Baldwin Locomotive Works.

SINGLE EXPANSION AND COMPOUND LOCOMOTIVES.

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

Adapted to every variety of service, and built accurately to gauges and templates after standard designs or to railroad companies' drawings. Like parts of different engines of same class perfectly interchangeable.

Electric Locomotives and Electric Car Trucks with Approved Motors.

Burnham, Williams & Co., Philadelphia, Pa., U.S.A.

FREIGHT MATTERS.**Vanderbilt Fast Freight Lines.**

Another important step in the general scheme of consolidation of the Vanderbilt railroad interests was determined upon at a meeting recently held of the presidents & managers of the several railways & fast freight lines. President Callaway of the New York Central Railroad announced on Aug. 6 that the 8 fast freight lines, which operate over the railways comprising the Vanderbilt system, will also be consolidated into 2 divisions with a general headquarters in Buffalo. This step, it is expected, will result in a large saving of expenses. It will reduce the working forces now employed by these freight lines more than one-half. The 8 fast freight lines connected with the Vanderbilt roads are now under the supervision of 5 managers as follows: The Red, White & Midland lines are managed by F. L. Pomeroy with headquarters at Buffalo, the Blue & Canada Southern lines by G. G. Street from Rochester, the West Shore line by W. F. Wilson from Buffalo, the North Shore Despatch by W. J. Mann from Detroit, & the Nickel Plate by D. F. Jennings from Chicago. These lines are to be so consolidated that all operating over the N.Y.C. Ry. & its connections will constitute one system, & all operating over the West Shore Ry. & its connections the other system. It is likely that each individual freight line will retain its name for the sake of convenience. The N.Y.C. system will include the Red, White, Midland, Blue & Canada Southern lines. The West Shore system will include the North Shore Despatch & the West Shore & Nickel Plate lines. The N.Y.C. system will be in charge of H. L. Pomeroy as General Manager & the West Shore System's General Manager will be W. F. Wilson. A reorganization of the accounting departments of the lines will also be made at the same time. A clearing house will be established at Buffalo, in charge of G. G. Street, now General Manager of the Blue Line, with the title of General Accountant, where the accounting of all the lines, which is now done separately, will be consolidated. Consolidations in the traveling & other outside agencies will also be made wherever it is found practicable to do so. Just how radical this will be will not be determined until after the managers of the roads have had a meeting & canvassed the situation. No official estimate of the saving to be effected is given, but the Railroad Gazette thinks it safe to say that the present force can be reduced one-third, effecting a saving of at least \$250,000 a year. At all events there is not a particle of doubt that the business could be just as efficiently conducted with two-thirds the present force of men.

Montreal's Elevator Facilities.

The elevator question is one that is now engaging the attention of the shipping interest of the port of Montreal & from the experience already this season of the shippers & the transportation companies ranks as one of the most important problems confronting those who have the interests of the port in their keeping. The G.T.R. has felt the need of greater accommodation for handling the large amount of business coming over its line, there having been considerable delay at times owing to the failure of the elevating facilities to keep up with the shipments as they arrive. From the General Manager's office it is learned that the facilities of the G.T.R. as at present constituted, consist of elevators of the Montreal Warehousing Co., which are in reality G. T. institutions. They are 2 in number, elevator A being situated on Wellington street, with a capacity of 400,000 bus. of grain & 60,000 barrels of flour, & C, located on Mill St., with a capacity of 600,000 bus. of grain.

The quantities handled through these elevators during 1897, was 6,374,204 bus. of grain, & 96,000 barrels of flour. Up to the end of June this year the following quantities have been handled: Grain, 3,579,735 bus.; flour 43,129 barrels. It will be seen that already this season more than half the quantity shipped last year has been handled, & the heaviest portion of the season—the harvest part—is yet to come. Matters at Windmill Point have been facilitated this year by the putting in of a carrier which can deliver grain direct from the elevator into the ocean steamers at that point. General Manager Hays says: "I believe that one or more large elevators of a capacity of at least 1,500,000 bus., should be constructed at Windmill Point, but the basin, of course, should be extended, & the depth of water made sufficient for ocean vessels, to come up right alongside the elevator. It is only by handling grain at a minimum cost that the port of Montreal can expect to hold its own. That alone increases its importance as an export grain port, as everything is now down to such a close margin that even one-eighth of a cent per bushel is many times looked upon as quite a profit."

C.P.R. Freight Differentials.

The C.P.R. was recently notified of a meeting of the executive officers of all railways doing a trans-continental freight business to be held in Denver, August 22. The C.P.R. was requested to send a representative to this convention, & R. Kerr, traffic manager of the C.P.R. lines west of Fort William, will represent it. It is generally understood that the officials of the western railways are preparing to register a formal protest against the continuance of the C.P.R. differential on freight business. The management of the Southern Pacific Ry., from whose offices the call for the Denver meeting was issued, states that the time has arrived when the different U. S. lines either should agree to allow the C.P.R. to do all the trans-continental freight business that is offering, or should deprive that line of the advantage it possesses in its present differentials on freight business across the continent. This is practically an extension of the much-discussed C.P.R. differential problem, in order to make the fight include both the freight & the passenger departments. The C.P.R., on account of its longer haul between U.S. cities in the east & U.S. cities in the west, has always been conceded a differential on transcontinental freight business. The U.S. lines claim that this existing concession permits the C.P.R. to name a rate at least 10% lower than rates over U.S. lines. Now that interlinear competition has led to a demoralization of tariffs, the U.S. lines, as usual, are attempting to shift the blame of that demoralization upon the shoulders of the C.P.R. It is not likely, however, that the C.P.R. will relinquish its claim to its authorized differential, whatever far-fetched charges may be brought against it by its disconcerted U.S. rivals.

Elevators in the Northwest.

From all indications 1898 will be the banner elevator building year in the history of the Northwest. There is not an elevator company in Manitoba that will not add to its storage facilities along every branch line in the province. Prominent among the new elevators will be those erected by the Northern Elevator Co. Already 10 are under construction at the following points: Oak River, Varcoc, Petty-piece, Cypress River, La Salle, Starbuck, Elm Creek, Somerset, Swan Lake & Union Point. Each of these will have a capacity of 30,000 bushels, & a few others will be erected later on in the season. When those mentioned are completed the Northern

Elevator Co. will have 102 elevators in Manitoba & the Territories. Besides the 5 to be built for the Lake of the Woods Milling Co., there is about completed an elevator for the Richardson Grain Co., of Kingston, Ont., at Sydney, to replace the one destroyed last winter. The Manitoba Grain Co. will also erect a number, & it is understood the Dominion Elevator Co. will add to its storage capacity. Bready, Love & Tyron will spend about \$50,000 in erecting elevators at 13 or 14 Manitoba & Territorial points.

Transcontinental Freight Rates.

A conference of considerable importance was held at the Great Northern headquarters in St. Paul, in July, at which were present traffic officials of the 4 great trans-continental lines. Freight rates to the Kootenay country, to Washington & the entire north Pacific coast & Puget sound country were discussed, & what is understood to be an amicable agreement was reached. The matter chiefly discussed was freight rates to Kootenay points. Those at the conference were Traffic Manager Kerr & Kootenay Agent Peters of the C.P.R.; Assistant General Freight Agent Garrett, of the Union Pacific; General Traffic Manager Clarke, & General Freight Agent Somers, of the Great Northern; General Traffic Manager Hannaford & General Freight Agent Moore, of the Northern Pacific. The St. Paul Pioneer Press says in speaking of the objects of the meeting:—"There have been no material reductions requiring advances, but in many cases the rates have fallen down, & in many other cases they have become ill-proportioned. It was necessary to check them up & re-adjust them."

The Ottawa & New York has given its freight cartage at Ottawa to A. Thoburn, treasurer of the Russell Theatre.

A joint through tariff, C.P.R., New York & Ottawa Ry., & Ottawa & New York Ry has been issued between Cornwall & stations on the C.P.R., Smith's Falls & east to Montreal via Finch Jct.

An immense business is being done by the Ottawa, Arnprior & Parry Sound Ry. this season in grain & lumber. The activity is from the west, Arnprior, Whitney, Gilmour's Mills & Parry Sound. All the lumber is for Montreal for export.

The G.T.R. has decided to make a bid for a share of the oat carrying trade, & for that purpose has arranged for the erection of an oat clipping elevator in Chicago. Such a building is a necessary part of the business. Hitherto the G.T.R. has not handled any of that class of business for the reason that it had not the necessary facilities. That deficiency will soon be removed, & the road hopes to participate in the carrying of the immense quantities of oats which are shipped every year from western points to the east, for export as well as for local consumption.

All freight rates were restored to a normal tariff July 25 on the Western roads. In this way was brought to a close a long-continued & disastrous rate war. While it was in progress many millions of dollars were recklessly thrown away. For twelve months rates in all parts of the territory west of Chicago have been badly demoralized. No section escaped. It is difficult to determine where the ill results were most severely felt. From St. Paul to the Gulf, & from Chicago to the Pacific Coast, the ravages of the war were experienced. But for it earnings of the roads would have shown phenomenal & unprecedented increases, & stockholders would have been enriched by the enlargement of dividend payments.—Railway World, Philadelphia.

THE DEVELOPMENT OF THE RAILWAYS OF CANADA.

By Walter E. Weyl.

Much of the acrimonious discussion over the question of state versus private ownership of railroads might be averted, did the advocates of either system recognize the limitations of their own arguments. It is characteristic of such dialecticians that they apply the results of one nation's experience to the problems confronting another, without considering the modified circumstances by which such experience is conditioned.

It is especially necessary to take this national equation into account in comparing the railways of Canada with those of the United States. The experience of these nations presents a series of parallels & contrasts directly traceable to the similar or to the diverse conditions existing in the two countries. Both in Canada & in the U.S. railways have grown more rapidly than population; in both countries they have often preceded roads, & even settlement itself; in both, the lines have been cheaply & rapidly constructed, & have been extended into the most sparsely-settled districts. In Canada as well as in the U.S. the main arteries of railway communication run east & west; in both countries the policy of private construction, ownership, & management has prevailed; & generosity towards the railways, as exemplified by large grants of land or money, has been common to the governments of both. The contrasts in the policy adopted on either side of the boundary line are equally striking, if less important; but the underlying similarity in the railway history of the two countries can be shown to have its cause in the like economic conditions & tendencies prevailing.

The English, on the whole, have favored a policy of private ownership of home, & of governmental ownership of colonial railways, but to this rule the case of Canada furnishes an exception. While the railways of India, of Australia, of the Cape, of Natal, etc., have been largely constructed or managed by government, the development of the railways of Canada was at first left to individual initiative. This laissez-faire policy of the government may be attributed in part to the economic doctrine then supreme in England, but it was no less due to the discouraging outlook for railway enterprises in Canada. At the beginning of the railway era the total population of British North America scarcely exceeded half-a-million, & these were mainly clustered in what are now the provinces of Quebec & Ontario & within easy reach of the great lakes & the St. Lawrence. Separated from the unknown territories of the west & from the Maritime Provinces of the east, even these tracts were too thinly peopled to invite large outlays for railways, particularly in view of the exceptional advantages presented by cheap inland navigation.

These adverse conditions were as potent in checking private enterprise, however, as in discouraging governmental activity, & the result was that, for a considerable period, the development of Canadian railways was exceedingly slow. As late as 1845 an insignificant 16-mile road from La Prairie to Quebec was the only railway within British America. During the fifties, however, the construction of the Grand Trunk, the Great Western, the Northern, & other lines was begun, & the mileage quickly grew from 71, in 1850, to 2,087, in 1860. The increasing population, the expansion of the settled area, the opening up of new lands to agriculture, & the steady increase in wealth & industry were causes, as well as effects, of improved means of land transportation, & after Confederation in 1867, economic, political, & military considerations united to increase the extent of the railroad net. The Grand Trunk continued to grow in

length, the Intercolonial & Prince Edward Island railways were constructed, the Canadian Pacific was pushed forward to a speedy completion, & branch lines were everywhere thrust out to the margin of settlement. The length of the railways increased from 2,150 miles, in 1866, to 5,157, in 1876; to 10,697, in 1886; & to 16,270, in 1896, the length of road in operation during 1897 amounting to 16,550 miles. The present extent of Canadian railways is thus only one-eleventh of that of American lines, but, with an approximately equal area, Canada's population bears a still smaller proportion to that of the U.S., & despite the fact that the Dominion contains less than five million inhabitants, there are but 7 countries in the world that can boast of a railway mileage greater than that of Canada.

This rapid development is to be attributed, in no small degree, to the financial aid of the state. Grants of land & money have been made by the Dominion, by the several provincial governments, & by municipalities, & of a total paid-up capital of \$920,000,000, no less than \$197,000,000, or 21.4%, was thus contributed, the average subsidy amounting to about \$12,000 a mile.

Of the total amount thus granted, the Dominion contributed more than three-fourths, or about 76%, the municipalities 8%, & the provincial governments 16%. Among the latter the government of Quebec has been unusually lavish, furnishing almost half of the total provincial contributions, & with a railway mileage not half so great as that of Ontario, more than doubling the donation of that province.

This policy of fostering the growth of railways by government subsidies has been subjected in Canada to considerable adverse criticism. It has been argued that the taxpayers have made immense sacrifices; that the lavish donations of the state have resulted either in the destruction of national wealth, or in its conversion to the uses of private persons; that this generosity has had a demoralizing effect upon the railways themselves; & that it has tempted them to convert Ottawa into one great lobby. These views, however, are far too pessimistic. A government subsidy should always be in the nature of a sacrifice. The policy has its *raison d'être* in the desire to combine the advantages of private & of state construction of railways, to encourage the growth of useful, but unprofitable, lines, without sacrificing the impetus derived from individual initiative. In populous and highly-developed countries, such as France, this assistance of the state has been principally required for the construction of local lines (*réseau nouveau*), but in Canada the government subsidies have aided the extension of the net by the construction of long through lines.

