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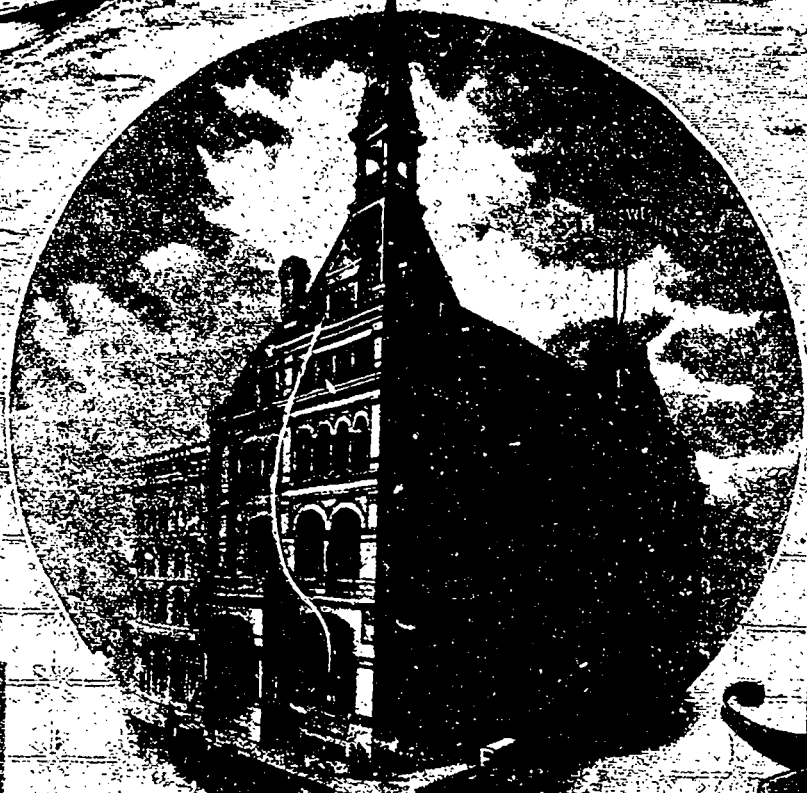
APRIL, 1887.

# Railway TORONTO, ONTARIO.

# WESTERN ASSURANCE CO.



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AGENCIES IN ALL PRINCIPAL CITIES AND TOWNS IN CANADA  
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# RAILWAY LIFE

A MONTHLY JOURNAL  
CANADIAN

DEVOTED TO  
RAILWAY INTERESTS

Vol. II.]

TORONTO, ONT., APRIL, 1887.

[No. 4.

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and Manitoba Roads, thence down the River by boat to Winnipeg. If the scheme is successful quite a large traffic will be built up over this new route.

THE annual special issue of the *Timber Trade's Journal* of London, Eng., is a particularly creditable number of this recognized authority in Britain on the important interests it represents. Besides the regular reviews and news articles there are many special articles, descriptive of new devices in wood-working machinery, plans of important timber docks, and other information of value to the trade, the whole profusely illustrated.

ONE of the institutions of Kingston is the Library of the Kingston and Pembroke Railway Mutual Aid Association. The association has a good selection of books and intends to become the finest institution of the kind in Central Ontario. The company recently granted \$200 to the Association to be used in buying new books. The library is now so large and attractive that, at the request of a number of prominent citizens, it is proposed to admit the public at a nominal fee.

MAYOR KING, of Calgary, in an interview, said:—"The Canada Anthracite Coal Company have had from 100 to 150 men employed all winter, and they have shipped several car-loads to Calgary in the rough state. This coal, which is hard, burns equally well, or even better than the Pennsylvania coal, and has given the very greatest satisfaction whenever it has been tried. The Canada Anthracite Coal Company has only been organized from six to eight months, and in that time they have expended about \$30,000. They are putting in a lot of new machinery, and will commence about the first of next month. The supply is unlimited. They have discovered one seam of four and a half feet and another of seven feet, and they expect to strike another seven feet seam almost any day."

THE United States Government proposes to build a new lock on the St. Mary's Canal. The new structure is to be 100 feet wide and

800 feet long, with 21 feet on the mitre sill and a lift of 18 feet. This would accommodate vessels of 20 feet draft, raising the tonnage of vessels to be passed from 3,000 to 5,000 tons. The cost is estimated at the enormous sum of \$4,738,865, and it is expected that it will be ten years before the work can be completed. It is believed that the traffic between Lake Superior and the other lakes can be much increased by this work. Last year the tonnage passing through the canal was 4,200,000 tons.

A new invention to extinguish fires in coaches in case of railway accident has been recently tested in Lincoln, Neb., with flattering results, says a despatch. The invention consists of an apparatus fixed to the inside of a car, directly over the stove, with a pipe connecting the two together. If the coach telescopes or rolls over in the ditch, the extinguisher is at once discharged into the stove; and at the tests made the fire was so completely extinguished that not a spark could be found in the debris after the discharge. From the working model and the experiments made it appears that the invention is practical, and steps will be taken at once to introduce it to railway managers.

THE following despatch from Detroit appeared in the daily press lately; Referring to a St. Thomas rumor that the Canada Southern Railway was to be transferred to the Canadian Pacific, President Ledyard, of the Michigan Central Railway, says the report probably grows out of the fact that negotiations are pending between the two companies regarding the interchange of traffic, which he hopes will shortly be concluded. Mr. Ledyard goes to New York to meet Sir George Stephen and Mr. Van Horne, and a definite understanding will probably be reached. Mr. Ledyard says such an arrangement as was rumored could not be made unless the stockholders of the Canada Southern agreed to it, and as they have agreed to an operative agreement with the Michigan Central which has eighteen years more to run, it is not likely they will make another one.

THE traffic receipts of the Grand Trunk Railway for the week ending April 16th show an increase of \$7,198 compared with the corresponding week last year.

"I've been on this road ten years," said the conductor on a southern railroad to a passenger who complained of the slow time, and I know what I'm talking about." "Ten years, eh?" said the passenger; "what station did you get on at?"

NORRISTONS *Herald*:—John Ruskin calls railroads "the loathsome form of devilry now extant, carriages of damned souls on the ridges of their own graves." John must have had his free pass taken up by the conductor when he was several hundred miles from home.

It is said to be highly probable that the Northern Pacific will carry a great deal of Canadian freight this coming season, billed for Winnipeg. It will be taken to Duluth from the Grand Trunk by steamers, and go to Grand Forks over the Northern Pacific and Duluth

## Personal.

MR. D. B. HANNA, who has occupied the position of acting accountant of the Manitoba & North-Western, since November, has been appointed accountant.

MR. JOHN G. LAVEN, Toronto, as Canadian passenger agent of the Michigan Central, has a territory embracing that portion of Ontario east of Port Arthur, Quebec, Nova Scotia and New Brunswick excepting the lines of the New Brunswick Railway.

THE regular monthly meeting of the Central Railway club of Buffalo was held March 23. The resignation of Mr. R. H. Soule as president was accepted and Mr. Thomas Sutherland of the Chicago & Grand Trunk, the vice president, was chosen president to succeed him.

THE *Railroad Gazette* says:—Mr. George M. Pullman has been knighted by the King of Italy. While it is a matter of conjecture just why this distinction has been conferred on him, still we tender to Sir George the assurances of our distinguished consideration.

It is stated that Erastus Wiman has bought an interest in the new pulverizer of Raymond Brothers, of Chicago. This contrivance, it is claimed, illustrates an entirely new principle in mechanics, grinding refractory substances to an impalpable dust without the aid of tooth, stamp or roller, and simply by the action of air.

MR. G. R. PUGSLEY, president of the Regina & Long Lake Railway, was taken seriously ill while in Ottawa on business in connection with the road. At one time grave fears were entertained for his life, but the latest advices from the capital contain the gratifying intelligence that the patient is out of danger and that in two weeks he will be able to resume his interrupted business.

THE following, from an American, relating to one of the greatest railway men Canada has produced, will be read with interest:—It is reported from Omaha that Mr. S. R. Callaway, vice president and general manager of the Union Pacific Railway, will in future devote his entire time to the duties of vice president and that Mr. G. M. Cumming, assistant general manager and land commissioner, will succeed him as general manager.

MR. JOHN WARWICK, secretary to Mr. J. H. McTavish, land commissioner of the C. P. R., Winnipeg, has been appointed private secretary to Mr. J. M. Egan, superintendent of the St. Paul, Minneapolis & Manitoba. Mr. M. Bacon, who was Mr. Egan's secretary in Winnipeg, and who accompanied him to St. Paul, goes to the Montana Division of the road as chief clerk under Superintendent Shields.

THE following are the officers of the American Association of Railroad Superintendents, elected at the last meeting:—President H. F. Royce (Chicago, Rock Island & Pacific); first vice-president, C. S. Gadsden, (Charleston & Savannah); second vice-president, L. W. Palmer (New York & New England); third vice-president, J. B. Morford (Michigan Cen-

tral, Canada Southern Division); secretary, Waterman Stone (Providence, Warren & Bristol); assistant secretary, C. A. Hammond (Boston, Revere Beach & Lynn); treasurer, R. M. Sully (Richmond & Petersburg); executive committee, W. J. Murphy (New York, Lake Erie & Western), H. Stanley Goodwin (Lehigh Valley), A. B. Atwater (Chicago & Grand Trunk).

A WINNIPEG exchange of recent date says:—The many friends of Mr. Robert Darrach, of the C. P. R. boiler shops, met recently and presented Mr. Darrach with a token of their esteem, and also a complimentary address. Mr. Darrach is going down to Barnesville, and he is to accept a position on the St. P. M. & M., and is one more added to the number of the C. P. R. men who have allowed themselves to be inveigled into Uncle Sam's country and the employ of the Manitoba road. For a long time Mr. Darrach has held a responsible position in the shops here, and his decision to leave has caused his fellow workmen much regret. The address was read by Mr. John Galligan, and Mr. J. C. Gibson made the presentation. Mr. Darrach replied in suitable terms.