The favorite child of the Dominion has been the Canadian Pacific. That Company has received a grant of \$25,000,000 in cash, 25,000,000 acres of land, & about 640 miles of completed track, the last item, including preliminary surveys, costing the government some \$33,000,000. The advantages accruing to the Dominion from these sacrifices have been very great. Canada, east of Lake Superior, has always had the advantage of water connection with the Atlantic ocean from the end of March until the end of November, but west of the lakes communication was almost non-existent. Between Port Arthur & Winnipeg there was only "the old canoe route," which, moreover, could not be used to transport immigrants, & there was no connection at all with British Columbia. Half a century ago the necessity of an inter-oceanic line had already been felt, & in an open letter, in 1847, Major Carmichael Smith wrote as follows: "This great national highway from the Atlantic to the Pacific is the great link which is required to unite in one powerful chain the whole English race." But, while the U.S. rapidly completed several of these "great

links," the Canadians, with their smaller population, lagged behind. After Confederation, however, an extension of the railways towards the west became a necessity. At this time there were no railroads in Manitoba, in British Columbia, or in the northwest, & even ten years later the conditions were hardly changed. Without the iron road the consolidated was a union in name only, & therefore in 1871 the government commenced the extensive survey of the territory through which the Canadian Pacific was destined to pass. In 1877 the Dominion began the construction, but by 1881 it was decided to hand the enterprise over to a private company, on the condition that the road should be finished by 1891. This condition was more than fulfilled. By 1886 the railway was completed, with a mileage of 4,533; & since then it has rapidly grown by new construction & by buying, leasing, or operating other roads, until at present it represents the consolidation of 21 Canadian lines, & owns or operates about 7,251 miles, about a seventh of which is situated within the U.S.

The Canadian Pacific is neither the first nor the only railway in Canada which has grown by the absorption of other lines. Amalgamation has taken place much the same as in England, France & the U.S. Of the 144 railway companies in Canada in 1896 (including 8 electric railways & bridge & tunnel companies) 21 have been amalgamated into the Canadian Pacific system & 25 into the Grand Trunk system; the remainder are more or less combined. The public has frequently recommended the Sisyphean labor of forcing railroads to compete. The Ontario & Quebec was constructed at great expense to compete with the Grand Trunk, & the province of Manitoba spent fully \$600,000 to make the Northern Pacific enter into a competition with its northern rival. But war has ended in peace, competition has been short-lived, & the truce that invariably ensued led to an agreement of some sort, if not to actual consolidation.

The Grand Trunk is a notable example of this process of amalgamation. Lying within the fertile peninsula bounded by Georgian Bay & Lakes Huron, Erie & Ontario, it has successfully acquired, by lease or purchase, property after property, until its length has increased to 4,186 miles. It is becoming increasingly an American line, obtaining foothold in Michigan, Indiana, Illinois, Maine, Vermont, etc., & having recently obtained complete control of the ill-starred Vermont Central.

What the Canadian Pacific is to the western provinces & the Grand Trunk to Quebec & Ontario the government railways are to the Maritime Provinces, New Brunswick, Nova Scotia & Prince Edward Island. As political & military exigencies dictated its futile policy of building the Canadian Pacific, so the government ownership of the Intercolonial & Prince Edward Island railways was determined by similar conditions. As early as 1832 it had been proposed to build a line connecting Quebec with the sea-coast towns of Nova Scotia & New Brunswick, & after a survey in 1835-37, the opportunity of constructing this important line seemed to have come. But the course of the proposed railway would have led directly across territory then claimed by, & subsequently awarded to, the U.S., & the railways, as finally constructed in 1876, followed a circuitous route, in order to skirt the northern boundary of Maine.

In consequence of this wide detour, which was justified on military grounds, the Intercolonial Railway is a needlessly long & uselessly expensive line. Its present length is 1,189 miles, including a short line (Windsor Branch), which is operated, but not owned, by the government. While the government has already expended more than sixty millions of dollars upon this unfortunate railway, the road, since 1872, has been operated at an annual loss ranging from \$26,000 to \$954,000. The

financial failure of the Prince Edward Island Railway, the only remaining government railroad enterprise, has been perhaps even more disastrous, this road having been operated at a deficit from the beginning. These results, however, may not be used as arguments either for or against governmental management of railroads. Though financially a failure, the state railways of Canada have been in many ways a success. They have helped to join the eastern provinces in a strong political union, to create a traffic with Quebec & Ontario, to foster a feeling of solidarity, & to be serviceable to the country in the deplorable event of an American or Oriental war. The nation stepped into the breach where private capital hesitated, & the millions that have been spent have not necessarily been wasted.

The financial success of a railway, or of a system of railways, depends upon the relation that the excess of revenue over operating expenses bears to the total cost of the line. A railway may be successful because its gross receipts are large, or because its working expenses are small, or because its capitalization is low, or through a combination of some or all of these circumstances. The net income of a railway may be large, but where, as in the United Kingdom, the capitalization is very heavy, the net revenue per dollar of invested wealth is small.

In new & sparsely-settled countries, the railways are usually capitalized at a low figure. In the U.S. the capitalization is considerably heavier in the east than in the less populous west, & the same relation obtains between Western Europe & the more sparsely-settled countries of the east. The capitalization of Canadian railways is \$52,000 a mile, which is less than that of U.S. roads (59,610) & considerably less than that of roads in many European States. The capital account per mile of railway in England is about 5 times, in Scotland more than 3 times, in France & Belgium more than twice, & in Germany, Switzerland, Holland & Italy from once & a half to twice as great as in Canada. This low capitalization is due not only to the sparseness of the population, but to the comparative youth of the Canadian railways. The capital account of British railways increased from £24,630 in 1838 to more than £47,200 (\$235,000) in 1895, but this has been largely due, as in other countries, to the tendency of the railways to branch out into industries other than that of transportation.

The chief cause of the low capitalization of Canadian railways is the obvious one of low cost of construction, but cost & capitalization are not quite identical. In Canada, as elsewhere, the capital account has been swelled to larger proportions by the facile expedient of stock-working. When the Manitoba & North-Western went into receivership, it was bonded to from 50 to 100% above its cost of construction. The second issue of Canadian Pacific bonds was made at 25%, & a subsequent & still larger block was sold at 52. There is a natural tendency for the capital account of all corporations to approach, not the actual investment of capital, but the real value of franchise & other property; thus the inflation of railway property for the purpose of concealing profits, or from less laudable motives, has obscured the actual cost of constructing the railroads. In the absence of trustworthy statistics, however, we may still infer that the cost was not excessive. The right of way, which in thickly-settled districts is costly, & on which the English railways, according to a moderate estimate (that of Jean's), expended fully one-tenth of their total capital, was obtained in Canada cheaply, if not gratis. The vast sums often expended on palatial stations, on terminal facilities in great cities, in avoiding grade-crossings, etc., were not demanded by Canadian conditions. In the United Kingdom immense sums have been spent in promoting & combating parliamen-

tary legislation, & drains have been made upon the resources of the railways by all forms of legal & extra-legal extortion. On the other hand, many of the raw materials of construction have been dearer than in Europe, & the Canadians have only partially pursued the policy of substituting cheap alien for the dearer native labor.

A final cause of the low construction cost of Canadian railways is found in the character of the lines. In Canada, as in the U.S., there has been in the character of construction a wise adaption of means to ends, & cheap, light, single-track lines have been built, instead of the heavier & more durable track, in more populous districts. As traffic increased, the light structures have been perfected & supplemented; steel has taken the place of iron & even of wooden rails, & the permanent way & rolling stock have been generally improved. But the railways of Canada are still far more lightly constructed than those of the United Kingdom, or France or Belgium, owing to the smaller amount of traffic.

The bulk of this traffic is freight, the receipts from this source, amounting to 64% of the total income in 1897, while only 9.4% were derived from mail, express & miscellaneous sources, & but 26.6% from the passenger business. The preponderance of the freight traffic, achieved in spite of water competition, is due to the sparse population & the large area, distance acting considerably less as a deterrent to freight transmission than to travel. The passenger traffic of Canada has grown very slowly. While the tonnage moved, per head of population, increased 194% (from 1.60 to 4.73 tons) from 1876 to 1896, the number of travellers increased only 106% (1.40 to 2.88) during the same period. While the Canadian thus average only 2.9 trips a year, the average in the United States is 8.2, in France 9.1, in Germany 10.4, in Belgium 14.7, in the United Kingdom 21.4 (excluding season tickets), & an almost equal number in the New England States. If the length of the trip is taken into account, the statistics of travel are not so unfavorable to Canada, since in all rural, & particularly in thinly-settled, districts (Russia, Norway, Hungary, Roumania & the Western States) the average distance covered by a traveller is generally great. Like the English railways, those of Canada do not, as a rule, give statistics of passenger-mileage, but a rough calculation gives the average trip as about 40 miles. On the Canadian Pacific each traveller is carried 46.5 miles, & the rate per mile is 2.74c. If this fare obtained throughout the whole of Canada, the average distance travelled would not be far from 33 miles, but, despite the high fares in Manitoba & the Northwest, where 4c. & 5c. a mile are not unusual, the average receipts per passenger mile are probably less. On the assumption of forty miles per passenger, the average yearly travel per capita equals only 116 miles in Canada, as compared with 153 in Germany, 170 in France, 208 in the United States, & about 250 miles (est.) in the British Isles. With three-fourths of Belgium's population, 300 times its area, and 6 times its railway mileage, Canada carries but fifteen million (14,810,407) passengers compared to little Belgium's hundred million—a difference only partially compensated for by the smaller parcours (about 13 miles) on the Belgian railroads.

Since 1885 the passenger traffic has increased more slowly than the railway mileage, & from 1890 to 1895 it has remained almost at a standstill, but an increase of 15.6% in the traffic from 1895 to 1897 indicates a coming revival in the passenger business. The freight traffic has also recovered from the ill-effects of the business depression of recent years; but, despite the recent increase in traffic, the total earnings per mile of road have steadily declined. In 1875 the receipts per mile of road were \$4,033; in 1880 they had sunk to

\$3,418; in 1885, to \$3,175; in 1895, to less than \$3,000. This decline, which may be paralleled elsewhere, is due partly to the construction of new & temporarily unremunerative railways, & partly to the great decline in freight charges, which has been so striking a feature of American railway history. The receipts per ton-mile on the Canadian Pacific declined from 1.50 to 1.17c. from 1889 to 1896, & numerous other instances of cheapened transportation might be cited.

The result of comparatively low rates & sparse population has been diminished receipts per mile, the statistics for Canadian railways showing but \$3,107 in 1896, compared to about \$7,000 in the United States, \$11,000 in France & Germany, \$12,000 in Belgium, & almost \$24,000 in England & Wales.

Fortunately the operating expenses have declined still more rapidly. During the 20 years ending with 1895, the operating expenses declined from \$3,268 to \$2,049, & while the working expenses formed 82% of the total revenue in 1876, the proportion had sunk to 69% in 1896. Despite this decline in the coefficient of exploitation, however, the net earnings \$15,500,000, furnish but a very moderate return, 1.72% upon the total paid-up capital, including the government subsidies.

The Canadian railways have passed through a storm-&-stress period that has been accentuated & aggravated during the last few years. The slowly returning prosperity of both Canada & the U. S. promises to aid the railroads of Canada, & railway securities have risen, with increase in railroad profits. The suspicious decline in operating expenses within the last few years has occasioned a slight scepticism as to the actual extent of the increasing prosperity of the railways, & pessimistic views are held in London & elsewhere concerning the ability of such roads as the Grand Trunk to weather future storms. It seems probable, however, that the future progress of the Canadian railways will be continuous, if not rapid. The bright promises of 20 years ago have not been realized; population has increased slowly, & the great country to the south has robbed Canada of its immigrants. But the Canadians have built for the future, & the development of Manitoba & the west, & the increase of manufacturing in Quebec & Ontario, coupled with a conservative railway policy, doubtless will improve the railway conditions in Canada.—Engineering Magazine.

[In stating that the U.S. has robbed Canada of its immigrants, Mr. Weyl has, probably, spoken on hearsay. Of immigrants who came across the Atlantic, intending to settle in Canada, & then changed their minds & went to the U. S., the total number is very small. At one time there was a considerable movement from Quebec to the factory towns of the New England States, but the tide is now running the other way, & repatriation is the order of the day. From Ontario considerable numbers, principally farmers' sons, went to Minnesota, Dakota & other Northwestern States while those districts were being opened up by railways & before there was through all-rail communication with Manitoba & the Northwest Territories by the north shore of Lake Superior. But that also is a matter of ancient history, & to-day there is a considerable movement of settlers from nearly every Western State into the Canadian Northwest.—EDITOR RAILWAY & SHIPPING WORLD.]

At a meeting of the Ontario Lumbermen's Association in Toronto Aug. 2, it was agreed that the Board of the Association should see the G.T.R. & C.P.R. officials & endeavor to induce them to equalize the freight rates on soft & hard wood. To Toronto the rates now are 6½c. for soft wood & 7½c. for hardwood; to Montreal 12½c. for soft wood & 15c. for hard wood.

The St. Clair Tunnel.

The American Society of Civil Engineers met at Detroit, Mich., during the last week in July, & during the meeting paid a visit to the St. Clair Tunnel. The Grand Trunk provided a special train which took members to Port Huron, & there they were taken on a train of new gondola cars & pushed through the tunnel by one of the famous engines used for working the tunnel. Considering the stories that have recently gone about concerning the destructive action of engine gases, this visit to the tunnel was of special interest to some members of the party. It was learned from Chief Engineer Hobson, of the G.T.R., that the only corrosion that has been serious enough to be considered at all was that of the steel bolts through the flanges of the cast iron segments making up the tube. The tube itself has not been appreciably affected. These bolts have been renewed where corroded & the bolt heads & nuts covered by concrete, which has been put in to fill the angle made by the flange with the cylindrical surface of the tube. It will be remembered, doubtless, that the lower half of the tube was bricked up at the outset & faced with concrete, flush with the flanges. The return trip through the tunnel was made within 5 minutes or less after the first trip, & there was very little gas or smoke in the tunnel; it could not have been disagreeable except to an unusually sensitive nose. The engines burn anthracite. The scheme of working requires a minimum interval of 10 minutes between the passage of engines. There is no doubt that the loss of the lives of 2 men a year ago or so, because of the breaking-in-two of a freight train in the tunnel, was due to the carelessness of the engineman & his disregard of the definite instructions for working in the tunnel. Nevertheless, the consequences of an accident of any sort which should keep a trainload of passengers & an engine or two in the tunnel would be so terrible that some other motive power will probably be adopted, if it can be done with reasonable cost & efficiency of working. The Co. is now considering compressed air motors. Obviously, the problem is novel in some particulars, as there is no precedent for motors of the powers which must be used in this tunnel.—Railroad Gazette.

A Candid Railway President.

J. J. Hill, President of the Great Northern (U.S.), which recently acquired the Corbin system of lines running north from Spokane Falls, Wash., has no use for that city, if newspaper reports of a recent interview with him are to be depended on. This is what he is credited with saying: "As far as I am concerned, I do not care whether the road ever builds through Spokane or not. We come into the city now all right & get out all right. We have all the depot facilities in the city that we want, & we always expect to have all we want. The Great Northern cares nothing for Spokane. It handles the business it gets from here, but if Spokane did not exist the road would be just as well off. Spokane does not appreciate a railroad & never did. Spokane is the worst hole from the Atlantic to the Pacific. I would not care if the Great Northern did not come within 50 miles of Spokane. The road would be just as well off. When I come to the city I keep away from the business men. I have no desire to see them."

Collingwood Schreiber, Deputy Minister of Railways & Canals, will be the host next month to a party of pleasant people who will accompany him to the Pacific coast. Hon. Mr. Dobell, Mrs. Dobell, E. L. & Mrs. Newcombe, & L. K. & Mrs. Jones, of Ottawa, will be of the party,

SHIPPING.

Thousand Island Steamboat War.

The latest move on the part of the R. & O. Co. has been to put on the steamer Richelieu between Kingston & Cape Vincent, N.Y., & to reduce the fare to 25c. for the round trip, against \$1, which has been charged by the American Line. A Kingston correspondent says: The citizens have never had such cheap outings. They can have a 60-mile ride for 25c. & the distance covered in less than 5 hours. They can have an all-day sail to Ogdensburg for 50c. The R. & O. Co. has the steamers Caspian & Columbian on the Thousand Island route, & they secure great patronage. "I never had such terms," said an excursion manager, "as I have had this year. I can get half the receipts on the Columbian any time I want to put on an excursion. I have, of course, to pay for the advertising. Heretofore I got one-fifth the receipts. The opposition is a good thing for me." The boats have handled large crowds, & promise to do so as long as hot weather lasts. The American Line people are satisfied, so they say. Their business is not disturbed. What the R. & O. people do is an extra, & above their service. Meantime the people get better river opportunities than they have enjoyed for years. The schemes to secure passengers for the boats are novel & numerous. The American line has offered, in addition to a ride of 60 miles for 25c., to give its patrons a free ride on the electric belt line about Kingston, giving a view of the chief interesting points in the city. The R. & O. Co. will, it is expected, meet the new feature by giving free cab service.

At Cape Vincent, Aug. 16, the New York Central Ry. refused to allow the R. & O. steamer Richelieu to land at the railway dock. A person interested says this is the same kind of treatment accorded to it by the G.T.R., & the N.Y.C. is only giving tit for tat.

Hudson's Bay Company's Steamers.

On the Stikine River the Co. has 2 stern-wheel steamers of modern type, the Strathcona & the Caledonia, built at Vancouver this year. They are each 140 ft. long, & 34 ft. wide, with accommodation for 60 to 100 first-class passengers. They are lighted by electricity. Weekly trips are made between Wrangel & Glenora. During the season of navigation one of these boats is taken over to the Skeena River & several trips are made as far as Hazelton, the head of navigation, & the point where the pack-trails to the Stuart's Lake & Omenica countries start.

Upon the Athabasca River the Co. has 2 well-equipped stern-wheel steamers, somewhat similar to the above-mentioned. The one on the upper part of the river, the Athabasca, runs as far as the Grand Rapids, & the other, the Grahame, from below that point to Fort Smith on the Slave River, where connection with the Co.'s screw steamer, the Wrigley, is made. This boat runs as far as the mouth of the McKenzie River. These latter boats are intended for the service of the Co. only, but outside freight & passengers are taken as far as possible.

The Co.'s vessels going from London, Eng., to Hudson's Bay are the Erik & the Lady Head. These are both barque rigged, the former having auxiliary steam power, & both are specially built to contend with the difficulties of navigation through the ice in Hudson's Straits. The Erik goes to Ungava, Churchill & York Factory, & the Lady Head to Moose Factory, both vessels being fully required by the Co.'s own shipments. They leave London in the early part of June each year, returning there in September or October.

Realizing the Facts.

The American Elevator & Grain Trade, Chicago, says: "Buffalo, as the gateway of the grain movement from the Northwest, is no longer without rivals. The Canadian routes are numerous, & during thus far this season have not been without their share of patronage. From Duluth & Chicago, the Chicago, Duluth & Parry Sound line of boats are carrying corn & wheat to the elevator at Parry Sound. The upper lake boats running in connection with the G. T. Ry. carry wheat & corn to the elevator at Midland. By the C. P. Ry. Co.'s vessels grain is carried to Owen Sound. Other lake carriers, as the Georgian Bay & Lake Superior Steamboat Line, bring down wheat & corn from the Western ports to the various terminal elevators on Georgian & Lake Huron. But the three Georgian Bay ports—Midland, Parry Sound & Owen Sound—are the main gateways. From the first the G. T. Ry., from the second the O., A. & P. S. Ry., & from the third the C. P. Ry., carry the grain onward across Ontario to tidewater & the ocean steamers at Montreal, where, within a month after the opening of navigation this year, 8,000,000 bushels of grain had been loaded at her wharves."

The Galops Canal.

This canal extends from Iroquois, Ont., to the head of the Galops Rapids, a distance of about 6 miles. The work of enlargement now in progress is designed to raise the normal level of the existing canal 6 ft.—that is, to the height of the lowest known stage of water in the St. Lawrence River, above the guard lock at the head of the Galops Rapids. The prism of canal will have a width of 80 ft. on bottom, with slopes of 2 to 1 throughout, & a depth of 15 ft. at lowest water.

A lock will be built at Iroquois about 200 ft. south of the present one. The masonry will be of the best class of limestone, peck faced, laid in cement, & in courses varying from 18 to 30 ins. in height. The lock will have two chambers, the lower to be 530 ft. in the clear & the upper 270 ft. by 50 ft. in width, with a lift of 11 1/2 ft. at normal water, which, at the lowest stage of the river, is increased to 17 ft. It is expected that one-half of the prism will be completed so that vessels with a draft of 15 ft. may pass through with the opening of navigation in 1899. About 1,200 men are now engaged in this work. This enlargement will cost the Government at least \$2,000,000.

Maritime Province Ports.

Wm. Thomson & Co., steamship brokers, St. John, N.B., supply the following information about ports in New Brunswick & Nova Scotia:

Loading Port.	Depth Water on Bar at High Tide.	Depth Water in Harbor.	How Cargo Delivered to Vessels.	Cost of Stowing per Standard in 1896.
St. John, N.B.	42 ft.	50 ft.	Lighters.	0 70
Musquash, N.B.	20 to 22 ft.	30 "	Rafts.	80
Herring Cove, N.B.	No Bar.	30 "	Lighters.	80
Grindstone Is., N.B.	No Bar.	30 "	Lighters.	80
Hopewell Cape, N.B.	No Bar.	30 "	Lighters.	80
West Bay, N.S.	No Bar.	30 "	Lighters.	80
Tusket, N.S.	No Bar.	30 "	Rafts.	90
Margarets Bay, N.S.	No Bar.	30 "	Rafts.	80
Halifax, N.S.	No Bar.	40 "	Wharf.	90
Sheet Harbor, N.S.	No Bar.	30 "	Rafts.	90
Liscomb, N.S.	No Bar.	40 "	Rafts.	90
Pictou, N.S.	22 ft.	30 "	Wharf.	1 00
Pugwash, N.S.	20 to 21 ft.	25 "	Whf & Rafts	90
Baie Verte, N.S.	No Bar.	30 "	Rafts.	1 00
Shediac, N.B.	17 ft.	20 "	Whf & Rafts	80
Miramichi, N.B.	18 to 22 ft.	30 "	Wharf.	1 50
Bathurst, N.B.	No Bar.	30 "	Lighters.	90
Campbellton, N.B.	20 1/2 to 21 ft.	21 "	Whf & Rafts	75

Pontooning on the St. Lawrence.

The operation of cutting in two large steel vessels like the U.S. revenue cutters Gresham & Algonquin, in order to permit of their passage through the St. Lawrence canals to the Atlantic seaboard, & the announcement that a similar method of procedure will be necessary in the case of the revenue cutter Onondaga, building at Cleveland, which will also be taken over by the U.S. Navy Department on reaching the Atlantic, has again directed attention to this class of work, & has emphasized the skill & care necessary for its satisfactory performance. When the steel steamers Mackinaw & Keweenaw, built at West Bay City, Mich., were taken through the St. Lawrence in this way, a few years ago, the success of the work & the simple manner in which it was performed, was surprising to some vessel men. Since that time a large number of vessels—whalebacks, light-ships, tugs built for ocean service, oil barges, etc.—all of them of greater draught than is found in 2 or 3 of the canals at present, & some of them of larger dimensions than the canal locks, have been successfully moved to the seaboard. In the case of vessels of dimensions larger than the locks, it has been necessary, of course, to cut them in two, but where depth of water was all that was to be taken into consideration, the vessels have been raised on pontoons.

There are 3 or 4 concerns that are equipped for this kind of work, & that undertake contracts in which they agree to deliver the vessels safely through the canals & below the shallow parts of the river. They usually act jointly with the ship builders when it is necessary to cut a vessel in two. The accompanying illustration shows the sea-going tug W. H. Brown while being pontooned through the canals from the lakes to the seaboard. She was built at West Bay City, & is now one of the auxiliary naval fleet. Another tug built at West Bay City, the Wilmot, was taken through the St. Lawrence in the same way. The same contractors also successfully conducted the work of cutting in two, pontooning through the canals & erecting at Montreal the steamer Campana, as well as a light-ship for the U.S. Government that was built on the lakes, but intended for Atlantic coast service. Few vessel men perhaps realize the extent of equipment necessary to cope with the various lines of work that may be required in undertaking contracts of this kind.—Marine Review.

When coming up the St. Lawrence Aug. 8 the steamer Myles took a sheer in the current at Farren's Point near Cornwall, & knocked her forefoot off. She was drydocked at Kingston.

In British Columbia Waters.

The Puget Sound steamer North Pacific has been fined \$400 for infringing the customs act by allowing smuggled cigars to be brought into B.C. by members of her crew.

The C.P.R. Co's. steamer Trail, which was laid up at Nakusp for repairs during June & July, was put in commission again early in August. She is plying between Arrowhead & the Trail smelter & tows car barges.

The B.C. Iron Works, Vancouver, closed down in July on account of financial embarrassment & the Co. is being wound up. It is said the Co. lost heavily on building steamboats for the Yukon trade. It is expected a new company will be organized to carry on the business.

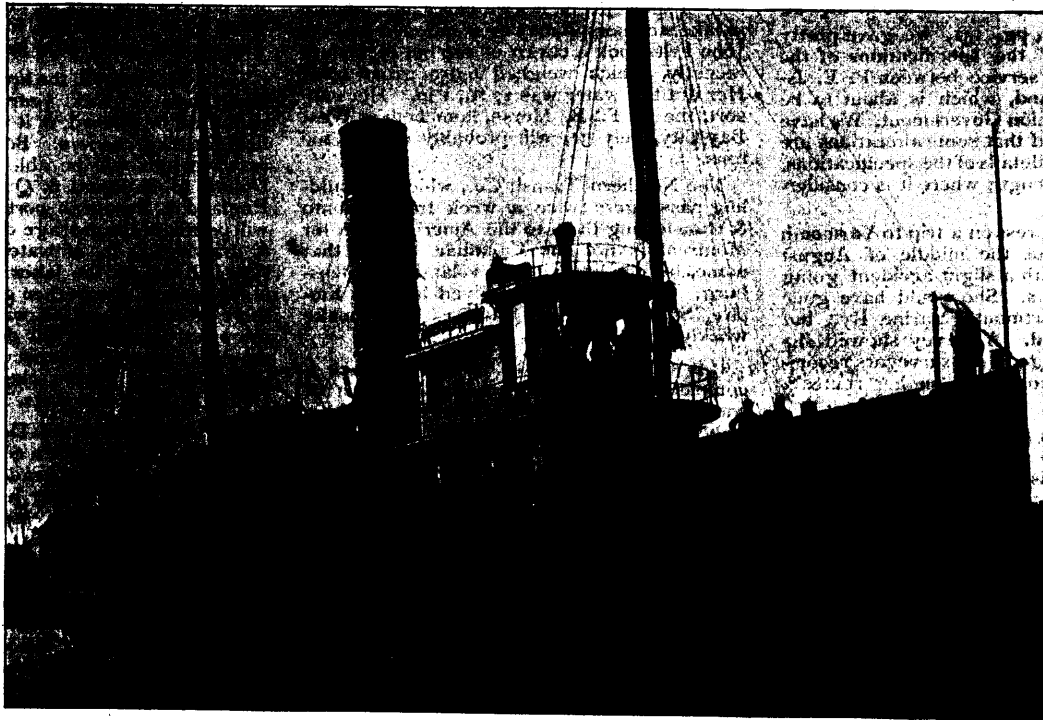
In reference to what we said in our July issue, pg. 134, the Canadian Pacific Navigation Co. informs us that it is its intention to put on a new steamer for the Victoria-Vancouver route, & that it hopes to have her running next season. The Co. has received a num-

As mentioned in our July issue, pg. 130, two out of the 3 steel-hull steamers built in Toronto for the C.P.R., & sent to Vancouver to be put together there for the Stikine trade, were sent back to the interior & are now being completed, one at Nakusp, for service on the Arrow Lakes, the other at Nelson, to run on Kootenay Lake between that place & Kuskanook, the temporary western terminus of the Crow's Nest Line. It is expected they will be finished by the end of September.