THE following sketch of the great projector of the ship railway, whose death occurred recently, is taken from an exchange:—James B. Eads was born at Lawrenceburg, Ind., May 28, 1820. With his parents he lived for a few years at Louisville, Ky., and in 1833, after the death of his father, he went to St. Louis, which city was his home from that time. He was a clerk on a lower Mississippi river steamboat in the latter part of the '30s. In 1842 he formed a company for the purpose of recovering sunken vessels and other property, in which occupation his great national engineering abilities were put to such use that in 1857 he was able to retire from the company with a handsome fortune. When the civil war broke out he submitted an elaborate plan to the government for the defence of the western waters, and contracted for the construction of seven iron clad gun boats for service on the Mississippi. In 1862 he constructed for the same purpose six iron hull propellers, carrying two turrets each. Many valuable new features of his own invention were introduced in these vessels. His great reputation as a civil engineer was gained since the war. He projected and constructed the steel arch bridge over the Mississippi at St. Louis, a work which, owing to the deep shifting sands of the river bed, had been considered almost impossible of execution. Capt. Eads was most prominently known, however, in connection with his work of opening the mouths of the Mississippi to the heaviest draught ships. Instead of a ship canal he deepened the South Pass of the delta by a system of jetties concentrating the velocity of the current, obtaining a permanent depth of twenty feet over a bar on which was but eight feet of water. At the time of his death Capt. Eads' attention was engaged with the project of a ship railway across the Isthmus of Panama—a scheme which was before the United States senate during the session just closed.

## Construction.

THE contract for the construction of the St. Catharines & Niagara Central from Thorold to Hamilton, Ont., has been awarded to Sibley & Carrill, contractors of Toronto and St. Catharines, Ont. The Hamilton Bridge Co. has the contract for the construction of a bridge across the canal in St. Catharines.

A SURVEY is being made for a proposed line from Vicksburg, Mich., on the main line of the Chicago & Grand Trunk via Parkdale, Three Rivers and Constantine to Mishawaka, Ind., where it again strikes the main line. The road will run through a fertile farming country and will shorten the distance from Vicksburg to Mishawaka 14 miles.

THE New Westminster Southern, incorporated in British Columbia, is to run from some point near the 49th parallel of latitude between Semiahmoo Bay, township 16 in the District of New Westminster, to some point on the south bank of the Fraser River opposite the city of New Westminster. The incorporators of this company are: Donald Chisholm, T. J. Trapp and William McCole, all of New Westminster, B. C.

THE *Chicago Journal of Commerce* publishes a resume of the track laying and railway building of the United States for 1887, as collected by a correspondence extending over the whole country, from which it appears that there is new track projected amounting to 21,347 miles, at least 15,000 of which, it is claimed, will be laid this year. There are accounts also furnished of old track to be relaid of 18,856 miles. This would require, according to the estimates, fully 3,250,000 tons of steel rails.

It is stated that the St. Paul, Minneapolis & Manitoba Road will require about 36,000 cars of material, to put in operation the main line to Great Falls, Mont., and some Dakota branches, which are to be completed this year. To effect this, at least four miles of rail must be laid each twenty-four hours until the snow flies again. Bids are advertised for the construction of the road from Aberdeen to Bismarck. In order to do this the work will be carried on day and night, three gangs of men being employed, working eight hours each. Between dark and daylight electricity will be used to furnish the light, after the manner of the Russian engineers on the Trans-Caspian Railway.

AN Ottawa despatch in the daily press states that the Government have promised a land subsidy to the Winnipeg & North Pacific Railway Company, which has been organized to build a railway from Winnipeg to Fort Simpson by way of Fort A La Corne. The directors of the company are: Messrs. Alex. Manning, H. S. Howland, A. P. Macdonald and others. A bill to grant the company six thousand acres of land per mile for that portion of the road between Winnipeg and Fort A La Corne, and ten thousand acres per mile from that point to the foot of the Rocky Mountains, will probably be introduced this session.

The following is from the *Ottawa Citizen*:—Dr. Grandbois, M.P., says the Temiscouata Railway is progressing favourably and that before the end of the present year passenger trains will be running. The work was commenced last fall between Riviere du Loup and St. Roac du Degele, a distance of sixty miles, for which Mr. J. J. Macdonald has the contract. It will open up a valuable tract of country and shorten the distance between Montreal and St. John by about 160 miles. This is the middle route which was discarded when the Intercolonial Railway was built. Mr. A. R. Macdonald is president of the company.

The *Railway Age* says—Our records show that from January 1 to April 1, no less than 1,040 miles of new main track have been laid on 49 different lines in twenty-five of the states and territories. This is a larger total than we have recorded for any previous year up to the same date, excepting in 1882 when the construction for the entire year reached the unprecedented total of 11,568 miles. The mileage already laid in the three most unfavorable months of the year is greater than that added in any one of several years during the history of this country, and is only 700 miles less than the total new construction in the year 1875. Of the 1,040 miles already reported laid nearly half are in the Indian territory and the state of Texas, each of which has added about 250 miles. Kansas already shows an addition of nearly 100 miles and California of about 70 miles. The remaining new mileage is furnished by numerous extensions scattered through the different states.

#### The Kingston and Pembroke.

The annual meeting of the Kingston and Pembroke Railway Co. was held on the 9th Feb. The following report of the meeting is taken from the *Kingston News*:—

In the absence of President Gildersleeve, Hon. Mr. Kirkpatrick was moved into the chair. The minutes of the last annual and special meetings were read and confirmed. The Directors' report was submitted as follows: Since the last annual report the Directors have to report a general improvement in the condition of the railroad and superstructure.

The passenger station at the market battery and the construction of the freight station at the same place is now well advanced. It will be ready for occupation in April next.

The company has purchased and paid for the property of the Kingston Car Works Company, comprising forty-two acres of land together with their extensive workshops, plant and machinery. This purchase places the company in the most favorable condition in respect of construction and repair of rolling stock.

The outstanding second mortgage bonds of the company have been redeemed, and second preference income bonds, with interest at six per cent. payable out of net income, only if earned and non-cumulative, have been substituted and sold at par.

The capital stock has been increased to \$3,000,000, with the sanction of the shareholders.

The funds on hand provide for all floating liabilities and expected requirements for rolling stock, etc., for increased traffic.

The earnings for 1886 were \$148,563.25; expenses, \$110,214.71; leaving a profit of \$38,348.54. The earnings show an increase of \$10,069.22 over 1885, including the credit balance of \$1,086.64 brought down from 1885. The amount to be carried forward to the credit of 1887, after payment of fixed charges, will be \$5,115.18.

In view of the expected increase of traffic in lumber, etc., as well as iron ore from the mines now in operation (a large quantity of ore having been already sold) it will be advisable to provide increased locomotive power and rolling stock out of the funds on hand for that purpose.

The report regrets to announce the death of Mr. I. Munsen, of Watertown, one of the directors, who always took a deep interest in the road. The vacancy was not filled.

The report was adopted.

The auditors' report, testifying that the accounts were correct, was also adopted.

The following were appointed a board of directors: Hon. G. A. Kirkpatrick, Messrs. C. F. Gildersleeve, W. Nickle, James Swift, H. Folger, Kingston; R. P. Flower, J. D. Flower, New York; H. H. Porter, Chicago.

On motion of B. W. Folger, \$200 was granted to the K. & P. Mutual Aid Association to be expended in buying books for the library, and \$25 to each of the hospitals.

At a subsequent meeting of the directors, C. F. Gildersleeve was elected president and J. D. Flower, vice-president.

#### The St. Clair Tunnel.

The following description of this work appeared in an exchange:—The shafts which will lead down to the tunnel on both sides of the river are excavated to the depths of about 25 or 30 feet, and will extend to the proposed level of the tunnel at those points, 80 feet below the surface. The shafts will be 16 by 8 feet in size, and after curbing with 12-inch square pine timber, will be 6 by 14. All the necessary appliances for successfully coping with many unforeseen and unavoidable obstacles that will doubtless present themselves, as the work on the ground on both sides of the river, including huge air pumps, a complete Edison electric light plant, steam pumps with a capacity of lifting to the surface an amount of water equal to an inflow of two five-inch streams, also sufficient boiler capacity to operate all necessary machinery. The contractors also control the patent process of freezing the ground before excavating, and thus quicksands and loose earth, which have heretofore given tunnel builders a vast amount of trouble and expense, will be taken in a congealed form, and the work will proceed with but slight delay. About the only obstacle that is not easily overcome is the tapping of a large stream or fissure of water from the river, letting in more water than the pumps can lift out.

#### Canadian Pacific New Locomotives.

The *National Car and Locomotive Builder* says: From Mr. Francis R. F. Brown, mechanical superintendent of the Canadian Pacific Railway, we learn that a great deal of work was done in the shops belonging to the road during the past year. In the Montreal shops 25 new locomotives were built, of the following types: 4 consolidation engines with cylinders 19 x 22 inches; driving wheels, 51 inches; boiler pressure, 160 pounds; weight in working order, 104,000 pounds. The engines are fitted with the extension front and straight stack, Westinghouse air brake on one pair of drivers, tender and for train, American steam brake on the second pair of drivers. The tender capacity is 3,000 gallons imperial, or over 3,600 standard gallons, the unusually large tank capacity being intended to provide for the regions where long runs must be made between water stations.

They built 3 of the heavy standard passenger engines, cylinders 19 x 22 inches; driving wheels, 69 inches; boiler pressure, 160 pounds; weight in working order, 98,000 pounds; tender capacity, 2,800 imperial gallons. These engines are fitted with Westinghouse air brake on driving wheels, tender and for train.

In the line of comparatively light passenger engines, 8 were built with cylinders 17 x 24 inches; driving wheels, 69 inches; weight in working order, 89,000 pounds; tender capacity, 2,800 imperial gallons. These engines have Westinghouse air brake for drivers, tender wheels and for train. The boiler pressure is 150 pounds.

Five road engines, with cylinders 17 x 24 inches; driving wheels, 62 inches diameter; boiler pressure, 150 pounds; tender capacity, 2,800 imperial gallons. These engines have Westinghouse air brake for train service, and the American steam brake for drivers and tender; weight in working order, 85,000 pounds. There are also five more road engines similar to the above, but slightly lighter and without the steam brake.

MR. CHARLES WARING, writing in the *Fortnightly Review*, suggests the state purchase of Irish railways as a solution for the ills which afflict that country. As to finances, which is, of course, the crucial point, Mr. Waring says: "The stocks to be dealt with amount to about £35,000,000, of which the ordinary shares come to £16,578,988, on much of which no dividend is earned, and which, consequently, is worth little. The guaranteed shares amount to £1,295,076, the preferential shares to £8,065,358, the loans and debentures to £9,748,167. The total of the financial operation would therefore appear to be between twenty and thirty millions sterling, probably nearer the former than the latter sum—an amount insignificant by the side of the proposals recently made for the improvement and pacification of Ireland. It is not the business of a private individual to speculate as to the price which should be paid for the railways; that is a question between the Government and the proprietors."



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Correspondence invited. Write on one side of paper only, and be specially careful with names and dates.