Several changes have been made in the officials of the C.P.R. inland steamer fleet. When Capt. Fraser was taken from the tug Columbia, & promoted to the steamer Trail. Capt. Estabrook, of the Hunter, on Slocan Lake, was given charge of the tug Columbia. Mate Griswold, of the Nelson, was given the same position on the Rossland. Mate Sutor, of the Slocan, has been transferred to a similar position on the Trail. Mate Allsmo, of the Rossland, has been promoted to be pilot of the Kootenay. Pilot McClennan of the Kootenay has been promoted to be Captain of the Hunter, on Slocan Lake. All these changes & trans-

fers are in the line of promotion.

A menace to navigation is drifting about the coast waters of the Pacific in the direct course of coasters. Last March the bark Forest Queen sailed from Puget Sound for San Pedro with lumber & has never since been heard of. The supposition is that she capsized in a gale, & is floating around somewhere buoyed up by her load of lumber. Recently a derelict that somewhat resembled the missing bark was sighted bottom up in lat. 43.19 N., long. 129 W., & a few days later the same derelict was sighted off Point



PONTOONS UNDER A LAKE-BUILT TUG IN THE ST. LAWRENCE.

ber of tenders, but at the date of our last advices on the subject (Aug. 1) neither of them had been accepted.

The plant & shipbuilding business of the Esquimalt Marine Ry. has been sold out to the British Columbia Marine Ry. Co., which assumed control July 27. Its intention is to enlarge the business & to supplement the large docking & repairing plant at Esquimalt with a smaller plant in Victoria Harbor, & also to equip a site in Vancouver already secured, with facilities for repairing & building craft of all sizes.

Nearly every C.P.R. inland steamer is doing a big business this summer, due largely to the immense amount of railway construction now going on in the Kootenays, on both the Crow's Nest Pass Ry. & the Robson-Midway branch. This necessitates the transfer of great quantities of merchandise, grading outfits & supplies of all kinds, to say nothing of the large volume of passenger traffic, including the railway laborers constantly going in to work on the lines.

Reyes. The underwriters & insurance men of the Sound are indignant that the U. S. Government, notwithstanding that a number of their vessels are lying idle at San Francisco, has taken no steps to destroy this danger to coasting vessels.

Lake Superior to the Rockies.

The steamer D. L. Mather, owned by the Keewatin Lumber Co., & plying on the Lake of the Woods, was burned to the water's edge July 26. Loss, \$8,000; covered by insurance.

The Rainy River Navigation Co. has secured the steamer City of Alberton, heretofore plying on Rainy Lake, & she will be taken into Rainy River & used to assist the Keenora in her Rat Portage trade & in running on the river during low water.

The new steamer Mohican, while running the rapids on the Rainy River above Fort Frances Aug. 9, got out of the channel & was crowded up on the rocks, staving a hole in her hull & giving her passengers a great

fright. Among those on board was D. D. Mann.

An impressive idea of Canada's greatness is afforded by an advertisement in a Winnipeg paper, illustrated by a picture of the 2 propellers of almost sea-going size which carry passengers from Selkirk to the mouth of the Saskatchewan & return, a distance of 700 miles. Quite a country Canada is, when almost hidden in its vast expanse is an inland lake on which propellers can steam for 350 miles straightaway.—Toronto Telegram.

The Maritime Provinces.

The keel of a steam ferry boat to ply on the harbor of St. John, N.B., was laid in Carleton, Dec. 8, 1838.

One thousand & eighty-one vessels of all kinds entered the customs at Sydney harbor from the opening of navigation to July 31.

The view on pg. 163 shows the marine railway recently built at Lunenburg, N.S., a description of which appeared in our June issue, pg. 102. We are indebted to the publishers of Seaboard, New York, for the use of the cut.

In our July issue, pg. 131, we gave pretty full particulars of the specifications of the winter steamer for service between P. E. Island & the mainland, which is about to be built for the Dominion Government. We have since been informed that some alterations are being made in the details of the specifications, to secure more strength where it is considered necessary.

The steamer Express on a trip to Yarmouth from Halifax about the middle of August touched & met with a slight accident going through the Tusquets. She would have gone in dry dock or Dartmouth Marine Ry., but both were occupied. A survey showed she had not been damaged; & the surveyors recommend that she be continued on her route, & she left as usual.

In recent issues (June, pg. 107, July, pg. 134) we have given particulars of a considerable number of vessel companies which have been incorporated, with G. W. Churchill & other members of the Churchill family of Hantsport, N.S., as shareholders. The firm of E. Churchill & Sons, the members of which are the principal parties interested, are wealthy vessel owners. They have been incorporating a separate joint stock company for each of their vessels, so that, it is said, in case of any one of their vessels getting involved by any cause, such as collision, etc., only the vessel implicated, or its value, would be liable.

The launch of the Dominion Atlantic Ry's steamer Prince Arthur took place at Hull, Eng., July 19, W. R. Campbell, the Co's. General Manager being present. The launch was, as on the occasion of launching the Prince George, a perfect success. Crowds attended the event, which passed off without a hitch. She is 290 ft. in length & 38 ft. breadth of beam. The work of installing her boilers & engines & furnishing her interior will be hurried forward, & it is expected she will be in readiness to leave Hull by Sept. 1. The Co's. magnificent liner, Prince George, shortly to take her departure for her Boston & Maritime Province service, was dressed with all possible bunting, rainbow fashion, & presented a fine spectacle.

The graving dock at Halifax, owned by the Halifax Graving Dock Co., with headquarters in London, Eng., is excavated out of the solid rock & is built of granite & concrete. It is 601 ft. long, 102 ft. wide at coping & 70 ft. wide at bottom, with 30 ft. of water on sill. Width of entrance 85 ft. The dock can take any warship built with all guns and armament. The property is provided with machines, workshops, etc., so that any cargo can be handled & repairs effected. The Co. also

owns the property of the late Chebucto Marine Railway at Dartmouth, N.S., consisting of no. 1 railway 2700 tons capacity; no. 2 railway 900 tons capacity; no. 3 railway 2 cradles 250 & 150 tons capacity; no. 4 railway 2 cradles 200 & 100 tons capacity.

Ontario & the Great Lakes.

Lakes Superior, Huron, Erie, Ontario & Michigan have an aggregate area of 94,750 square miles, which is larger than the area of Great Britain.

The largest whalback steamer ever built, the Alexander McDougall, recently left the barge works at West Superior, Wis., & went to the Mesabic ore docks to load with 6,000 tons of ore for her maiden trip down the Great Lakes.

While on her way from Toronto to Alexandria Bay Aug. 10, the steamer Cambria ran ashore opposite Presque Isle light. She had 300 or 400 passengers on board, all of whom were taken off safely. She was pulled off without much damage.

As a specimen of freight-carrying capacity in lake steamers, it may be mentioned that the John Fritz took a cargo of ore out of Duluth recently, which weighed 6,959 gross tons. Her draft of water was 17 ft., 1 in. Her consort, the S. F. B. Morse, launched at West Bay City, July 31, will probably carry 7,200 tons.

The Northern Transit Co., which is handling passengers twice a week from Toronto & transferring them to the American line for Montreal, is not the Canadian line of that name, but the line from Cleveland to Ogdensburg. The steamers employed are the Empire State & Badger State. They make weekly trips.

It is said a scheme is on foot to place a complete line of steamers on the chain of waters from Lindsay to Peterborough & from Cobocok to Peterborough. The project as put forth has been received with approval by the owners of the boats on Stony Lake. The object is to incorporate into a company the owners of all steamers now on the waters in order that a much better service may be arranged.

It is said the Hamilton Steamboat Co. has done very well this season, & that the receipts are ahead of last year, although the fare is much lower. It is considered unlikely that the Co. will go back to the old tariff even if the railways restore rates. It will probably advance fares something above the present price, but will not restore them to the old figures. The Co. has found that cheap fares by water attract business, & in future will make its own rates independently of what the other railways may do.

The surface level of Lake Superior at Duluth is a foot lower than at this date a year ago. This low water is a disadvantage to the big boats & helps the smaller ones, which are really out of the competition during high water. The two classes of boats are now about on an equality. An old vesselman says there is no way of explaining positively the variations in lake levels, but he believes they are lowering, though almost imperceptibly. This record is corroborated by G. K. Gilbert in the forthcoming report of the U. S. Geological Survey.

On Aug. 6 the C.P.R. began lake steamship service on Georgian Bay & Lake Huron. The new steamer City of Windsor was put on this service, & left Owen Sound for the following ports of call on the Bay & Lake Huron—Salt Ste Marie, Ont., Shequiandiah, Blind River, Hanova Bay, Algoma Mills & other intermediate points. A tariff has been issued by the freight department of the C.P.R. governing business on this route. This tariff establishes rates identical with those of the

Great Northern Transit Co. & the North Shore Navigation Co.

The Ottawa River Navigation Co.'s new steamer Island Queen arrived at Ottawa about the middle of August, & was put on the line between Ottawa & Wendover, leaving Wendover every week day at 6 a.m., arriving at Ottawa about 10 a.m., & leaving on the return trip at 5 p.m. from Queen's wharf for Wendover & all intermediate points. The Island Queen is a swift passenger propeller making 13 miles an hour, & has a passenger license for 250. She is neatly fitted up with upper & lower cabins & shade decks, & will be a great acquisition to the Co.'s fleet.

The Hilda, the first of 2 steel grain barges that are being built for the Prescott Elevator Co., was launched in Toronto Aug. 9. The barge is 180 ft. long, 30 ft. beam, & 14 ft. deep, having a canal draft of 40,000 bushels of wheat. She is built entirely of steel, even the decks, & the bottom is sheathed with rock elm plank 5 ins. thick to shield it from rocks in the canals. It has 5 hatchways on the deck, a cabin aft for the accommodation of the officers' quarters, & an excellent place is fitted up in the fore-castle for the deck hands. The second one will be launched this month.

Capt. McDougall, the inventor of the whaleback, says:—"Next year the new Canadian canal will be opened, & it will offer a broader field for lake carriers. Boats carrying 2,000 or 2,200 tons will be able to go direct from Duluth to Montreal & Quebec, & thence to England & European ports. The new canal will permit of the passage of boats 270 ft. long & drawing 14 ft. of water. Vessels of this type can sail on the lakes during the season of navigation, & can then go to sea & remain there in commission all winter, when freight rates on the ocean will demand it. Within the next five years I expect to see a fleet of at least 100 boats of this class trading between Duluth & European ports."

Official reports to the Department of Railways & Canals indicate a considerable diminution in the volume of trade passing through the "Soo" Canal during July. Up to the end of June the number of vessels locked through the canal this season was 1,506, an increase of 400 as compared with the season of 1897 to that date, while the amount of freight passed through was 1,419,197 tons, an increase of nearly 400,000 tons as compared with the corresponding period of last year. The falling off during July, however, has been such as to reduce the total traffic for the present season thus far considerably below the total for the corresponding period of last year. Up to July 31, 2,056 vessels were locked through, carrying 1,786,477 tons of freight, against 2,003 vessels & 2,205,822 tons of freight locked through last year up to July 31. Comparing the traffic in freight there was a falling off of nearly 600,000 tons during July. This year the canal opened April 11, & last year April 21.

Province of Quebec.

The R. & O. steamers are to call at Cap a l'Aigle on the up as well as down trip.

It is said arrangements have been made for the steamer Admiral, which runs between Montreal & Gaspé, to call at Matane, on both up & down trips.

Application for incorporation has been made by the Chateauguay & Beauharnois Navigation Co., with a capital stock of \$9,100, headquarters at Chateauguay Basin, to acquire & operate steamboats & other vessels. The applicants are:—Capt. C. B. Bouthillier, R. Lang, D. W. Tully, A. McRobert, St. Joachim de Chateauguay; J. Brault, of Sainte Philomene; J. H. Reay, of Saint Clement de Beauharnois, & P. Parent, of Beauharnois.

Water Routes to Yukon.