Our readers are requested to send us court decisions and newspaper clippings relating to railway interests.

It is desirable that communications, new advertisements and changes in old advertisements be handed in before the 10th of the month.

W. B. CAMPBELL, *Publisher.*

Office—61 Bay Street, Toronto.

TORONTO, APRIL, 1887.

#### INTER-STATE COMMERCE LAW.

NORWITHSTANDING the many important subjects pressing for attention in our columns, we have deemed it wise to give up a large portion of space in this issue to matter relating to the new Inter-State Commerce Law of the United States. We do so believing that this is the most important subject that is before the railway world of America at the present day, and we regret very much lack of space as well as lack of ability to give our readers as comprehensive a view of the question as we would desire.

The coming into force of the Law on April 4th was marked by the loyal acceptance of the situation by practically all the railways of the United States. But, while willing to accede to the demand of the law, there was a strong and apparently well-founded request on behalf of certain southern roads that the Commission should use its power of suspending "the long and short-haul clause," as it is called, for a time, until their position could be more definitely

ascertained. The great argument in support of this view and that which seems to have prevailed was that the competition by water in the great navigable rivers would ruin the roads if the letter of the law, as they interpreted it, were enforced. The Commission acceded to the request and suspended the action of the clause, as relating to these roads, for 90 days. It seems to be generally agreed that by this action the Commission has averted a disaster, but at the same time it is manifestly unfortunate that such a step should be necessary at the very inception of the new regime. There are those who even now contend that the clause does not mean what the southern railway men thought it meant, and that it would have been better to have refused to obey an interpretation which would be ruinous to them, and appeal to the courts for a ruling. If the decision went against them they could then ask for a suspension. Some such thought as this seems to have been voiced in his own sententious way by Mr. Jay Gould when, in talking to a reporter in St. Louis, he said:

"I think that the law should have had a thorough test before suspending any of its features. It would have been more satisfactory to the public to have first demonstrated that that feature should be suspended than to suppose it would and suspend it on a supposition."

There are many different interpretations of the clause which has been thus suspended in relation to some roads, and as there is nothing like speaking by the book in such matters we give the clause entire:

Sec. 4. That it shall be unlawful for any common carrier subject to the provisions of this act to charge or receive any greater compensation in the aggregate for the transportation of passengers or of like kind of property, under substantially similar circumstances and conditions, for a shorter than for a longer distance over the same line, in the same direction, the shorter being included within the longer distance; but this shall not be construed as authorizing any common carrier within the terms of this act to charge and receive as great compensation for a shorter as for a longer distance; provided, however, that upon application to the commission appointed under the provisions of this act, such common carrier may, in special cases, after investigation by the commission, be authorized to charge less for longer than for shorter distances for transportation of passengers or property; and the commission may from time to time prescribe the extent to which said designated common carrier may be relieved from the operation of this section of this act.

The views of the associated southern roads and all others interested as to the effect of this clause will be received by the Commission at sittings, to be held this month at Atlanta, New Orleans and Memphis. During the suspension of the clause the roads are entitled to charge the rates in force on March 31st last. Strong arguments will be urged why the southern roads, having to face water competition, should be allowed to charge differential rates. But the law is one for the United States, as a whole, and to make different rules for different parts of the country will set at naught the first principle of the Bill, which was to regulate by a Federal law the Inter-State Commerce of the country. Moreover, the southern roads are not the only ones affected in this way. The Great Lakes are a highway of commerce and with the Lachine and Erie Canals are the route of unlimited trade. If the through railways from Chicago to New York are compelled to charge a mileage rate it must mean the diversion of a vast portion of the traffic to the lakes, and the northern roads will hardly be content to rest under this disability. Nor is it to be supposed that water competition is the only reason which will justify suspension of the clause in special cases. Suspensions will be demanded on behalf of other roads and may have to be granted. In its minor points the Bill is proving a gratifying success, but its chief feature seems to be unworkable in the only sense in which it seems fair to interpret it.

#### THE DISALLOWANCE QUESTION.

A very important question to come before the Dominion Government is that of the disallowance of railway charters, passed by the Manitoba Legislature, for roads which may divert traffic from the Canadian North-West into the United States, instead of through our own territory and our own ports. The people of Manitoba demands freedom in chartering roads, judging by the fact that every member elected to the House of Commons from that province is pledged either by the policy of his party or by more or less direct promise to use his utmost influence to prevent the disallowance policy being carried further. There was a time when it was contended by some that the bargain with the Canadian Pacific Railway Company binding the Government not to author-



ize the building of roads across the boundary, compelled the Government to disallow charters passed by the Provincial Legislature of Manitoba, even when those charters were within the competence of the Legislature to pass. Some utterances of the Ministers of the Crown at various times have given apparent ground for this view. But Hon. Thos. White, in a recent speech in the North-West, declared: "As you are aware, the contract with the Canadian Pacific Railway in no way interferes with the right of the Legislature of Manitoba to grant charters within the boundaries of the Province as they existed at that time." This, together with Sir John Macdonald's famous utterance when the contract was ratified, "We cannot check Manitoba," prove that the disallowance of Manitoba charters has been the result simply of the Government's deliberate policy, designed to keep the trade of the North-West for the people of Canada. In view of the fact that the people of Canada have made immense sacrifices and run great risk of financial loss for the North-West, there are very strong arguments in favor of this policy.

But, even admitting the strength of these arguments, there are two considerations which must not be lost sight of in relation to the question whether this policy shall be continued. One is the question of principle—whether, in view of the practically unanimous protest of the people of Manitoba, this system of disallowance shall continue. And the other is whether the Government can, as a matter of expediency, maintain the attitude which it has so far maintained on this question. There is not a majority of seventy for the Government, as there was in the last Parliament. Even the most hopeful of Government partisans do not claim a majority of more than forty. To bring about a division on the disallowance question, under present circumstances, would be to antagonize four Government supporters and exhibit weakness which the ministry would rather leave unexposed if possible.

Already two charters have been passed by the Manitoba Legislature, incorporating railways to the southern boundary, and it is claimed that one or both of the lines will be built at once. If disallowance is still to be the rule the Government will need to take action promptly, for it would be useless to disallow the charters

after a road has been built. Moreover, there is, at this writing, a notice on the papers in the House of Commons for a motion condemning disallowance, which may be expected up for discussion at an early day, and this will force a decision upon the question by the House of Commons itself.

It seems to be assumed that the Canadian Pacific Railway Company is the great obstacle in the way of granting charters in Manitoba, and that but for the influence and wishes of that company the disallowance policy would be discontinued. But nothing has been made public, so far as we know, to indicate that this is the case. Members of the Government have stated over and over again that the maintenance of the monopoly, even in the old Province of Manitoba, was in the interest of the Dominion, and that that was their reason for maintaining it. It seems to be admitted that the C. P. R. syndicate did not secure this monopoly as part of the bargain between themselves and the Government. Of course, then, they could not have handed it over to the Company. They never had it as a right and it has not been shown they ever asked it as a favor. That being the case, the question is a political one; but we trust that in settling it the politicians will keep well in view the vital importance to Canada of her great railway interests, and give their decision with full consideration of that factor in the case.

#### MINISTER OF RAILWAYS' REPORT.

THE annual report of the Department of Railways and Canals for the year ending 30th June last has been laid before Parliament. It is a bulky document and contains a great mass of information of interest to railway men, and we cannot in one issue give even a summary of more than a few points. We hope to deal in separate articles in future issues with the different phases of railway development set forth in this important blue book. One of its main features is the account given of the working of Government railways. At the close of the fiscal year the roads had a mileage of 1,190, made up of Intercolonial and its extensions 866, Eastern Extension 80, Windsor Branch 32, Prince Edward Island Railway 212. The increase as compared with last year was five miles,

made by the completion of the Dartmouth Branch. There was a total loss of \$190,637 on the operation of the road, there having been a deficiency on every portion of the line except the Windsor Branch, which shows surplus over expenditure of \$4,428. The receipts on the Intercolonial were \$2,383,200, expenses \$2,489,243, showing a loss of \$106,042; Eastern Extension receipts, \$94,756; earnings, \$66,893; loss, \$27,863; Prince Edward Island Road receipts, \$216,744; earnings, \$155,584; loss, \$61,160. The amount expended on capital account on the Intercolonial was \$546,134, making the total expenditure on capital account up to the close of the year \$546,134. The system is still pursued of charging such items as "applying air brakes to locomotives," "rolling stock" and others to capital account, which should be charged to revenue. However, on the other hand, the report says that no less than \$115,000 had been charged against the earnings of the year for improvements of a character generally charged to capital, representing works over and above ordinary maintenance and renewal. The traffic returns of the road show that in the last ten years the gross earnings have doubled, the amount of freight has increased one and a half times and the number of passengers by one-third. As compared with the last year the quantity of lumber transported has decreased and the quantity of coal has increased. The traffic in the latter article has grown from nothing in 1879 to 165,791 tons last year. The low rate at which the coal is carried makes this traffic unremunerative to the road, though beneficial to the country. The Intercolonial now has its own sleeping cars, but not sufficient for the mail steamers' traffic from Halifax in winter and Rimouski in summer. More are asked for. The Prince Edward Island Railway has cost in all on capital account \$3,735,980, the expenditure on this account last year having been only \$4,688. The Cape Traverse Branch to the shores of Northumberland Strait is intended to facilitate communication with the Intercolonial. The Branch leaves the Island Railway at County Line Station and runs to Cape Traverse, a distance of 13 miles. The strait is nine miles wide. At Cape Tourmentine on the mainland connection is made with the New Brunswick and Prince Edward Island Rail-



way Company, 40 miles in length, and the Intercolonial is thus reached at Sackville. In winter the ice boats, run by the Marine Department, land at Cape Traverse.

## Editorial Notes.

FROM present indications, this will be the most remarkable season for railway building on record.

OF the private Bills introduced in the Dominion Parliament on the first day when such were in order, all related more or less directly to railway affairs. Accounts of these bills are held over for the present, to appear in our next issue.

A NUMBER of those arrested in connection with the Panhandle robberies have confessed their complicity in the affair. The lesson this terrible crime teaches is that railway managers should know more of what their men are doing, not by putting detectives and spotters on their track, but by taking a generous interest in all that concerns the men and in everything that can make them thoroughly loyal to the road.

THE summary of the Grand Trunk's report in another column shows that this great corporation has wiped off the unfavorable balances held over from late years and is now ready to use the profits in prospect and certain to be realized to pay dividends. There never was a time when the prospects of the Grand Trunk were brighter than they are now, and the people of Canada, whose progress is so much bound up with its success, will be glad of the fact.

SUBSCRIBERS to RAILWAY LIFE are invited to send us items of interest that come within their knowledge. There are no other means at our command of ascertaining many current facts of great interest to railway men. Some of our friends have been very kind in this respect, and we hope their good example will encourage others. We have made the LIFE the handsomest paper in Canada, but we believe "handsome is that handsome does," and are anxious to make the paper as interesting and useful as any class paper in America. Our wishes in this respect can never be realized until our friends co-operate with us,

THE *National Car & Locomotive Builder* urges the formation of railway clubs in railway centres. The practical good achieved by these clubs in many places is the best evidence of the soundness of the idea. As to the method, the *Builder* urges that the doors be thrown as wide as possible and says "the less of a constitution the club is harnessed with the better." This is true, half the unsuccessful societies owe their death to the fact that they have more constitution than they can carry. Few rules, comprehensive yet simple and a dependence upon the good sense of the members and their regard for the good of the club, are the best promoters of good work, and so long as the society is doing good work it will be successful.

## GRAND TRUNK REPORT.

THE following is a special cable to the *Mutl* of this city:—LONDON, April 17.—The directors' report of the Grand Trunk for the half year ending December 31st last shows the gross receipts to have been £1,913,654, compared with £1,629,763 in the corresponding half of the previous year. The working expenses were £1,327,827, or at the rate of 69.39 per cent., as compared with £1,238,313, a rate of 75.98 per cent. on the previous year. The net receipts were £640,452, from which is to be deducted for preference charges: Interest on debenture stocks, £216,262; interest on bonds, £44,292; rents of leased lines, £75,396; interest on subsidiary lines, £82,649: total, £418,511, leaving the net revenue balance on the half-year's working £221,941. There was a debit balance against the half year that ended on June 30 of £815. The revenue of the Chicago and Grand Trunk was insufficient to meet the interest charge by £37,621, making a total of £38,436. Deducting this from the net revenue balance for the past half-year's balance, the sum of £183,504 remains available for dividends, the directors providing for the payment of a full dividend for the half year on the 4 per cent. guaranteed, together with arrears on the same stock for the half year ending June, 1886. The dividend for the past half-year absorbs £104,395, and the June arrears £78,296, making a total of £182,692. A credit balance of £311 is carried forward to the current half year.

### SATISFACTORY INCREASES.

The gross receipts for the half year showed an increase of £283,891, as compared with 1885, an increase of £91,807, as compared with 1884, and a decrease of £140,594, as compared with 1883. The working expenses show an increase of £89,514, as compared with 1884, and a decrease of £49,669, as compared with 1883. The net traffic receipts show an increase of £194,377, as compared with 1885, an increase of £95,863, as compared with 1884, a decrease of £71,925, as compared with 1883. There was a net increase of £369,965, or 13.42 per

cent., in the number of passengers carried compared with the previous half year, and of £77,370, or 14.39 per cent., in the receipts. The increase in the number of passengers for the whole year, as compared with the previous year, was 542,782, and in the receipts of £859,500. The number of passengers carried in the December half and in the complete year is the highest recorded. The average fare per passenger for the whole year was 3s. 11½d., as compared with 5s. 1½. in 1885. The freight and live stock traffic shows an increase in the December half, as compared with the corresponding half of the previous year of 332,708 tons and £206,043. There was an increase during the whole year as compared with the previous year of 452,818 tons and £330,431 in revenue. The receipts and tonnage of freight for the December half and for the whole year were also greater than ever before. The percentage for working expenses for the past year was the lowest since the union of the Grand Trunk and Great Western. The average receipts per train mile have been reduced from 5s. 3½d. in 1882 to 4s. 8½d. in 1886. The amount charged to capital account for the half year was £22,656, including £17,100 for new works. There was a debit balance on renewal account of £21,618, against £29,840 in December, 1885, and £30,328 in June, 1886.

### THE CONTROLLED LINES

The controlled lines, the Chicago and Grand Trunk and the Detroit, Grand Haven and Milwaukee, shared in the improved conditions affecting the working of American railways in the past year as compared with the disastrous year 1885. It is estimated that the net year's profit to the Grand Trunk on the traffic interchanged with the Chicago and Grand Trunk was £452,258, compared with £309,574 in 1885. The net profit from traffic with the Detroit, Grand Haven and Milwaukee was £38,691, compared with £36,551 for 1885. The subsidiary lines are estimated to have yielded a net profit of £138,457, as compared with £106,953 in 1885.

### EMERGED FROM ITS DIFFICULTIES.

The directors offer their sincere congratulations to the proprietors upon the improved conditions of affairs thus shown. The company has at length successfully emerged from the misfortunes which resulted, and which were felt even in a still greater degree by other railways on the continent of America, during the disastrous years of 1884 and 1885, especially in the last six months of 1885, when the misfortune culminated. The losses of 1885 and of the first six months of 1886 consequent on those misfortunes have now been cleared off, and the company in future will be free to apply all the profits realized in the payment of dividends. Owing to the most careful management, financially and otherwise, the company, so far from having permanently suffered, is now in a stronger position than at any previous period in its history.

### THE INTER-STATE LAW.

The company's officers have carefully considered the best mode of carrying into effect the Inter-State Commerce law. Considerable

difference of opinion has been expressed regarding the interpretation of some of its enactments, but while on the one hand there is no reason to suppose that the law will prove detrimental to the interests of the Grand Trunk, its tendency appears on the other hand to prevent the renewal of excessive competition and the return of those causes which have acted very disastrously upon the principal railways on the American continent for many years past. The prohibition against the undue issue of free passes and the payment of commissions on traffic cannot but have a beneficial effect on railway property over the whole continent. The general policy of stability is such as has not hitherto been experienced or as might have been expected to result from its operation.

The consideration shown by the proprietors under aggravating circumstances has enabled the directors and officers to surmount difficulties which otherwise would have proved still more embarrassing in the past and might have seriously affected the undertaking in the future.

### THE GRAND TRUNK AND THE COMMERCE BILL.

THE Mammon Column of *London Truth* of April 7th, 1887, contains the following:— I cannot understand why the Stock Exchange should be afraid of the Inter-State Commerce Bill, for I consider that its effect can only be beneficial. The abolition of "ticket commission" to agents alone will produce a saving of five million dollars annually, while the clauses providing for the cancelling of free passes and the advance in the commutation rates will also act favourably. There is, however, no doubt that the line which will benefit most by the new Bill is the Grand Trunk. The Bill makes all pooling arrangements amongst American Railroad Companies illegal. In the place thereof, officers will be appointed, who will insist on fair rates as against extravagant or competitive rates in years past. Now, the Grand Trunk Railroad being as to its greater part outside United States legislation, will not have to lower its local rates in response to any reduction on the part of American roads, but its terminals outside the Dominion will become affected by the United States law. To compensate the loss on local tariffs the American roads are about immediately to raise their through or long-haul tariffs, and it is now an established fact that the Grand Trunk will follow suit and raise its through tariffs to compensate the improvement on the American roads. It will therefore get the benefit of this improvement in through rates, while retaining the full tariff on its local traffic. It must also be considered that up to the present the Grand Trunk Railway has been carrying more through traffic than it has been allowed to retain under its former pooling arrangements. It will now retain all this surplus, which is considerable. The Grand Trunk, moreover, now has an interest in stimulating the through traffic, as it will henceforth enjoy all the benefit, instead of having to hand over a considerable portion of it to its partners. Altogether I anticipate

a very considerable and continuous increase in the earnings of the road, and you cannot therefore do any harm by operating on this "tip."

### A Famous Limited Train.

For a year or two past the most famous passenger train in the world has been the daily New York and Chicago limited, over the New York Central & Hudson River Railroad. The revolutions in the methods, aspirations and achievements of the Wagner Palace Car Company, by which the drawing-room and sleeping car over the Vanderbilt system of roads are operated, has been so great that the Wagner Company now takes a foremost position in catering to the comfort and luxury of business and pleasure travel in this country. The Wagner Company has about ready for daily service on the "limited" over the New York Central between New York and Chicago and the West, a new train that will eclipse all previous efforts in car construction. The new buffet smoking cars on the Centrals limited will be supplied with a bath-room, a barber shop, two toilet rooms, one for train employees, independent of the toilet room for passengers. These buffet smoking cars will be 69 feet long which is much longer than the average length of cars in regular use. They will be fitted in the most luxuriant manner, and besides the movable chairs, couches, etc., will contain a library that will include the latest novels, together with all the periodicals and daily papers. The platforms of the cars will be protected by side gates and canopies in order that passengers may pass from car to car without the slightest danger or exposure. The new limited train is lighted by electricity, and if the steam-heating experiments now in progress on the New York Central are successful these trains will be heated by steam throughout. The absence of heavy grades and the long tangents that are characteristic of the New York Central, render it entirely feasible to make bathrooms and barber shops very important and useful adjuncts of the limited. Taken all together the improved limited trains over the Central may be accepted as the highest development in the modern art of transport by rail.

### Railways in the North-West.

THE following letter from the pen of a well-known journalist appeared in the *Railway Age* of 8th inst, accompanied by a map of the North-West:

West and north-west of Manitoba lies a vast region, the organized portion of which composes at least half a million of square miles whose railway system at present consists practically of only 800 miles of the Canadian Pacific Railway running through the southern portion of it. In addition to this there are twenty-five miles of the Regina & Long Lake Railway, Pugsley's line, running north-westwardly to Long Lake, forming the initial portion of the Regina & Saskatchewan Railway. So far as I know the charter of the latter does not limit it, and it may, I think, pass down

the valley of the great Mackenzie, having for its objective points one of those glacial relics of the past which are said to be numerous along that mighty stream.

Then there are about thirty miles of Galt's line from Medicine Hat to Lethbridge, in the middle of the great coal fields, a line constructed for coal transportation, but which may yet be extended to Fort McLeod and even beyond.

The general impression with regard to Pugsley's line is that it will eventually pass into the hands of the Canadian Pacific Railway Company. Its route lies along the great "fertile belt," over which a few years ago Winnipeg orators waxed eloquent at after dinner speeches and public meetings.

These 800 miles of railway represent the entire railway mileage of the Canadian North-west—that is of line actually constructed and exclusive of course of the railway system of Manitoba.