A reliable correspondent, writing from Dawson City, Yukon, about the end of June, said: "The water in the Yukon River is about 6 ft. less than this time last year, & some of the people anticipate that most of the St. Michael's fleet will not be able to come up, though trading companies say the water will be higher in July, & that all their boats will arrive, & the first boats are expected about July 15. Several boats have arrived from St. Michael's which left there last fall & wintered at Circle City & lower down. The following steamers left for down the river: The Hamilton June 25, the P. B. Weare June 26, & the Bella June 27—all of these boats carrying in the neighborhood of \$1,000,000 each in gold. The first steamer to reach Dawson from Lake Bennett was the Bellingham, which came down in 7 days, & the A. J. Goddard was the next. She came down in 5 days, & is now on her way back to the White Horse Rapids with government mail & passengers. Above the White Horse she has a sister boat plying to Bennett, & if the trip from here to White Horse can be made against the stream, we figure it will make a wonderful difference to this country, as it is less than 600 miles from here to Skagway, while it is 1,700 miles to St. Michael's alone. There are at present steamers running on all the waters between here & Bennett, & it is figured that a person can come from Seattle & Vancouver in 10 days of actual travel—say 4 days from Vancouver or Seattle to Skagway or Dyea, 1 day to cross the pass & 5 days on boat—and it is expected that as soon as the steamers get into running shape this time will be cut into considerably."

Another correspondent writing from Dawson City, July 23, says:—"The first steamer from St. Michael's of this season's crop arrived here during the past week. She was drawing only 3 ft., yet got stuck for 4 days near Circle City. The river is yet very low, though not quite so bad as was anticipated a month ago. Anxiety still is felt as to the getting in of food. One of the best of the river steamers—the Hamilton—was badly injured on her down trip by getting on bars, & may be knocked out for the rest of the season. We have now 3 little steamers between here & White Horse Rapids, by which passengers can reach salt water in 8 days, & can get into Dawson in 5."

Faith Fenton sent the following to the Globe, dated McDougall Camp, Teslin Trail, 50 miles beyond Telegraph Creek, Aug. 9:—Col. Evans, with 80 of the Yukon force, including artificers, surveyors, & 2 ladies of the Victoria Order of Nurses, left Teslin July 21 direct for Selkirk by the steamer Anglian,

Capt. McDonald, owned by the Canadian Development Co. This is the first trip & the first steamer on the lake. It was expected they would reach Selkirk about Aug. 1. The steamer will continue her course to Dawson, & expects to make her return trip in 2 or 3 weeks, when the remainder of the force will be taken forward. The Anglian is a substantially-built boat, & carries 100 passengers & about 300 tons of freight."

The success of the steamers Ora & Goddard in making the trip down White Horse rapids to Dawson & return will revolutionize Klondike travel, says the Victoria Colonist. The steamers had no difficulty whatsoever on the down trip, making the run from White Horse to Dawson in 3 days, so that now a man should be able to make the through trip from Victoria in less than 10 days & the return trip in very little more. Mr. Macaulay, who came up on the Ora, making the trip from Dawson to White Horse in 5½ days, says this time can be greatly lessened now

stern-wheel steamer Iskoot, referred to in our June issue, pg. 106, as having been wrecked at West Inlet while on her way to the Stikine have been taken to Vancouver, where they will be utilized by Mr. Read in a stern-wheel steamer he is building there.

The steamer Manaueuse has taken the place of the C.P.R. steamers Athenian & Tartar, between Vancouver & Wrangel, Dyea & Skagway.

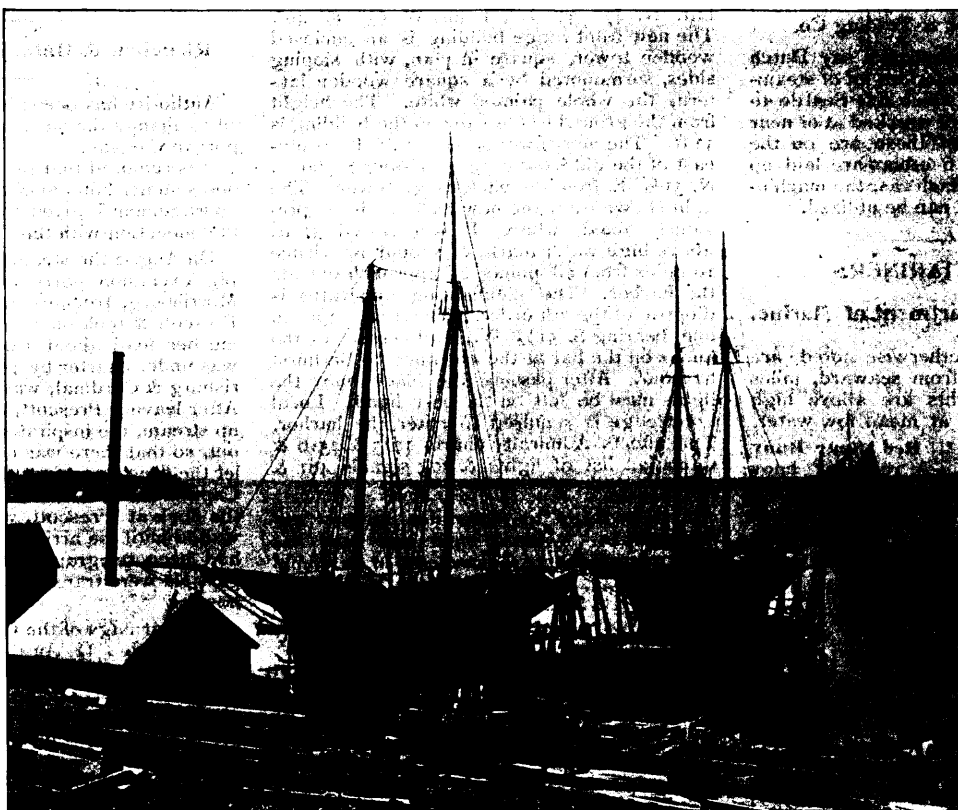
F. M. Rattenbury, Manager of the Bennett Lake & Klondike Navigation Co., was a passenger from Skagway by the steamer Tees, arriving at Vancouver early in August. He brought down \$15,000 in paper & about \$9,000 in gold—he had 600 ounces—the proceeds of the first two trips of the steamer Ora to Dawson City. He is assured that his Co. will reap a large harvest, for he is satisfied that the line is the best on the upper Yukon. At present the Co. has 2 stern-wheelers, the Ora & the Flora, running to Dawson, & arrange-

ments have been made with the Willie Irving, which practically gives 3 steamers on the route. The other vessel, the Nora, is running from Bennett to the White Horse, connecting with the other steamers. Mr. Rattenbury says scow after scow has been wrecked on the way down, & boatload after boatload of provisions lost in the swift-running river & lakes. Next summer his Co. will, in all probability, build 2, it not 3, other steamers for this service.

It is said a contract has been made with the Bennett Lake Navigation Co., of Victoria, B.C., for the carrying of Canadian & U.S. mails between Bennett & Dawson, Yukon, & that all classes of matter will be handled.

The upper river steamer, Joseph W. Clossett, was wrecked while shooting White Horse Rapids, Aug. 3. She was completed at Lake Bennett July 27, & started down river July 30. While trying to shoot the rapids the engineer failed to shut off steam at a critical point, & the steamer went on a rock. A gaping hole was torn in her side, & she sank in 18 feet of water. The passengers escaped to shore. The boat & freight will probably prove a total loss. The steamer was to connect with the Goddard & Kilbourne in the run to Dawson.

A Seattle dispatch, dated July 24, says:—"The steamer Kalamazoo, built by a party from Michigan, on Lake Bennett, last winter, was totally wrecked on Thirty-Mile River. The pilot ran her on a rock, & a great hole was torn in her bottom. The steamer & outfit on board will prove a total loss. This is the second steamer to come to grief on Thirty-Mile River after successfully running the dangerous White Horse Rapids."



MARINE RAILWAY AT LUNENBURG, N.S.

that the men know the river & the company is getting a supply of wood. On their trip, from 3 to 4 hours had to be spent every day gathering wood for the steamer, a delay that will not occur now that the Co. has sent men down to cut a lot & pile it on the banks. The only difficult place to navigate is Five Finger Rapids, through which the steamer had to be drawn by ropes attached to trees. Otherwise the trip was a pleasant one, the steamer a comfortable one. Capt. Ritchie, an old Mississippi navigator, was in charge on the first trip, but has given way to Capt. Bragg of Victoria. On leaving Dawson there were 62 passengers on board, but of these only 27 came through to Victoria, the others dropping off along the river to go prospecting.

Commissioner Ogilvie is taking to the Yukon an alco-vapor launch, 27 ft. long, & drawing 27 ins. of water. The engine is 7 h.p., & the boat can carry enough oil for 50 hours' run at full speed, & it carries 25 people.

The machinery, boiler & equipment of the

E. Anders, U. S. Collector of Customs at St. Michael & Alaska, reports that only 2 of the recently-constructed river boats—the Louise & the Leah—are likely to reach Dawson this year. Besides the vessels already reported wrecked on the way to St. Michaels, the barque Rufus E. Wood lost her river steamer overboard, the old tug Governor Stoneman lost a barge with a large quantity of freight when the river broke up, & the 12 steamers sent out from Seattle on June 2, by Moran Bros. were counted among the missing on July 7. These vessels were all alike & each cost \$50,000. In length they were 175 ft., beam 35 ft., & depth 6.5 ft. These boats were intended for passenger & freight purposes, having a capacity of 250 passengers & 400 tons of freight. Their ocean convoys were the tugs Resolute & Richard Holyoke, & the steam schooner South Coast. The Richard Holyoke had in tow 5 big river barges, each of which had 150 tons of coal aboard. The South Coast was loaded. At Dutch Harbor it was the intention to pick up the 4 boats that the Morans built there for the North American Transportation & Trading Co.

Recent reports from Unalaska say Dutch Harbor is crowded with a forlorn lot of steamers. Of the fleet of 20 which left Seattle to ply on the Yukon, 12 were wrecked at or near Dutch Harbor. Four of these are on the rocks, 2 are ashore & 6 others are laid up with broken backs. In each case the machinery is practically all that can be utilized.

NOTICES TO MARINERS.

By the Dominion Department of Marine.

All bearings, unless otherwise noted, are magnetic & are given from seaward, miles are nautical miles, heights are above high water, & all depths are at mean low water.

No. 35, July 15.—1. Red Spar Buoy South of Duck Islands.—A red spar buoy has been moored by the Government of Canada in 6 fathoms water off the south end of the southern shoal (Jeannie Graham shoal) extending southerly from Duck Islands, Lake Huron, Lat. N. $45^{\circ} 35' 45''$. Long. W. $82^{\circ} 53' 15''$. The buoy is $3\frac{1}{2}$ cables south of the shoalest spot, with 8 ft. water on it, is situated S. by E. $\frac{1}{4}$ E. $2\frac{1}{2}$ miles from Duck Island light, & S.W. by S. $1\frac{1}{8}$ miles from the most southerly point of the outer Duck Island. Vessels approaching it from the westward should not bring it to bear south of S.E. $\frac{1}{4}$ from the eastward, nothing south of W.S.W. This notice affects Admiralty charts 519 & 578.

2. Gas Buoys in Lake Erie.—Notice is given by the U. S. Lighthouse Board that on July 2 the following gas lighted buoys were established in the westerly end of Lake Erie: SANDUSKY BAY, OUTSIDE GAS BUOY No. 2, painted red, numbered 2, & showing a fixed white light during periods of 4 seconds duration, separated by eclipses of 10 seconds, on the northerly side of the entrance to the dredged channel across the bar, & about $\frac{1}{4}$ mile N.E. $\frac{1}{4}$ E. from Cedar Point range front lighthouse, in place of the former red second-class buoy numbered 2.

GULL ISLAND SHOAL GAS BUOY No. 3, painted black, numbered 3, & showing a fixed white light, on the north-easterly point of Gull Island shoal & about $1\frac{1}{10}$ miles S. $\frac{3}{8}$ E. from Middle Island lighthouse, in place of the former black third-class can buoy numbered 3.

NIGARA REEF GAS BUOY No. 5, painted black, numbered 5, & showing a fixed white light during periods of 10 seconds duration, separated by eclipses of 10 seconds, on the northerly side of a small reef & about 5 miles W.N.W. $\frac{1}{2}$ W. from Green Island lighthouse, in place of the former black second-class can buoy numbered 5. This notice affects Admiralty charts 332, 490 & 678.

No. 36. July 18.—Dangerous Rock in Hallbut Channel, B. C.—Information has been received from Capt. Walbran, Master of the Dominion steamer Quadra, of the existence of a rock with 8 ft. on it at extreme low water in the fairway of Hallbut channel, Barrier Islands, near Clan-ninick harbor, west coast of Vancouver Island, Lat. N. $50^{\circ} 0' 41''$, Long. W. $127^{\circ} 26' 8''$. The rock is of small extent, is slightly marked by kelp, & has deep water all around it. The following angles fix the position of the rock: N.E. tangent, Table Island 0° , S.W. tangent Table Island 74° , W tangent Lookout Island 48° , W. tangent, Granite Island 136° . This affects Admiralty charts 583, 716 & 1917, & B. C. Pilot, 1888, pg. 328.

No. 37 July 19, 1.—New Front Range Light Building at Bathurst, N.B.—The open-framed white wooden building from which the front range light on Caron point, entrance to Bathurst harbor, Chaleur bay, on the east coast of N.B., was shown, has been taken down & replaced by a new lighthouse tower, Lat. N. $47^{\circ} 39' 20''$, Long. W. $65^{\circ} 36' 40''$. The new front range building is an enclosed wooden tower, square in plan, with sloping sides, surmounted by a square wooden lantern, the whole painted white. The height from the ground to the vane on the building is 33 ft. The new tower stands $21\frac{1}{2}$ ft. south-east of the old front range building & 360 ft. N. $51\frac{1}{2}^{\circ}$ E. from the back range tower. The light shown from the new building is, as previously fixed, white. It is elevated 31 ft. above high water mark, & should be visible 10 miles from all points of approach outside the harbor. The illuminating apparatus is dioptric of the 7th order. The two lights in one, bearing S. $51\frac{1}{2}^{\circ}$ W., lead vessels to the buoys on the bar at the entrance to Bathurst harbour. After passing the black buoy the lights must be left on the port hand. Local knowledge is required to enter the harbor. This affects Admiralty charts 1715 & 2516 & Canadian list of lights & fog signals 481 & 482.

2. New Buoy at Entrance to St. Andrews, N.B.—A black steel can buoy has been moored by the Government in Passamaquoddy Bay, in 6 fathoms of water, two cables length S.E. of the beacon on the eastern bar of Navy Island, at the entrance to St. Andrews harbor, Lat. N. $45^{\circ} 3' 25''$, Long. W. $67^{\circ} 1' 56''$. From the buoy St. Andrews light bears N.W. by N. $\frac{3}{4}$ N., 1 mile; S.E. end of Navy Island W. $\frac{1}{4}$ N., $\frac{1}{2}$ mile; St. Andrews outer light on Tongue shoal E. $\frac{1}{4}$ N., $\frac{1}{4}$ mile. This affects Admiralty charts 464, 1743 & 2013.

By the U. S. Hydrographic Office.

St. Marys River—Middle Neebish cut.—On July 2, 1898, the 4 black spar buoys & 2 white float lights in that part of Middle Neebish being deepened will be moved to the centre line of the channel. Until further notice the north half of the channel, 150 ft. in width, will alone be available for navigation. The upper & lower of the buoys that have been moved mark, respectively, the upper & lower limits of the part being dredged. To assist navigation 2 white float lights will be placed near the upper & lower black spar buoys. Masters of vessels are requested not to attempt to pass each other within these limits & to give the right of way to down-bound vessels.

St. Marys River.—Steamer City of Berlin aground Between Iroquois Point & Round Island.—Capt. Jos. Rouleau & the Thompson Towing & Wrecking Association furnish the following information: The steamer City of Berlin, drawing 17 ft. of water, went aground June 22, in St Marys River, between Iroquois Point & Round Island. At the time of

grounding she was on the St. Marys River (upper) range, nearly opposite the Mission, about $1\frac{1}{2}$ statute miles above the red can buoy on Mission shoal. The shoal, which has 15 ft. of water on it, has been marked by the U.S. Engineers with a floating staff carrying a red flag. The city of Berlin was towed off the same day. The steamer Iron King grounded on the same shoal during May.

St. Marys River.—St. Marys Falls Canal.—The (old) Weitzel lock, St Marys Falls Canal, was reopened for June 15. Boats intending to pass through the canals at Sault Ste Marie are loading 6 in. deeper, the rise giving that much greater depth of water on the sills.

St. Marys River—St. Marys Falls Canal.—W. H. Garvey, pilot, maintains a set of range lights for the use of vessels at Point aux Pins above the St. Marys Falls Canal. They are white lights, the rear one being 35 ft. above the river level, & the front one 15 ft. Triangular slat targets mark the range in daytime.

Richelleu & Ontario Navigation Co.

Authority has been given by Order-in-Council to change the name of the steamer Passport to Caspian.

It is rumored that the Co. will build a \$50,000 summer hotel at Kingston if sufficient encouragement is given, the hotel to be operated in connection with the Co's steamers.

On Aug. 2 the steamer Columbian, with a big excursion party on board made up at Morrisburg, Iroquois & Cardinal, arrived at Prescott & took on nearly 200 people, making her load about 1,000. The boat, which was under charter by private parties in Morrisburg & Cardinal, was bound for Kingston. After leaving Prescott, & when about 3 miles up stream, the inspirator, or air pump, gave out, so that there was nothing else for it but let the fires down & return for repairs. The Captain brought his boat about & again gained the dock at Prescott, where the passengers waited until the arrival of the Caspian, which had been telegraphed for, when as many as possible were transferred & returned to their homes.

The earnings of the Co. from the opening of navigation to Aug. 1 were \$323,512.05, against \$323,835.66 in the corresponding period of last year, a decrease of \$322.61. The receipts from Aug. 2 to 9 were \$44,772, against \$38,797 in the same week last year, an increase of \$5,975. The Co. this year has not only the cheap rates of the railways to contend with, but has also the opposition of the new American line. Despite this the receipts on the western section of the line, between Toronto & Montreal, are said to be considerably ahead of last year, there having been gains in every month since the opening of navigation. It is said the decreases in earnings have occurred below Montreal, principally in the Saguenay service, where the Co. is running only 4 boats weekly instead of 6 as in previous seasons. The want of the 2 new large boats that are building has been very much felt by the Co. this year, as the present boats leaving Toronto have not sufficient accommodation for the business offering. Many tourists have had to take sofa beds on the boats, the stateroom accommodation being entirely inadequate.

The Great Northern Ry. (U.S.A.) has contracted with the Kanawha Coal Trust, of West Virginia, for 500,000 tons of coal, to be used for the road's next annual supply. This is a hard blow for the Pittsburg coal district, which was unable to compete for the order owing to the cheapness of West Virginia production.

WIND-BAROMETER TABLE FOR THE GREAT LAKES.

By Prof. E. B. Garriat, U.S. Weather Bureau, Chicago.

Height of Barometer Lake Level.	Direction of Wind	Character of Weather & Wind Indicated.
29.40 to 29.60, and steady	West	Fair, slight changes in temperature, gentle to fresh winds.
29.40 to 29.60, rising	West	Fair, cooler, fresh west to northwest winds.
29.40 to 29.60, falling	South	Warmer, increasing southerly winds.
29.60, or above, falling rapidly	East to South	Warmer, rain or snow within 36 hours, increasing east to southeast winds.
29.60, or above, rising rapidly	West to North	Cool & clear, quickly followed by warmer, variable winds.
29.60, or above, steady	Variable	No immediate change, but winds will go to south inside of 36 hours.
29.40, or below, falling slowly	South to East	Rain or snow, increasing easterly winds.
29.40, or below, falling rapidly	South to East	Rain or snow, high easterly winds, followed within 48 hours by clearing, cooler, west to northwest winds.
29.40, or below, rising slowly	South to West	Clearing, colder, fresh to brisk, west to northwest winds.
29.20, or below, falling rapidly	East to East	Severe storm of wind & rain, & wind shifting to northwest within 36 hours.
29.20, or below, falling rapidly	East to North	Severe northeaster, with heavy rain or snow, & winds backing to northwest.
29.20, or below, rising rapidly	Going to West	Clearing & cooler, probably cold wave in winter.

Application is to be made for the incorporation of the Roberval Que., Telephone Co.

The Hawaiian Government have given the Pacific Cable Co. the right to lay a cable between Hawaii, the U. S., Japan, & the Pacific Islands for 25 years. This Co. is incorporated under the laws of New York State, has a strong financial backing with ten million dollars capital. It is said work will begin at once; a bill is now before Congress asking for a \$100,000 a year contract between the Co. and the Postmaster-General for the transmission of official messages of the U. S. for 20 years.

ELECTRIC RAILWAYS.

Ontario Street Railway Taxes.

The question of the assessment of the rails, poles & wires of street railways as land is still before the Courts. It will be remembered that the Ontario Court of Appeal, a few months ago decided that the rails, poles & wires laid & erected upon the streets were assessable as land. The Privy Council has recently refused leave to appeal from this decision. The basis upon which the assessment is to be made is now the important question. The Assessment Act provides that an assessment should be made in each ward in the municipality, & that the property is to be valued at its actual cash value as it would be appraised in payment of a just debt from a solvent debtor.

A recent decision of the Court of Appeal on the method of assessing telephone wires & poles is of importance upon this point. It is therein held that the property in each ward must be valued as just so much dead material, & that the cost of construction or the value as part of the going concern is not the test. The assessment of the Toronto Ry. Co. was at the rate of \$6,300 a mile, such figures being based on the cost of construction, with an allowance for depreciation. The Co. appealed against this assessment, & the appeal came before County Judges Morgan, McGibbon & Dartnell, at Toronto, July 30. Only 2 witnesses were heard. K. W. Blackwell, of Montreal, valued the rails as scrap steel, at \$3.50 a ton. J. J. Gartshore, of Toronto, valued them at \$3. It was shown that the only market for the rails was at New Glasgow, N.S., where the rails would be worth \$10 a ton, but the freight & cost of taking up would reduce the value to the amount sworn to. The wires, etc., were valued by the witnesses at \$5.20 a mile. Ultimately the appeal was adjourned, to be taken up by the same Judges Sept. 6. The assessment of the power-house of the Co. was reduced from \$329,000 to \$300,000. Messrs. Fullerton & Drayton appeared for the City, & Messrs. Laidlaw & Bicknell for the Co.

The Maritime Provinces.

Halifax Electric Tramway.—In our July issue, pg. 138, this was spoken of as a 5% stock. It was last year, but this year the Co. has been paying 1 1/2% quarterly, or at the rate of 6% per year.

Following is the Co.'s financial statement to Dec. 31, 1897, as presented at the last annual meeting:—

ASSETS.	
Property.....	\$1,377,039.82
Accounts receivable.....	16,830.83
Supplies on hand.....	8,129.77
Construction (in process).....	1,520.27
Suspense accounts (as insurance, etc.).....	3,993.09
Deposit with City on snow account.....	500.00
81 shares stock in treasury.....	8,100.00
Cash on hand.....	76,845.10
	<u>\$1,492,958.88</u>
LIABILITIES.	
Bonds.....	\$ 600,000.00
Capital stock.....	800,000.00
Accounts payable.....	23,776.21
Suspense accounts as advertising.....	183.32
Bond interest due Jan. 1, 1898.	15,000.00
Quarterly dividend payable Jan. 1, 1898.....	10,000.00
Surplus Jan. 1, 1897.....	16 690.58
Surplus for 1897 after paying \$32,500.00 in dividends.....	27,308.77
	<u>\$1,492,958.88</u>

The stock was listed on the Toronto Stock Exchange July 23. There were no transactions in the stock, however, which was offered at 134, with 132 bid. The company has an exclusive franchise for 21 years, but at the expiration of the term it has the option of saying whether it desires to continue the exclusive privileges, & if so it may make a new arrangement. If it decides to forego exclusive privileges, the City cannot prevent the Co. from carrying on its business as at present. For exclusive privileges the Co. now pays \$1,000 a year & 4% of the gross receipts from the tramway department. In 1895 the present Co. was incorporated to take over the business of the Halifax Street Ry. Co., the N.S. Power Co., the Halifax Illuminating & Motor Co., & the Chandler Electric Co. During 1897 the Co. purchased the electric plant of the Halifax Gas Light Co. The Co. now has exclusive rights in the tramway business, & also does a large business in furnishing incandescent & arc lighting, power, etc. It also has the contract for lighting the city streets.

Ontario Lines.

Ayr & Paris.—A Toronto deputation recently interviewed Paris Town Council respecting a proposal to build an electric line between there & Ayr. It is said a charter will be applied for.

Brantford & Port Dover.—From Brantford comes a report that a Co. is being formed to operate an electric line between that city & Port Dover. It is proposed to use the T.H. & B. Ry. tracks between Brantford & Waterford, making that portion of the line electric as well as steam, & to build an electric line from Waterford to Port Dover.

Cornwall.—On Sunday, Aug. 14, a large party of Roman Catholic Foresters went from Montreal by G.T.R. to Cornwall, where they were conveyed by the street railway, to St. Lawrence Park, where they spent the day. It is said the electric cars continued running through the day, & carried ordinary passengers as well. The Lord's Day Alliance is contemplating legal steps in the matter.

Hamilton, Grimsby & Beamsville.—At the quarterly meeting July 25 the statement presented is said to have been most satisfactory, the business being 12% greater than for the corresponding period of 1897. It was decided to abolish quarterly meetings & to hold an annual meeting on the 4th Monday in January.

Owing to the heavy fruit trade another freight car has been added to the equipment.

It is said there are not many transactions in the Co.'s stock. T. Carpenter, Winona, recently sold his holding to Dr. Woolvorton.

The biggest Sunday business in the history of the line was done July 24, when about 1,500 people went from Hamilton to Grimsby Park to hear Evangelist Sam Jones.

Hamilton Radial.—The Co. began to run its cars on Birch avenue Aug. 6, & abandoned the Sherman avenue line. The new portion of track runs under the G.T. & Northern railway tracks, & thus dangerous level crossings have been done away with.

Hamilton Street.—On July 27 the Hamilton ratepayers voted on two questions. The 1st, "Shall the City purchase & operate the H. St. Ry.?" was answered in the negative by 1,867 to 263. The 2nd question, "If the City do not purchase the H. St. Ry. should the Council extend the franchise of the Co. for 15 years, that is until 1928?" was answered in the affirmative by 1,618 to 823. The Council has since been asked to extend the franchise for 15 years.

Lanark County.—Interest in this proposed electric line has been revived & the ratepayers of Perth are to vote on a bonus by-law.

London.—The Mayor has been notified that the London St. Ry. Co. will enter suit against the City to recover the amount of taxes, \$2,714, paid under protest. The taxes were paid on the Co.'s rails, poles, wires & rolling stock, according to the assessment as fixed last year by the Board of County Judges. By paying the taxes & bringing a suit to recover, the Co. will be in a position to appeal until it takes the matter to the Privy Council, if it chooses.