A line is projected from Fort Qu'Appelle via Regina to Wood Mountain in the district Assiniboia. The charter of this line has been issued and it stipulates that work must be commenced at Fort Qu'Appelle, by next November. One of the chief promoters of the line is Mr. Archibald Macdonald, an old time factor of the Hudson's Bay Company and who is now in charge of the company's post at Fort Qu'Appelle. But looking at this line in a commercial sense one may properly inquire what is the necessity for building a line from Qu'Appelle to Regina and Wood Mountain when there is already another projected from Regina to that section? The Fort, though a pretty little town in the midst of charming scenery, is not necessarily a commercial centre. In the old days it was selected as a camping place by the traders and freighters because water and wood were to be found there in abundance and there was plenty of shelter, but in the new age which dawns with railroads, charming scenery and good camping facilities do not enter as a factor into the calculations of the hard headed railroad man. He knows nothing and cares less for sentiment which appealed to the woodman. He cometh as the locomotive and departeth like the last train, waiting for none and caring not for landmarks and the romance which are connected with them. The railway builds its own temples; it "thatches with towns the prairie broad," establishes its own centres of trade, its terminal of commerce, and, in fact, creates its own population.

An application has been made to the Ottawa government for a line from Regina to Wood Mountain and at the last session of Dominion Parliament charters were granted to a number of companies to construct lines of railway in the Canadian North-west.

There is the Winnipeg & North Pacific Railway, the contemplated route of which is from Winnipeg via Fort a La Crosse on the Saskatchewan, and Dunvegan on the Peace, its terminus being the splendid but little known harbor of Port Simpson on the northern coast of British Columbia. This is a most ambitious project, as it will if constructed be the great rail route to Alaska, and it will no doubt play an important part in the opening up of that great country. The project is in the hands of

Toronto capitalists. It is a magnificent scheme, and in Canadian railway circles it is not looked on as a paper road, but as a *bona-fide* project which must be materialized in the next decade.

A charter was also granted last year to the Bow River Mining & Transportation Company for a road which is to run due south from Medicine Hat to the coal fields of Alberta.

One was also granted to the Medicine Hat Coal & Railway Co., a local line for that district.

Besides these there are two or three lines in Manitoba that are looking forward to far west objective points.

There is the North-West Central which has acquired a certain perfume owing to its alleged relation to boodle, but whether justly or unjustly is a matter best known to politicians. The line will strike somewhere north of the Pugsley line; it will tap the rich country of the Carrot River and no doubt enter the fertile belt as a rival line to Pugsley's.

There is also the Souris & Rocky Mountain Road which aspires to open up the rich ranching lands and coal fields of Assiniboia and Alberta.

Another line is projected from Brandon which is looking forward to an objective point at the foot of the Rockies.

In British Columbia there is considerable activity and a line is projected from Kootenay to Athabasca, and another south to the international boundary line, but as these are not part of the North-West system proper I shall leave the system in that province for a separate article. When these lines are completed the Canadian North-West territory, instead of having 555 miles of road, will have something over 5,000, to say nothing about the branch feeders that will be constructed by the Canadian Pacific Company within the next few years.

At present you hear very little about the branches of the Canadian Pacific Railway, but anyone who is accustomed to railway development in the west knows that when the Canadian Briareus takes hold with his hundred grips many of the roads which now profess to be "independent" and rival lines will merge as feeders into the great Python line as naturally as the small streams flow into the great rivers.

GEORGE B. ELLIOT.

### The Great Freight Thefts.

THE following account of the great freight thefts of the employees on the Pittsburg, Cincinnati & St. Louis is from the *Railroad Gazette*:—The existence of a gang of freight robbers, employees of the Pittsburg, Cincinnati & St. Louis, and operating between Pittsburg and Dennison, was discovered last August, but its ramifications seemed so extensive, it was thought best to delay arrests and if possible lag the entire gang. But on Monday of this week, the detectives at work having obtained sufficient testimony, a large number of arrests were made in Pittsburg, and warrants issued for members of the gang living at many points on the line of the Panhandle. The stealing appears to have begun at Collier's

where freight trains stop for supper, and to have been confined to west-bound cars, sealed at New York and Pittsburgh for distant points. While the crews were at supper, the robbers, it is said, would pull out the wire from the car-seals, help themselves to whatever was movable, re-sealing the car door by a few blows of a hammer. It is at least possible, however, that they were in possession of a sealing stamp, and made their own seals.

It is not improbable that the conspiracy was organized by criminals who came into the employ of the company for some such opportunity, and they appear to have been very successful in roping in every hand who was likely to "squeal." They were very bold, and to them is probably to be credited the murder of a young fireman last fall, who one night discovered them at work upon a car. In order to get rid of so much plunder, stealing was begun at other points besides Collier's, but the conspiracy appears to have been largely confined to the first freight division of the Panhandle, namely, between Pittsburg and Dennison.

The loss to the company is probably exaggerated by the daily press, but the published reports do no injustice to the extent of the conspiracy, which appears to have assumed a remarkable character, including, it is said, 75 of the 90 crews employed between Pittsburg and Dennison.

### The Argument Against Stoves.

THE following very effective arguments against the use of stoves in passenger cars, were used by Mr. W. B. Baker when before the Committee of the Connecticut Legislature on Railroads.

"The proper location of the fire for safety, whether placed *within* or *beneath* the car is certainly *midway* in the car, that neutral point in case of collision, when one car is driven into another or telescoped. This was exemplified in the late accident on the Boston & Providence, where the stoves were in the middle of the car. Had the stoves met the concussion at the end of the car, they would certainly have been broken to pieces, and their fire knocked in all directions.

"I do not think that any railroad company would object to legislation prohibiting stoves. They know it is even for their pecuniary interest to have them abolished, as stoves are the most expensive thing about a car. Two stoves actually occupy the car space of four passengers, but *really* prevent eight from being seated. This room is proportionately, in a car costing \$5,000, worth \$352. The expense for fuel and attendance is four times that of a good hot water heater. Each pair of stoves will consume 14 tons of coal a year, which, at \$4 a ton, is \$56.

"With stoves not only are there two fires to menace the passengers with cremation, but two *blazing* fires, as against the hot water heater with its *one dull* fire. One heats solely from the surface actually in contact with the coal, and this surface being of very limited extent, must of necessity be *constantly red hot* on cold days to be felt even a few feet off, while with

the hot water heater the water within or around the fire absorbs most of the heat and carries it off and distributes it equally all over the car, giving every passenger an optional warming-pan at his very feet.

"As the stove is allowed by law, and its first cost is small, the competition for cheapness in car construction will still tempt many to adopt it. And while the traffic in cheap stoves continues, there is little encouragement for inventions that must, from their nature, be higher priced. Necessity gave place to the stove, custom has tolerated it, and habit has habituated us to it. But now public disapprobation and a just law will abolish this burning evil forever. No more burnt offerings to this cast-iron idol of fire!

"The law protects us from the incendiary and against combustibles and explosives, then why not against the constant exposure to danger from the two flaming fires that stand deadly guard at the only avenues of escape from the broken car?

"We do not ask you to pass a law compelling railroad companies to adopt our heater, as there are others of similar qualities that are safe from fire as compared with stoves, but abolish at least *one fire* from every passenger car in your state."

### Canada and the Inter-State Commerce Bill.

THE *Toronto News* recently published the following:—"I'll give you a pointer," said a gentleman who has considerable knowledge of our trade relations with the United States, and who owns heavy interests in several Canadian steamers plying on the upper lakes. "I suppose you know that about two years ago the Americans passed an order in council, or an ultimatum, or some such thing, to the effect that any American grain shipped from an American port in Canadian bottoms would not be allowed to pass through the United States without paying duty. This was a blow struck at Canadian vessel owners and Canadian railroads. You see the shippers in the Western States were taking advantage of the short cut across Canada, and Canadian vessels used to load with grain at Chicago or Duluth, carry it to Colingwood or Midland, where it was elevated into Grand Trunk cars and shipped east to Portland and other seaports in the Eastern States. Then the vessels would load up with lumber and other exports for American lake ports, and thus they did a splendid trade and were enabled to compete successfully with American railroads. But this order put a stop to that. The American vessel owners were too mean and jealous to kick, although it virtually cut their throats also. They could carry the grain, but it had to be elevated into American cars, and the Canadian railways did not break their necks accommodating them. The Canadian vessel owners and railroads then began to ship grain via Montreal, and quite a traffic was carried on in this line last season. But to come to the point. This Inter-State Bill, passed by the American Government, is the best thing that ever happened to Canada. The American railroads have to charge about the same rates

for short and long hauls. This chokes off competition, and the vessels can carry grain at a fair figure from Duluth to Chicago, giving special rates that will knock the American railways through traffic sky high. And the bulk of this grain will have to pass through Canada, as there is no Inter-State Bill in force here. It is on account of this Inter-State Bill that you see the Americans building so many new vessels. They think the Lake trade is going to be something terrific this season, and I guess it will. If Canada should pass an act against carrying grain through in bond and throw off the grain tariff, it would break their hearts and they'd all build their ships on this side. If the people of Ontario had only enough sand in them to kick and have a canal built so that the Allan liners and the Dominion liners could load their cargoes at Toronto wharf you would see this city of yours outstrip either Chicago or New York. I hear it would only cost a million or two to do it, and I think that when the people of Ontario pay millions for railroads in British Columbia and Manitoba they had better learn that little maxim that charity begins at home."

#### The Sault Ste. Marie Line.

THE *Railway News*, of London, Eng., says:—With reference to the Sault Ste. Marie route a statement is published to the effect that the road from Duluth to the Sault, a distance of 410 miles, is already started, and, it is expected, will be finished in time for the next crop of wheat, next September or October. Messrs. Brown, Howard, and Co. are to build the road. There will also be a road built by the Washburns, the extensive millers of Minneapolis, who turn out about 20,000 barrels of flour a day, a road extending from Minneapolis to Sault Ste. Marie, a distance of 500 miles, which will also be completed by next September or October. At the Straits of St. Mary it will be necessary to build a bridge, and, as the Canadian Pacific Road proposes to build a branch to this point, it is planned to erect one for the use of both roads, and this, with the Canadian Pacific branch, will be finished, it is expected, by next fall. From Sault Ste. Marie to Brockville, Ontario, is the next branch of the road. The distance is 500 miles, and of this forty miles have already been constructed. The St. Lawrence River will be crossed by a bridge, and the road will pass through New York west of the Adirondack Mountains, in as near an air line as is possible, and connect with the West Shore Road at Ketterlam Junction, and then with the Boston Hoosac Tunnel and Western Road. It is further proposed to connect by the Hoosac Tunnel and Western route to North Adams or Williamsburg. From Williamsburg to Williamstown, a distance of twenty miles, a new road will be built and by the Newhaver and Northampton Road connection will be made with the Massachusetts road to Boston. In regard to this twenty miles of road from Williamstown to Williamstown, it will be necessary to secure the revival of a charter that was issued twenty years ago, the road for which it was made out

never having been built. Elevators are now being built in Duluth, and sufficient facilities will be afforded to handle all the grain and produce that it may be necessary to ship. More grain was handled there last year than ever in Chicago. From Duluth to Boston, by the present route round through Chicago, it is three hundred miles longer than by the proposed new route.

#### Endurance of Railroad Ties.

THE supply of railroad ties is a matter of growing importance for the New England farmer, and certain experiments made at the suggestion of Professor Sargent by the Boston and Providence Railroad have an important bearing on it. Fifty-two ties were laid in December, 1878, on a track in Boston where the traffic is very heavy, having an average of sixty-five trains daily. Ten kinds of wood were tried, five in the natural state and five creosoted. None of the ties rotted, except one of the ailantus; the others that had to be removed had been injured by the hammering of the trains. Spruce, hemlock, larch, and Southern pine have all suffered badly in this way. White oak lasted well, but it holds the spikes so firmly that they cannot be drawn when the rails have to be shifted. Creosoted elm and birch did well, and are to be recommended. Chestnut was, unfortunately, not included in the experiment, although it is considered one of the best woods for ties. The behavior of the catalpa was one of the most interesting features of the case; it has been highly spoken of for ties on account of its practical indestructibility when placed in the soil.

#### The Cheap Long Haul—Its Effects on Prices and Production.

MANY teamsters earn a livelihood by transporting goods, wares and merchandise over the streets and country roads through or between interior points. As a rule, they take on a road at one end of their route, where they live, keep their teams, get the most of their loads and have facilities for loading and unloading goods. They deliver it at the other terminal, where they have also loading and unloading facilities, and they then take a return load to their starting point. Their prices for this through business are fixed and reasonable. There may be a break in rates sometimes caused by competition or to keep competition away, or prices may be increased when roads are bad and it takes longer to make the trips. But as a rule, the rates of transportation are uniform and reasonable.

If a teamster of this class were asked to take his empty wagon to a point on his route away from home, to there load up with such precarious help as he could obtain, and to carry the load to a further point on the route, but not to its termination, there to discharge it and return with his empty wagon to his starting point, he would in justice, fairly and from necessity charge more for the short haul than for the long haul over the whole route, having loads both ways and aided by all the conveniences that he had established for the through business. Oh the short haul he

would have to make a trip and return empty over a large portion of his route, with pay only for carrying a load one way. Of course it would be worth more than it would to cover the whole distance if he had a paying load to carry on his return. There is not a farmer in the country but that would demand more for short haul than for a long haul under such circumstance.

There are varieties of such long and short hauls on the railroad lines as numerous as the lines, the intermediate railroad stations and the products that constitute the entirety of railroad freights of all classes, kinds and degrees. To equalize the charges for this infinite variety of freight traffic constitutes the most intricate part of the science of railroad management. For a lot of politicians and demagogues in Congress or in the State Legislatures to attempt to regulate by cast-iron rules such a traffic is the height of assumption and nonsense. There are cases where it is worth twice as much to convey a car-load of freight 100 miles as to carry it 200 miles. An inhibition preventing the railroad company from charging what its services are worth—according to the value rendered, without regard to the length of the haul—is absurd and proposterous.

The system of low-priced long hauls has made the prosperity of the West and of the whole country. It has enabled the farmers in Kansas who raise corn, and the farmers in Dakota who raise wheat, to sell their crops at a paying price, instead of feeding the wheat to their horses and burning their corn for fuel. It has enabled the settlers on the plains to buy coal stoves and coal, without which they could not erect habitable houses. It has enabled the owners of the pine woods in Michigan and Wisconsin to sell their lumber in Nebraska and Colorado. It has equalized in these and in a thousand other ways, so far as human skill and calculation could accomplish it, the disadvantages of distance of locality, of markets and of supplies. It has made farms in Iowa worth \$60 an acre that without it would never have been worth over \$10 an acre.

The general results of the cheap long haul system may be plainly illustrated. There is a great reaper manufactory at Springfield, Ohio. There are great rolling mills at Chicago. There is a great wagon factory at Whitewater, Wis. There is a great furniture factory at Grand Rapids, Mich. There are in other localities great thrashing machine factories, great wood and iron factories of various kinds. They give employment to millions of men. The purchase of their supplies of flour, of provisions and other articles of food, scatters wealth in their respective neighborhoods and puts mints of money into the farmers' pockets. They have built up centres of population, business and culture. Some of these manufacturing centres have become education centres, where schools and colleges of great repute have been established.

The great manufacturing, commercial and educational centres in the interior of the country have been created by the cheap long-haul system. If the long hauls by railroad had cost as much in proportion as the short

haul, the products of great manufacturing establishments could not have been conveyed to distant markets, for the transportation would have cost more than the articles were worth. They could not have brought raw material from a distance, for the freight would have made it cost more than the manufactured product was worth. Those who want waggons would still have been compelled to buy them at the nearest village, manufactured single by hand labor at a much greater cost. It would have been the same with every article manufactured in large quantities, for sale at a low price, and of use in every household and every man's daily life.

A farmer or local producer of any sort in Iowa who wants to send a small jag of freight to an adjacent county, finds that he could send a car-load or a train-load of freight to Chicago at a much cheaper proportionate rate, possibly for actually less money in proportion to the amount. He therefore concludes that the high local rate is robbery. It is not so. But for the cheap through rate he would consider the cheap local rate too high. The local rate is far less than it would cost him to send freight by team, or by any other mode of conveyance. The cheap long haul has enabled him to sell at a much higher price every article that he wants to send to the general markets, and to buy for a less price every article that he uses for his home or in his business or industrial occupation.

The cheap long haul has brought the ends of the world together. It has advanced civilization. It has lessened the cost of every human comfort, and has made every human home better and happier. To re-establish the rate of the long haul on a basis that would require to make it proportionate to a paying short haul, would lessen by half, if not by more, all the benefits that railway construction has conferred on mankind.

### Inter-State Railway Commissioners.

This extract shows what the *Railway Register* thinks of the commissioners appointed under the Inter-State Commission Bill.

The agony is over. The President has appointed the members of the National Railroad Commission. They are Thomas M. Cooley, of Michigan, William R. Morrison, of Illinois, Augustus Schoonmaker, of New York, Aldace F. Walker, of Vermont, and Walter W. Bragg, of Alabama.

Of the commissioners, Mr. Cooley is by far the ablest man, and he certainly has not accepted appointment on account of the pecuniary consideration attaching to the office. However, he may deem the honor of the place some sort of recompense. His work on Constitutional Limitations, Torts, etc., are recognised as standard in this country, and he is understood to receive very liberal royalties from his publishers.

Mr. Morrison, by his lack of conservatism, lost the support of the people in his congressional district, and was placed on the retired list. He is a politician of the radical type.

Mr. Bragg, although he served for four years as Railroad Commissioner of Alabama, is

chiefly known as a political leader of that State.

Mr. Schoonmaker's chief recommendation is that he was a "personal and political" friend of the late Samuel J. Tilden.

Mr. Walker was appointed upon the recommendation of Senator Edmonds, and is known principally as the framer of railway laws for the State of Vermont.

Of the Commission it may be said in general terms that it is probably as good as could have been expected for the money offered. Although the President signed the railroad bill more than six weeks before the appointments under it were announced, he has doubtless done as well as the circumstances of the case would permit. He entertained a hope at first that some really able men would be willing to accept office from patriotic motives, but he could not get five men of national reputation to undertake so large a task for so small returns.

The Commissioner will have less than two weeks to organize and get ready for the arduous duties that will await them. Whether they will be able to discharge the responsibilities which they assume in a wise and satisfactory manner remains to be seen. They should not be prejudged. Yet we cannot but regret that it was impossible to place men of larger practical knowledge in railway affairs on the Commission.

### A Deserved Tribute.

The *Winnipeg Free Press* of March 28th, contains the following, which is sufficient answer to the stories which have been circulated by interested parties respecting alleged blockades, difficulties and hardships of passengers on the Canadian Pacific line last month:

A week ago yesterday, it will be remembered, a special train left Winnipeg for the Pacific coast having on board the passengers who had been delayed in the city owing to the snow blockade in the mountains. So pleased were they with their accommodation in the city and their treatment on the train that when they reached Donald they drew up the following address and handed it to the railway officials for transmission to Mr. Van Horne:

MARCH 22nd, 1887.

To W. C. Van Horne, Esq., Vice-President of the Canadian Pacific Railway Co.

We desire to convey to you our high appreciation of the courteous treatment we have received from all the officials and the employes on your road throughout our entire journey. The utmost solicitude has been shown to ensure our comfort and render the trip across the continent as comfortable as possible.

We would also assure you that, in our opinion, your officials in Winnipeg acted most wisely in retaining us there instead of sending us out on the line during the short period we were detained.

We would also say that the conduct of your officials and representatives in meeting us at the trains in Winnipeg and lodging us at the best Hotels in the city, and personally looking after our comfort and welfare during our stay there was most praiseworthy, and the company voluntary paying the entire expenses was generous in the extreme.

We would also further add our conviction that the treatment we have received, together

with your first-class equipment and the other facilities provided to enable you to properly transport and care for the travelling public merits, and is receiving the just reward in the large and increasing patronage your road is daily receiving.

Many of us have crossed the continent frequently, and in future will not only travel by your route, but will advise our friends to do so also.

This was signed by about seventy people, many of whom signed on behalf of their wives and families, so that in all about 200 people would be represented. The starting point and destination is given in each case, showing that they were on their way from all parts of the east and from Europe to points on the Pacific coast, both in British Columbia and the United States.

## The Railway Service.

THE *Railway Register* says:—Which will bring about the adoption of automatic couplers for freight cars—the railways or the legislatures? During the present winter bills have been considered in several States which had the accomplishment of this purpose in view. The man killing methods now in vogue must sooner or later be changed for something better.

THE Canadian North-Western Division of the Railway Station Agents' Association of North America held its second annual meeting at Winnipeg, Man., March 23, and fifty of the sixty-one members were present. The following officers were elected: T. H. Kellet, Deloraine, president; J. H. Millner, Morris, vice-president; J. F. Hunter, Crystal City, secretary; F. W. Peters, Brandon, treasurer. Delegates were appointed to attend the annual meeting of the National Association in Minneapolis in July.