Metropolitan Street.—A special general meeting of shareholders was held in Toronto, July 28, to consider the issue of bonds to the extent authorized by the statutes relating to the Co. for each mile of single track of the railway, & authorizing the execution of a mortgage or mortgages upon all the property, tolls & income of the Co. for securing the payment of such bonds, such bonds to replace the existing issue of bonds, which are to be cancelled, & to authorize the increase of the capital stock of the Co. from \$100,000.00 to \$450,000.00. The meeting authorized the issue of 1st mortgage bonds to the extent of \$450,000.00, the capital stock to be increased to the same amount. (Official.)

Ottawa.—The City Council has decided to submit the Sunday street car question to the popular vote next January. There are two obstacles in the way of the operation of street cars in Ottawa on Sunday, the prohibitive act of the Ontario Legislature & a clause in the Street Railway Co.'s charter forbidding Sunday cars.

The men are asking for a 9 hour day at the present rate of pay, \$1.50. The Co. has offered \$1.43 for a 10 hours day, which the men refuse. It is not known whether they will strike or continue the 11 hour day.

Preston & Berlin.—A deputation recently waited upon the Ontario Government in the interests of this Co., & asked for a modification of the requirements of the statutory provisions respecting the granting of bonus by municipalities to railways. The law at present requires that the petition to a municipal council in favor of granting aid to any railway shall bear the signatures of a majority of the ratepayers & two-thirds of the real estate owners before the council can act upon it.

Toronto Ry. Co.—The gross earnings of this Co. are as follows:—

	1897	1898	Increase.	Decrease
Jan.	\$74,545.55	\$86,562.36	\$12,016.81	.....
Feb.	69,744.61	82,402.19	12,657.58	.....
Mar.	78,891.45	92,818.12	13,926.67	.....
April.	73,756.38	86,898.83	13,142.45	.....
May.	82,461.51	92,670.35	10,208.84	.....
June.	91,533.44	94,119.32	2,585.88	.....
July.	105,381.64	104,392.92	.....	\$1,078.72

The decrease in July is explained by the Epworth League convention having been held in July, 1897, & the increase for that month was \$18,800 over July, 1896, or more than \$10,000 above the normal increase. July this year more than maintained the normal monthly increase.

Toronto Suburban.—Owing to a dispute between the Co. & the Weston village authorities, the Co has ceased to run into the village & now stops its cars at the eastern boundary. The contention between the Council & the Co. has been, according to the former, the neglect of the latter to build the track as agreed to, to the upper end of the village. When the line was first established, about 4 years ago, it ran only to the outside limits of the village. The Co. then obtained a franchise from the Council, one of the conditions of which was that it was to build its line as far as the Methodist church, & subsequently to the farther limits of the village. The Co. built its line to the Methodist church, but all proceedings on the part of the Council has failed to induce it to carry out the other part of the contract. The case came up at Osgoode

hall in March, when it was judicially stated that the Co. should carry out its agreement under the franchise, or suffer the consequences.

Manager Close, in an interview, said: "The village Council had the law on its side, but no common sense. Weston was one of those villages a few yards wide & 2 miles long. The cars stopping on the village limit, instead of running half-way to the other end, would be of great inconvenience to the citizens, & he thought that after they had been without the cars for a couple of weeks the Council would come to its senses. In the meantime, the Co. would regard the law."

Province of Quebec.

Montreal Belt.—The traffic in July was very heavy, no less than 92,000 passengers being carried. In July, 1897, 62,000 passengers were carried, an increase for July of the present year of 30,000.

It is expected that this Co's stock will be listed in the near future. Last year the Co. paid interest on its \$300,000 issue of bonds, & this year, with the constantly increasing traffic, it expects to pay a dividend on the ordinary shares, amounting to \$500,000. If it is able to do this, it will be the most eloquent testimony to the future success of the road. The Montreal Witness says there is a great sparsity of good investments on the local stock exchange at present, & the stock of an electric road so favorably placed as the Belt Line would be welcomed on the list. Of course the success or non-success of the issue will resolve itself into a question of earnings or expenses; if these are satisfactory success is assured.

Montreal Park & Island.—This Co. has been refused the right to appeal to the Privy Council from the judgment of the Quebec Court of Appeal confirming that of the Superior Court. The Co. entered into a contract with the town of St. Louis du Mile End some years ago, by which it was to supply the town with a first-class electric car service on the leading streets, with transfers to the Montreal St. Ry. & tickets at the same rates as prevail on the latter line. The Co. failed to carry out its contract, & the corporation took out an action against it. After considerable delay the case finally came up for hearing before Judge Charland, who held the action to be well taken, but granted the Co. a delay of 2 months in which to carry out its contract. This did not suit the Co., & it took the case to the Court of Appeal. The latter Court confirmed the first judgment. Then the Co. took the case to the Privy Council, where it was represented by E. Blake, Q.C. L. O. Taillon went over for the corporation, & succeeded in having the Co's application for appeal thrown out.

On Aug. 17 the safe & office furniture of the Co. was sold by bailiff's sale at the head office of the Co., Place d'Armes Hill, at the instance of the Collector of Provincial Revenue, for taxes due. The same day the bailiff went out to the office at St. Pierre aux Liens to sell the effects of the Co's office there. The furniture was purchased back by the trustees, Messrs. Thibadeau & Morrice.

Montreal Street.—The gross earnings are as follows:—

	1897.	1896.	Increase.
Oct.	\$116,292.09	\$109,110.38	\$7,181.71
Nov.	110,929.60	100,818.57	10,111.03
Dec.	113,128.91	103,116.02	10,012.89
Jan.	110,140.83	89,620.55	20,520.28
Feb.	102,625.49	89,951.68	12,673.81
Mar.	114,677.91	99,441.87	15,236.04
April.	110,819.37	103,045.93	7,773.44
May.	123,508.09	116,337.03	7,171.06
June.	133,164.61	130,676.78	2,487.83
July.	129,245.92	143,986.62	14,740.70
	\$1,164,533.82	\$1,096,105.43	\$68,428.39

The Montreal Star says:—"The average daily earnings of the road for the past 10 months were \$3,879.23, & the average daily increase over last year has been \$322.11. The excellent showing has, of late, created increased interest in the stock on the Exchange, & in the last couple of weeks it has advanced several points. The earnings have also led to talk of an increased dividend, but whether the directors will make the change remains to be seen. They will hold their annual meeting in a few weeks from now, & it is quite possible that the matter will be discussed. At present the stock pays 2½% quarterly, or 10% annually."

On Aug. 2 the Bank of Montreal paid in London, Eng., the coupons due Aug. 1 on the M. S. Ry.'s 4½% loan for £140,000.

The Co. is laying a 60 ft. rail along its whole route on Craig St. With the fewer points the cars will run much more smoothly than where rails are shorter.

Montreal to St. Bruno.—A number of Montrealers have purchased a mountain at St. Bruno, Chambly district, about 10 miles from Montreal, & purpose expending considerable in improvements. An electric railway from Montreal to St. Bruno is included in the scheme.

Quebec, Montmorency & Charlevoix.—It has been decided not to extend the electric railway system of Quebec to Montmorency this year by electrifying the Q. M. & C. Ry., but everything will be got in readiness during the winter to change the motive power of the entire railway from Quebec to Cap Tourment from steam to electricity next spring.

Rimouski & Gaspé.—The people of the parishes in Rimouski & Gaspé counties want Ahearn & Soper of Ottawa to establish an electric railway along the St. Lawrence in the districts named. Mr. Soper states that he has replied that his firm's interests in Ottawa preclude them from going into the proposed line.

Jurisdiction of Railway Committee.

In the case of the G. T. R. Co. v. Hamilton Radial Electric Ry. Co., Judge Street, Toronto, recently held that under certain sections of the Dominion Railway Act, enacting that the plaintiff's & other railways, & any railways whatever crossing them, are works for the general advantage of Canada, & are to be subject thereafter to the legislative authority of Parliament & the further enactment that no railway shall be crossed by any electric railway whatever, unless with the approval of the Railway Committee of the Privy Council, are within the powers of that Committee, & therefore the Committee could empower the defendant's railway, contrary to the provisions of its Provincial Act of Incorporation, to cross the plaintiff's railway at grade, against the will of the latter. (An appeal was entered in this case, but subsequently abandoned.)

The Ontario Divisional Court has held that it is the duty of a motorman in charge of an electric street railway car to specially see that the car is sufficiently under his control, so he may take special care to avoid collision with aged & infirm persons on foot whose ailments are plainly evident, & who cross the road at a street crossing.

Saturday Evening Bulletin, New Glasgow, N.S.: "THE RAILWAY AND SHIPPING WORLD is a publication of special interest to steam & electric railways, shipping, express, telegraph & telephone interests. Each issue generally has illustrations or maps. It is only \$1 a year. Published in Toronto."

TELEGRAPHS & CABLES.

The Telegraph in British Columbia.

At the recent meeting of the Canadian Electrical Association in Montreal the following paper was contributed by R. B. McMicking, Manager of the Victoria & Esquimalt Telephone Co.:

Since that excellent paper on the "Early Construction of Telegraph Lines in the Dominion" was submitted at the fifth convention by C. P. Dwight, I have had in mind the need of a supplementary clause concerning the introduction of the telegraph into British Columbia in the early sixties, & which was to constitute a section of the somewhat formidable undertaking of connecting the New with the Old World by means of about 18,000 miles of land line.

It may be—doubtless is—within the recollection of some of our members that, on the failure of the first Atlantic cable in 1858, there was set in motion as a means of attaining the same end—i.e., telegraphic communication between the two hemispheres—a gigantic enterprise, known as the "Collins Overland Telegraph (Russian Extension) Co.," having in view the stretching of a wire from the telegraphic system of the Pacific States, through British Columbia, & via Behring Strait to Russia & Europe.

With marvellous energy & enterprise, the work of construction was commenced in 1863, the line entering B.C. from the south in longitude 122 W in 1864, being carried thence to New Westminster, from which point it followed the valley of the Fraser River & the Cariboo waggon road northward to Quesnelle, a distance of about 450 miles, which point was reached in 1865. Offices were established along the way, & from Quesnelle southward the line was soon opened for commercial business. The enterprise proved a great boon to the early colonists, both by reason of the large expenditure necessary in its construction & operation, as well as by the facilities offered thereby to the widely-separated settlements for speedy communication.

In 1865, also, a branch line was run across the San Juan Archipelago to Vancouver Island, connecting Victoria, the capital of B.C., with the main line at Swinomish, Washington Territory. This branch was about 74 miles long, including 5 submarine cables of a combined length of about 16 miles.

From Quesnelle the main line crossed the Frazer River to the westward, & following a north-westerly course, with Behring Strait as its next objective point, reached the Naas River—about 400 miles distant from Quesnelle—when the second Atlantic cable was successfully laid, & operated July 29, 1866.

The construction party of about 250 men—and which included explorers, surveyors, choppers, line builders, operators & transport gangs—on receiving the news of the completion of the cable, remained in camp 2 or 3 days, awaiting developments. At the end of this time, finding the cable continued to work well, they set out for civilization, leaving their tools, stores & material to the tender mercies (in great part) of the Hudson's Bay trappers & the native red man, as their transport out would have cost more than the new article.

During the winter of 1866-7 a station was maintained at Fort Stager, on the Skeena River, where an operator named McCartney & a companion domiciled until the following spring, & where oftentimes during those—to him—dreary winter months, I held converse with him by wire from Yale.

In addition to the construction party the Co. owned & had in service a fleet of vessels, steam & sail, plying upon ocean & river, some in the transportation of material, supplies & line equipment, others in preparing for the placing of a cable across Behring Strait, a dis-

tance of about 60 miles—quite an undertaking at that date.

Of the fleet, I now recall the ocean steamer George S. Wright, the river steamer Mumford, barques Onward, Clara Bell, H. L. Rudgers; ship Nightingale, schooner Milton G. Badger. The Onward made a trip to Siberia with material and supplies, was caught in the ice—where she remained all winter—and became a wreck when the ice moved in the spring.

The Behring Strait cable was to stretch from Cape Prince of Wales, on this side, to Plover Bay, on the Siberian shore, from which latter point inland about 350 miles of line had been erected, while southward from Cape Prince of Wales, in Russian America, about 300 miles of land line had also been constructed.

The course of this contemplated line through the British possessions & down the great waterways of Russian America would doubtless have brought it into close proximity to the present Klondike gold fields, & near Dawson City, in which event it is not improbable that the hole-digging necessary would have developed the riches of that section at least 30 years earlier, & have given to the former generation an additional important mining epoch.

The history of the building of this line, & the causes which led to a work having for its object the encircling of the world by wire at so early a date, is likely always to be read with interest.

The Co.—which subsequently merged into the Western Union Telegraph Co.—maintained the line northward as far as Quesnelle until purchased in 1870 by the B.C. Government, which in turn handed it over to the Dominion Government on B. C. entering Confederation in 1871. Later still the C.P.R. assumed control south from Ashcroft. While under Government control, & previous to the influx of population consequent upon the building of the C.P.R., the revenue fell far short of the expenditure yearly.

In 1867, Buie Bros., merchants, built a branch line from Quesnelle to Barkerville, in the Cariboo gold region, a distance of 60 miles. This branch, together with the main line between Quesnelle & Ashcroft, is still operated by the Federal Government.

The original expenditure in the construction of the B.C. section of the Intercontinental line reached the large sum, roundly, of three million dollars.

I have written from memory, yet, doubtless, with comparative accuracy, through having been in the Co's service during construction & for some years afterward, & while in charge of Quesnelle office in 1866 becoming the medium by which the news of the successful laying of the Atlantic cable, July 29, 1866, reached the construction party 400 miles north-west of that point on July 30, 1866.

Canadian Pacific Telegraphs.

The Co. is stringing another wire between Canso, N.S., & Halifax, to provide the necessary facilities for the increased business between Europe & the West Indies consequent on the opening of the Halifax & Bermuda cable.