THE New York railroad commissioners have sent out the follow circular to railroad officers: From the liability of accidents occurring to brakemen falling between the ends of cars, the board regards it as its duty to ask the views of the railroad companies of the state as to the question whether or not it is practicable to provide a bridge or other device for all cars where brakes are operated from the top, which shall protect the brakeman from falling between the ends of the cars.

THE *Railway Station Agents' Journal* says: A Connecticut law in effect June 1, prohibits the running of Sunday trains between 9 a. m. and 3 p. m. The great argument against such legislation is that it may occasionally prevent a man from reaching the bedside of a dying wife or child, and that it will render impossible many acts of mercy which depend upon the facility of Sunday travel. If this argument can be made to serve its purpose, it matters not how many families of railway men may be deprived of the comforting presence of husband or father in moments of like distress; or that thousands of railway men are without one day of rest that a few acts of mercy may be performed.

IN connection with the question of how the new Inter-state Commerce Law affects the express companies, the following letter, from Chairman Cooley, of the Inter-State Commission, to Mr. G. C. Cheney, general superintendent Canadian Express Company, will be of interest:—Your letter of the 1st inst., requesting the decision of the commission upon the question whether the Inter-state Commerce Law applies to express companies, has been laid before the commission and duly considered. If any express company desires to be heard by the commission on the question you raise, an early opportunity will be offered for the purpose; but until such hearing is applied for the commission will assume that the law does apply to such companies.

MR. CHARLES LATTIMER, writing to the editor of our able contemporary, the *Railway Section Foreman*, says:—"I feel a genuine sympathy with you in your paper and with your readers. What a band of faithful men you write for! Bless them, and the men with them in that work, whose heroism so few understand as they guard the lives and property of this country in cold and sleet, and storm and flood, making it possible for trains to fly over the land in the darkest night with perfect security. I honor the trackmen and often utter a 'God bless them,' for I feel sure that none can find more admiration for their self-sacrifice, and more sympathy in their work."

GENERAL traffic manager Qlds of the Canadian Pacific railway has issued the following circular: The enforcement of the provisions of the Inter-State law will compel a revision and cancellation of all special local rates and of the division of through rates or commodities shipped from points in Canada to points in the United States. Agents will therefore give notice to all who are now shipping to United States on through rates that, on and after April 1st ensuing, all such through rates will be void. Every effort will be made to obtain, as soon as practicable, reasonable rates from American lines from the points of connection with this line to the several market and distributing centres in the United States with which business is now done by Canadian shippers, and due notice of such rates will be given as soon as they are obtained.

THE *Railroad Service Gazette*, in the course of an admirable article on "Punctuality," says:—A prominent railroad man once said that he owed all in life to this circumstance: He had applied for the position of brakeman upon a certain road, and was told to be at the office to receive his answer "at ten o'clock sharp." As the hour drew near he found himself upon the eve of completing a task in which he was much interested. A few minutes, he thought, would make no difference, and he worked on, until his mother came to him and earnestly advised him to be prompt. He reached the office as the clock was upon the stroke of ten. "You can have a place, young man," said the officer, "for I see you know the value of time." Punctuality is the soul of successful railroading, "Whatever is worth doing at all is worth doing well." To

do anything "well," it is necessary to be in season with its performance, and in that lies the gist of the whole matter. The qualities that insure punctuality are just those which insure success, and in nine cases out of ten, a railroad manager, who desires his work done by one knowing no such word as fail, will choose that man to do it who best understands the value of the minutes.

## Mechanical.

A DEVICE has been successfully tested on the Delaware & Hudson Road for indicating when a train has passed a certain point and the hour at which it passed. It is the invention of David Strain, of Schodack, and Anson D. Simpson, of Troy, N. Y.

A PASSENGER locomotive is being fitted to burn gas fuel at the Meadville shops of the New York, Pennsylvania & Ohio. The gas will be generated from a fire of petroleum and coal and burnt by aid of a jet of superheated steam.

THE Connecticut River Railroad claims to be the first in the United States to light a whole train by electricity, having beaten by one day the Boston & Albany limited express, on which, moreover, one coach, the dining-room car, lacks the electric light.

THE bridge-building industry is unusually active, and the bridge works are unable to accept all the business offered. There are two bridges projected across the Hudson; six across the Mississippi; two across the Missouri; a \$10,000,000 bridge over the Potomac, besides a large number of small bridges. The Pennsylvania Railroad Company has ordered the substitution of iron bridges for wooden ones wherever the latter exist on its system of lines.

The Barrett apparatus used on the Connecticut River Railroad weighs only 500 lbs. complete, for a train of three cars, and consists of a dynamo in the baggage car driven from the axle, and a small storage battery which supplies electricity when the train is stopping at a station. The train leaves Springfield for Northampton at 6:30 p. m., and makes three trips during the evening, returning for the last time about midnight. It has for some time been heated by steam, and now carries neither stove nor lamp, and people who make evening calls on up-river friends, or come down to the theatre, can feel calm assurance that they won't be roasted whatever happens.

MR. D. SWANBY, in the *Railway Gazette* discusses some important track affairs and in the course of his very timely remarks says:—The best hand-car has a light body and wheels, stout axles, gearing hung high, and so proportioned as to yield the greatest amount of power and speed obtainable from the force applied. It has a short wrought-iron lever with forked ends, each prong terminating in a broad, substantial eye-band, which holds the handles securely and supports them toward the ends in a manner that prevents their being wrenched

loose or broken in the middle. Four men can run this car 12 to 15 miles an hour easier than they could run five miles with the inferior one, and there will be no necessity for pulling it to pieces in a struggle to urge it over the road, or injure it by dragging it on or off the track as in the case of its lubberly relative. A track gang on a five-mile section can run the round trip over their track in an hour with a good car, while it would take at least two hours to make the trip with an inferior car. At this moderate estimate we have here an item of waste amounting to ten per cent. of the time of all track gangs operating with inferior hand-cars. The annual loss in a gang of five or six men will foot up not less than the price of three first-class cars, and when figured for a long line of road employing many gangs will show a sum total that should astonish the economical manager.

THE immense task of compiling and printing the records of the 3,500 railroad bridges in New York State, accompanied by diagrams, strain sheets and full and minute computations, which the Railroad Commissioners undertook in 1884, is still far from complete, a great many of the roads being slow in sending in the data asked for by the board, though it would seem that a period of nearly three years, the time which has elapsed since the request was made, ought have afforded them time enough. The strain sheets, etc., as they come in, are taken in charge by Mr. Charles F. Stowell, who puts them in suitable shape to accompany a report which the board will probably make to the Legislature next year or the year after. While this report and its accompanying data will make a valuable work of record and reference, the chief value of the commissioners' circular of 1884 and of the responses to it is in the present use made of the information elicited. The facts concerning each bridge are investigated on receipt of the report concerning it, and any indication of weakness, or in fact any feature concerning which the road needs a reminder of its duty, is at once made the subject of an official recommendation.

THE *London Standard's* Paris correspondent says that in an interview M. de Lesseps declared that he had learned with pleasure of the formation of the Nicaragua Company, which, he said, would improve the prospects of the Panama Canal Company. The Nicaragua enterprise, being a fresh water canal, would be useful as a means of irrigating and fertilizing the country. M. de Lesseps scouted the idea that the Nicaragua enterprise could be used for inter-oceanic traffic, as owing to endless locks increasing the time of transit, vessels would prefer going round Cape Horn. Referring to the Panama Canal, he said the only point of anxiety was the rocky culchra, although he was firmly convinced that the contract would be finished within the specified time. The work would soon be pushed day and night, lighting the culchra by means of electric light. The directors of the company anticipate that the work accomplished in 1887 will be double that done in 1886. The Panama Canal Company has bought thirty locomotives in Belgium.



## Benevolent Societies.

*"The natural propensity of labor is to unite for its own protection and for mutual assistance and support."*

### Brotherhood of Locomotive Engineers.

68. London, Ont., meets 1st and 3rd Wednesday evenings in K. of P. Hall, Carling's Block, Richmond St., at 7.30 p.m. S. Mason, C.E., 202 Clarence St.; H. E. Crouch, F. A. E., 498 York St.; Thos. Purdon, Sec. of Ins., 33 Cartwright St. J. W. Kean, Journal Agt.

70. Toronto, Ont., meets alternate Saturday's at 7 p.m., commencing Nov. 6, 1880, at Occident Hall, cor. Bathurst and Queen Sts. Geo. Mills, C.E., and Jour. Agt., 320 Queen St. East. James Christie, F. A. E. W. P. Marks, Sec. of Ins., Richardson House, corner King and Brock Sts.

76. Winnipeg, Manitoba, meets 1st Sunday at 2 p.m., and 3rd Wednesday at 8 p.m., in Engineers' Hall, Main St. A. Kennedy, C.E. 112 Logan St. W. J. Watson, F. A. E., 29 Ross St. L. O. Lemieux, Sec. of Ins., Brandon, Man. D. Moore, Journal Agent, Box 50.

89. Point St. Charles, P.Q., meets alternate Sundays, at 1.30 p.m. F. Payette, C.E., and Jour. Agt., 12 Richmond St. F. B. Lytle, F. A. E., and Sec. of Ins., 136 Congregation St.

118. Brockville, Ont., meets in Merrill's Block, King St., 1st and 3rd Tuesday at 2 p.m. J. Chatem, C.E., and Sec. of Ins., Box 64. Samuel Scott, F.A.E. J. Rowledge, Journal Agent.

132. St. Thomas, Ont., meets every Sunday at 2 p.m., in Engineer's Hall, Acacia Block. S. W. Whitcomb, C.E., box 29. D. Neilson, F.A.E., box 564. Robert Brown, Sec. of Ins., box 561.

133. Hamilton, Ont., meets every alternate Saturday, at 5½ King St. East. Thos. Kenwick, C.E., 133 Wellington St. E. Tinsley, F.A.E. and Sec. of Ins., 15 Colborne St.

138. Snow Drift, at Campbellton, New Brunswick, meets first Sunday and third Wednesday of each month, over Alexander's store, Broulway. George A. Sears, C. E., and Sec. of Ins., Box 491. Wm. Bastin, F. A. E., Box 459. A. J. Sharp, Journal Agent, Box 491.

142. St Francis, at Richmond, Prov. Quebec, meets second and fourth Thursdays of each month, at Odd Fellows' Hall. A. Sinclair, C.E., box 36. Geo. F. Howe, F.A.E. J. Wilkinson, Sec. of Ins., box 35

162. Moncton, New Brunswick. Meets second and fourth Saturdays, in Pythian Temple, Robinson St. Jas. D. McKay, C. E. and Journal Agent. H. M. Stewart, F. A. E. B. C. Gesner, Sec. of Ins.