The land lines connecting with the cable across the Straits of San Juan de Fuca between Beecher Bay B.C. & Crescent Bay Wash., were completed July 28, giving the C.P.R. Telegraphs direct connection between Victoria B.C., Seattle, Port Townsend, Port Angeles, Wash., & other Puget Sound ports.

The C.P.R. has announced a large reduction in rates from the Kootenay District, taking effect August 1, the maximum rate now being \$1 from any point in the Kootenay to any telegraph office in North America. Local rates from the same district have been reduced from 25% to 50%. The Co. was able to

make these reductions on account of the advance made in the construction of its copper wire across the continent, & other local construction in British Columbia, which enables it to handle business with B.C. to better advantage.

The Co. has built a line between Nelson & Kuskanook B.C., 65 miles, which will form a part of the Crow's Nest line, & has been built ahead of construction so as to place Kuskanook, the supply depot on Kootenay Lake, in connection with telegraphic points in West Kootenay. For the present but one wire has been strung.

The Co. is repoling its line between Victoria & Nanaimo, B.C., along the Esquimalt & Nanaimo Ry., & stringing an additional wire through to Departure Bay, 82 miles, to connect with the new Gulf cable. This when completed, about Sep. 1, will give Victoria 3 direct wires to Vancouver.

Telegraph Office Changes.

GREAT NORTHWESTERN.

OPENED—St. Leon Springs, Q.; Glanworth, Ont.; Bluevale, Ont.; Caledonia Springs, Ont.; Cacouna, Q.; Grimsby Park, Ont.; Port Sandfield, Ont.; St. Placode, Q.

CLOSED.—Lowville, Ont.; Odessa, Ont.; South Finch, Ont.; Cedars, Q.; Etchemin Mills, Q.

CANADIAN PACIFIC.

OPENED.—Departure Bay, B.C.; Amyot, Ont.; Brule Lake, Ont.; Grand Hotel, Caledonia Springs, Ont., summer office; Helderleigh, Ont.; Otter Lake, Ont.; Parry Wood, Ont.; Pembroke Station, Ont.; Pendleton, Ont.; Ray Side, Ont.; Rock Lake, Ont.; Ravensworth, Ont.; South March, Ont.; Seguin Lake, Ont.; St. Lazare, Que.

CLOSED.—Claresholm, N.W.T.; Dereham Centre, Ont.; Sulford, Ont.

Telegraph and Cable Items.

The Western Union is putting in new poles between Frederickton Jct. & Fairville, N.B.

The Lake Manitoba Ry. & Canal Co. is stringing a wire between Winnipeg & Portage la Prairie, Man., to connect with the wires on its railway line.

The Western Union has its poles up to Vancouver, B.C., & it is said wire will be strung by the end of August. The line will run from Vancouver to New Westminster, thence by way of Blaine & Fairhaven, Wash., where connection will be made with existing W.U. lines. (See June issue, pg. 111, July, pg. 140.)

A 4-masted twin-screw steamship, said to be the largest cable steamer afloat, has been launched for an English telegraph construction company. The craft is 440 ft. long between perpendiculars, fitted with vertical cable drums, & in 4 of the holds are circular cable tanks about 45 ft. in diameter & from 17 to 32 ft. in depth.

On the Philadelphia, Wilmington & Baltimore Ry., 42 telegraph poles have been set for a test of the life of different woods. The poles are divided as follows: 6 chestnut poles, creosoted; 6 pine poles, creosoted; 6 chestnut poles, woodline; 6 set in broken rock, 6 in clay, 6 in the ordinary manner, & 6 to have a hole bored near the ground so they can be saturated with oil.

The Charlottetown Board of Trade has complained to the management of the Anglo-American Telegraph Co., in England, in reference to the rates charged on business to & from Prince Edward Island & in regard to the offices being closed at 8 p.m. It is said that unless the Board's representations are effective steps will be taken to secure competition, it being claimed that the Co. has no right to a monopoly of the Island business.

TELEPHONES.

The Maritime Province Companies.

The Nova Scotia Telephone Co. has an exchange in Halifax with about 1,200 subscribers & one in Dartmouth with about 100. Its trunk lines have between 80 & 90 offices, the rates for 5 minutes conversation being minimum 15c., maximum 30c. At Sackville, N.B. connection is made with the New Brunswick Telephone Co., & at various Nova Scotia points connections are made with local companies as follows:—

At Windsor, with Cheverie Telephone Co.

At Hantsport, with The Valley Telephone Co., operating in Kings & Annapolis counties.

At Chelsea, with Queen's County Telephone Co., operating in Queens & Shelburne counties.

At Bridgewater, with the Central Telephone Co., operating in the New Germany district.

At Great Village, with the Union Furniture & Merchandise Co., operating in the Bass River district.

At Windsor, with the Rawdon Co's. lines, operating in the gold mining district, Hants county.

At Great Village, with the Economy Co's. lines, operating in the Economy & Five Island district.

At Maitland with the Noel Co's. lines, operating along the Noel & Walton shore.

At Elmsdale, with the West Gore & Nine Mile River Co's. line, operating in Hants.

This Co., as mentioned in our June issue, pg. 112, has been planning an extension between Pictou & Wallace, particularly to serve the lobster factory district. The matter is at present in abeyance; work may be gone on with this fall, but if not it is said that there is no doubt whatever the line will be built next season.

At the recent annual meeting the directors were re-elected as follows: President, B. W. Chipman; Vice-Presidents, R. Uniacke, C. F. Fraser, R. L. Borden, Dr. A. C. Cogswell, Dr. A. Haley, Windsor; C. F. Sise, Montreal; C. E. Harris, Secretary & General Manager. The accounts made up to Jan. 31 last were as follows:

ASSETS.		
Exchanges & plant	.....	\$267,688 32
Stores	.....	5,741 28
Stock in other companies	.....	12,640 00
Real estate, buildings, etc.	.....	16,365 69
Amounts due companies	.....	5,595 27
Due by agencies, including Halifax	.....	6,820 10
Cash on hand & in bank	.....	4,590 38
		\$319,441 04
LIABILITIES.		
Capital stock	.....	\$200,000 00
Bonds	.....	20,000 00
Bills payable	.....	14,045 29
Sundry amounts due	.....	12,533 34
Depreciation Account	.....	3,000 00
Dividend no. 15, payable March 1, 1898	.....	6,000 00
Accident Reserve Account	.....	5,902 50
Insurance Reserve Account	.....	6,000 00
Contingent Account and Sinking Fund	.....	30,000 00
Profit & Loss Account	.....	21,939 91
		\$319,441 04
PROFIT AND LOSS.		
CR.		
Feb. 1, 1897, balance	.....	\$ 20,204 89
Jan. 31, 1898, net earnings	.....	16,735 02
		\$36,939 91
DR.		
Jan. 31, 1898, Dividend 14, paid Sep. 1, 1897	.....	\$6,000 00
Jan. 31, 1898, Dividend 15, payable Mar. 1, 1898	.....	6,000 00
Jan. 31, transferred to Sinking Fund	.....	3,000 00
		\$15,000 00
Balance forward	.....	\$ 41,939 91

On Aug. 8 the usual ½-yearly dividend of 3% was declared.

In addition to the companies named above, the Yarmouth Amalgamated Telephone Co. operates in Yarmouth.

The New Brunswick Telephone Co., with headquarters at Fredericton, has an exchange

in St. John & 28 trunk line toll offices. In addition to the connection with the Nova Scotia Telephone Co. above mentioned, the N.B. connects as follows:

At St. John with the St. Martin's Telephone Co., of which the N. B. Co.'s Local Manager at St. John is Manager. This line has four offices, the furthest being some 50 miles from St. John.

At Norton with the Chipman Line, which is owned by the Central Ry. Co. This railway has no telegraph & operates its trains by telephone instead of telegraph orders.

The directors of the N. B. Co. are: Hon. A. G. Blair, President; A. A. Stockton, St. John; J. L. Black, Vice-President; C. Fawcett, Sackville; W. T. Whitehead, Fredericton; C. F. Sise, Montreal. The managing Director & Treasurer is F. A. Thompson, Fredericton.

On the trunk line between St. John & Moncton, 90 miles, iron wire is being replaced by copper, the intention being to extend the copper wire to Sackville, where connection is made with the Nova Scotia Telephone Co. In St. John the Co. uses silicium bronze wire, 17 gauge, entirely, finding the life of no. 12 iron for exchange work to be only about 4 or 5 years.

The Telephone Co. of Prince Edward Island, with headquarters at Charlottetown, has exchanges in Charlottetown & Summerside & pretty well covers the Island with its trunk lines, having 76 stations & about 200 miles of line outside the exchanges. Its charges for the trunk lines are: 5 miles for 5 minutes conversation, 10c.; 5 to 10 miles, 20c.; over 10 miles, 25c.; with ½ rates for each additional 5 minutes or fraction thereof.

Bell Telephone Co.

At a meeting of directors, July 29, acting upon the power conferred upon them by the shareholders at the annual meeting in Feb., 1892, it was decided to increase the capital of the Co. from \$3,168,000 to \$3,960,000. Each stockholder of record on July 29 is entitled to take, at par, shares of the new stock in the proportion of 1 share for every 4 shares then held. Subscriptions will only be accepted for full shares. Holdings that are not multiples of 4 shares can be adjusted by the purchase or sale of rights. The Co. will neither buy nor sell rights. The right to subscribe will expire on August 20, at 1 p.m. All stock not taken by subscriptions then on file at the Secretary-Treasurer's office will be disposed of as the directors shall determine. Stockholders who take new stock must file their subscriptions, & subscribers under purchased rights must file the assignment under which such rights are acquired with their subscriptions, at the Secretary-Treasurer's office, before August 20, at 1 p.m. Sellers of rights will not subscribe therefor. Payment at the rate of \$100 for each share must be made as follows: 50% on Sep. 1, 1898, 25% on Jan. 2, 1899, & 25% on April 1, 1899. Receipts for the amounts paid, bearing interest at the current rate of dividend, will be issued in exchange for each payment, & stock certificates will be issued at the date of the final payment.

After the publication of the notice there was an immediate demand for rights, which brought 60, while the regular stock ex-rights sold was bid 165. The price offered for rights shows the confidence which the public has in this security.

The Co.'s property in Barrie, Ont., was this year assessed for \$3,750. The Co. appealed against this decision to County Judge Ardagh, who gave judgment reducing the assessment to \$933.85, & stated that the property should have been assessed in the several wards & not in bulk. He held that telephone instruments & income are not accessible, but switchboards are.

In London, Ont., the Co. has lowered rates as follows: Telephones in residences from \$25 & \$30 to \$20 a year, unlimited, & for doctors' & dentists' offices from \$35 to \$25.

A new system of numbering telephones has been adopted in Montreal, under which it is necessary in all cases while asking for the number of the telephone required to add the exchange to which it belongs, that is, either main, east, up (uptown), Westmount or south, as the numbers are to run from 1 upwards on each exchange. This has necessitated re-numbering a large majority of the telephones. It is the custom in Montreal for operators to use the letter O instead of the word "naught," as, for example, in numbers like 2030, which is called "two-O-three-O," instead of "two-naught-three-naught," as this is thought, after years of experience in the U.S., to be less confusing & causes fewer mistakes.

The Co. met with a good deal of opposition in Quebec on Aug. 10, in regard to its scheme to put its wires underground. Local Manager Dauphin & Mr. Tower, of Montreal, appeared before the Civic Road Committee to explain their project, but as it did not provide for the removal of all street poles, a hot argument ensued. Mr. Tower claimed that it was necessary to leave some poles standing for distribution purposes. The committee wanted them all down. The Co. claims that by its charter it can put the wires underground, whether the corporation assents or not, & they propose to do so. Montreal had a similar case which the Privy Council decided against the city. The committee finally decided to send the City Engineer, with Mr. Tower, to look over the ground & report.

Telephone Items.

The Vancouver, B.C., Telephone Co. has started a nickel-in-the-slot machine at English Bay, which has been found a great convenience to business men & others camping out.

A telephone company has been established at St. Valier, P.Q., & is giving communication between the parishes of St. Raphael, St. Cayetan d'Armagh & St. Philemon de Bellechasse.

Dr. Shaw, Lucan, Ont., is said to be making arrangements to construct telephone lines to some of the neighboring villages. It is said a line is to be built first to Southgate, in London township, & after to Saintbury & Mooresville.

The People's Telephone Co., of London, Ont., which recently secured a 15 years' franchise from the city, is said to be going to withdraw from the field, the City Council having declined to guarantee an extension of the franchise at the end of that term.

A telephone line has been completed by a private company to Welwood, Man., 15 miles north of Carberry, with an intermediate station at Petrel, 8 miles out. It is said the Bell Co. will put in a service between Carberry & Neepawa, 30 miles, with stations at Brookdale, Montrose & Petrel.

The Ontario Telephone & Switchboard Construction Co. has been incorporated by Ontario Letters Patent, with a capital of \$75,000. It is composed of R. Fox, T. H. Smallman, F. B. Leys, T. H. Purdon, R. A. Bayly, J. Labatt, M. Masuret, J. Milne, Dr. J. D. Wilson & J. R. Minihnick of London, Ont., & R. H. Evans & H. C. Walters, of Detroit, Mich.

The New Westminster & Burrard Inlet Telephone Co. has toll lines in operation between Steveston, New Westminster, Vancouver, Port Moody, Ladner's Landing & Chilliwack, a total length of 106 miles of toll lines tributary to the cities of Vancouver & New Westminster. There are, also, 18 offices where the general public can communicate to or from, on payment of tolls. The Co. also operates the systems at Nanaimo, Kamloops, Vernon & Nelson.