168. Capital, at Ottawa, Ont., meets 1st and 3rd Sundays in Manchester's Block, 447 Sparks St. D. Kelly, C. E., Rochesterville, Ottawa, Ont. A. J. Barr, F.A.E., 16 Victoria

ave. R. Pigeon, Sec. of Ins., 260 Moreau St., Hochelaga, P.Q. J. Wells, Journal Agent, 672 Wellington Street.

174. Hope, at Port Hope, Ont., meets alternate Saturday evenings. D. Mallock, C.E. John McMahon, F.A.E., box 273. W. C. Allison, Sec. of Ins., Midland, Ont. A. Miller, Jour. Agent.

188. Avon, at Stratford, Ont., meets first and third Sundays each month at 2.30 p.m. Thos. Burr, C.E., Box 337. Alex. Muir, F. A. E. and Journal Agent, Box 337. Jas. Farr, Sec. of Ins.

189. Belleville, Ont., meets first and third Sundays of each month, at 2.30 p.m. Wm. Pratt, C.E., box 1016. Geo. Teale, F.A.E., box 1016. James Brown, Jour. Agt., box 1016. E. Taylor, Sec. of Ins., box 1016.

204. Pearson, at River Du Loup, Province Quebec, meets first and third Sunday at 2.30 p.m., and alternate Fridays at 7.30 p.m. in English School House. C. E. Sawyer, C.E., and Journal Agent. W. Mackie, F.A.E. A. Shickle, Sec. of Ins., Point Levi, Quebec.

240. Point Edward, Ontario, meets first and third Wednesdays of each month. Wm. F. Hall, C.E., L. box 87. James B. Wilson, F. A. E., L. box 87. D. Cameron, Sec. of Ins., Dr. 12.

243. Kaministaqua, at Fort William, Ont., meets 1st and 3rd Sundays at 3.30 p.m. in Smith's Block. Robert Armstrong, C.E., box 243. H. C. Cooper, F.A.E., box 243. Thos. McKee, Jour. Agt.

247. Halifax, Nova Scotia, meets second Saturday and fourth Monday of each month. E. Tobin, C.E., 38 Maccara St. Harvey Smith, F.A.E., 15 North St. Fred Carter, Sec. of Ins., and Jour. Agent, Annapolis, N.S.

295. Parkdale, Ont., meets in Week's Hall, Queen St., alternate Sundays at 8 p.m., commencing Oct. 24, 1885. John Neilson, C. E., West Toronto Jet., Ont. J. R. Spragge, F. A. E., 11 Northcote Ave, Toronto. C. Clark Sec. and Treas. Ins., Parkdale, Ont.

308. Nipissing, at North Bay, Ont. Samuel Porter, C.E., C. P. R. John Scott, F. A. E., Box 23.

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Div. 15. Stratford, Chief Conductor, Mark Wade. Sec. and Treas., Saml. A. Hurm.

Div. 16. London, Chief Conductor, Adam Douglass. Sec. and Treas., John McAuliffe.

Div. 17. Toronto, Chief Conductor, George Pike. Sec. and Treas., J. H. Hall.

Div. 27. Hamilton, Chief Conductor, John McKay. Sec. and Treas., James Ogilvie.

Div. 29. Brockville, Chief Conductor, W. G. Murray. Sec. and Treas., W. C. Wright.

Div. 47. Winnipeg, Man., Chief Conductor W. T. Hawkins. Sec. and Treas. Jos. Fahey

Div. 88. Riviere Du Loupe, P. Q., Chief Conductor, S. H. Livessent. Sec. and Treas., yMoreau.

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Sid. Vaughan, ..... Toronto, Ont.

#### Subordinate Divisions in Canada.

5. Charity; St. Thomas, Ont., meets every Tuesday. D. T. O'Shea, box 784, master. J. A. Holman, box 784, secretary. T. L. Hoyt, box 784, financier.

15. St. Lawrence, Montreal, Canada, meets alternate Sundays at 2.30 p.m. T. Clark, 19 Conde St., master. E. Upton, 7 Burgeois St., secretary. T. A. Dickson, 72 Mullin St., financier.

38. Avon; Stratford, Ont., meets 1st and 3rd Sundays at 2 p.m. A. E. Ball, box 318, master. J. Cooper, box 318, secretary. G. Nursey, box 318, financier.

66. Challenge; Belleville, Ont., meets 2nd and 4th Sundays at 2.30 p.m. J. Muir, G. T. R'y, master. C. Spry, G. T. R'y, secretary. J. Logue, G. T. R'y, financier.

67. Dominion; Toronto, Canada, meets 1st and 3rd Sundays at 2.30 p.m. R. Reid, 31 Leonard ave., master. W. C. Farrance, 68 Denison ave., secretary. J. Pratt, 73 Huron St., financier.

69. Island City; Brockville, Ontario, meets alternate Sundays at 2.30 p.m. T. Shields, box 248, master. W. H. Parsley, secretary. S. Bothwell, financier.

117. Beaver; London, Ont., meets 2nd Sunday at 2.30 p.m., and 4th Wednesday at 7.30 p.m. G. Angles, 385 Grey st., master. R. Lister, 140 Colborne st., secretary. S. T. Fletcher, 221 Maitland st., financier.

118. Star of the East; Richmond, Quebec, meets 1st two Wednesdays at 8 p.m., and the last two Saturdays at 3 p.m. J. Kelly, Richmond station, master. G. A. Pearson, Richmond station, secretary. J. Damant, Richmond station, financier.

119. Colonial; River du Loup, Quebec, meets every Wednesday at 8 p.m. G. Findlay, Hadlow Cove S. Que., master. L. D. Poulin, I. C. R'y station, secretary. W. Carmichael, I. C. R'y station, financier.



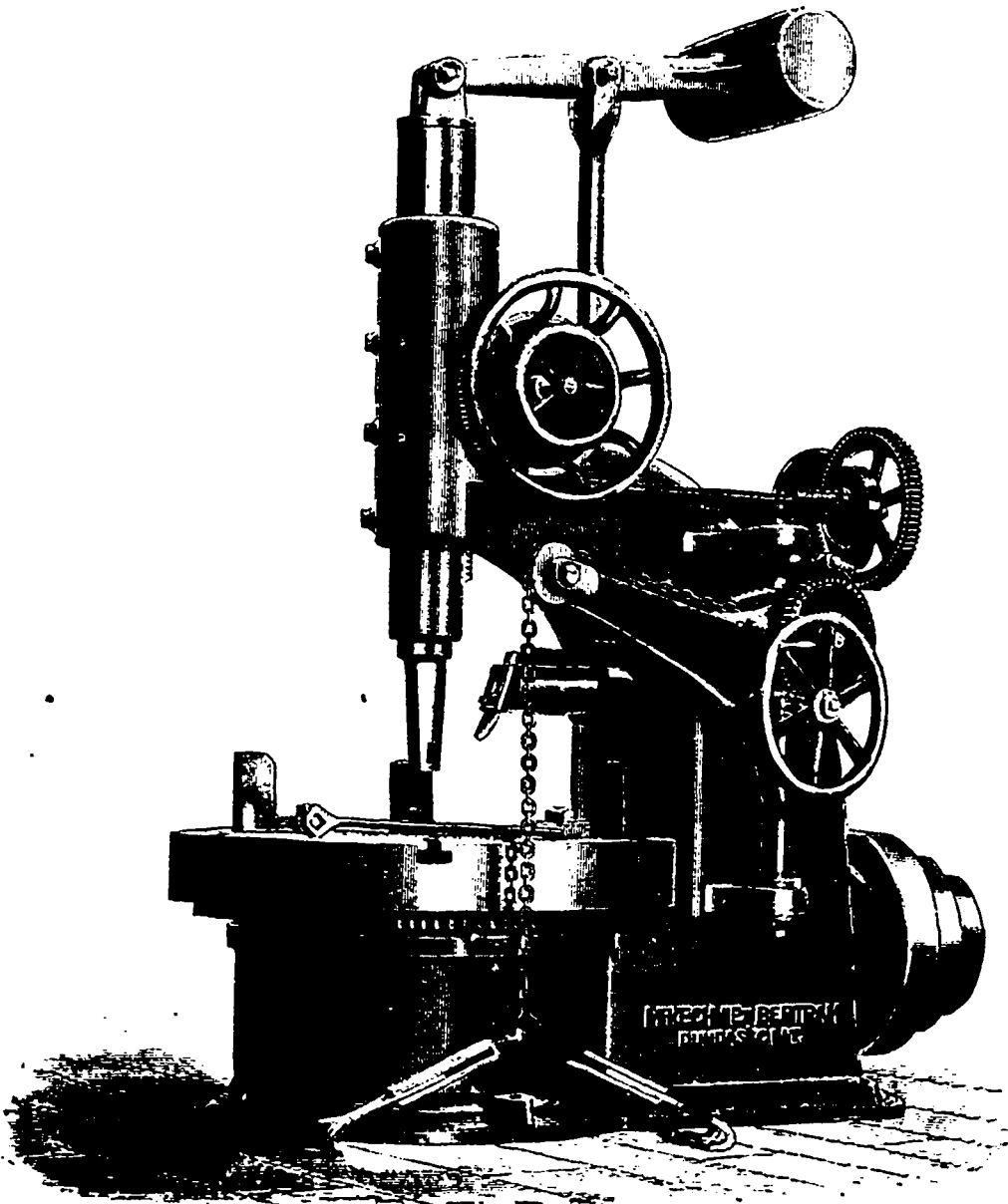
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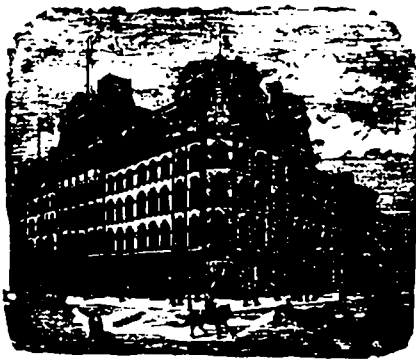
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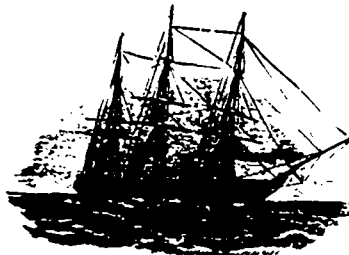
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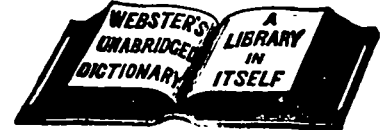
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