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VOL. II. No. 6

JUNE, 1887.

Railway

TORONTO,

ONTARIO.

File

WESTERN ASSURANCE CO.



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AGENCIES IN ALL PRINCIPAL CITIES AND TOWNS IN CANADA
AND UNITED STATES.

RAILWAY LIFE

A MONTHLY JOURNAL CANADIAN

DEVOTED TO RAILWAY INTERESTS

Vol. II.]

TORONTO, ONT., JUNE, 1887.

[No. 6.

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through the carelessness of whose employees the accident occurred, but has finally concluded to accept \$5,000 and free transportation for his show over the Grand Trunk lines during the coming season; which illustrates the fact, already observed by railway men, that the owner of live stock that the locomotive has converted into dead stock frequently asks more than he gets.

A paragraph in the *Railway News* says: The Paris railway paper, "*Le Journal des Transports*," has recently been greatly excited because of the presumed injury which the Canadian Pacific will have upon Trans Atlantic lines and upon M. de Lesseps' Canal. Our Gallic contemporary considers the building of this road simply another fraud of "Perfidie Albion" upon guileless America and France, and says that now England has put a girdle round the world. We don't quite agree with the Paris writer, and think that England was quite right in protecting its own eastern trade which it might otherwise have had to do by purchasing the control of the Panama Canal (if that scheme ever does get completed), as it had to do with the Suez Canal. Our trans-continental roads have to be self supporting and their primary duty is to build up the interior country, not the making of it into a tunnel for the passage of eastern goods to an English market. Let the "galled jade wince" as the great poet has it, "our withers are unwrung." The Canadian Pacific chiefly hurts, if anything, the projected but improbable Panama Canal.

ARRORS of the proposal made in the Dominion Parliament that the Government should publish monthly reports of the affairs of the Dominion, the statement of how these things are done in Britain, is worthy of attention. The *Standard*, of Boston, says: A British institution that might be advantageously introduced in this country are the annual reports to the Board of Trade, by the various railroad companies, of the accidents and fatalities that happen on their lines. The accuracy that must result from such a system, as well

as the incentive it furnishes to make the best possible showing, speak strongly in favor of its introduction. From the latest blue book it appears that in 1886 there were 938 persons killed and 3,539 wounded in the course of public railway travel in the United Kingdom. The report is full of instructive details, as, for example, the fact that the attempt to pass over grade crossings cost the lives of eighty-one persons, an increase of twenty three over 1885. Many impressive lessons emphasizing the necessity of accident insurance, the abolition of grade crossings, etc., are to be drawn from this report; and we repeat, therefore, that an annual compendium of like accuracy and explicitness would be highly desirable here.

The *Ottawa Free Press* says: It is a curious fact that those Manitobans who profess to be so much enraged against railway monopoly, expend their indignation in abusing the Pacific Railway Company, and endeavoring to find excuses for the ministers who maintain the monopoly and who refuse to redeem their promise to cease disallowing local railway charters. So long as the Manitobans pursue such a course, they are not likely to win the sympathies of the people of other provinces or to make any progress towards obtaining railway competition. The Pacific Railway Company are not open to censure for seeking to maintain their present monopoly. Any other corporation or set of individuals would do exactly as the C. P. R. Company are doing, provided they could get a government and a majority in parliament to support them. The president and directors of the Pacific Company are bound as trustees for the stock-holders to do everything in their power to maintain their monopoly. Why abuse them? The Pacific Company are utterly powerless to prevent the building of competing railways in Manitoba. It is the government of Sir John Macdonald that prevents Manitoba from obtaining railway competition. And yet the Manitobans make a laughing stock of their province by abusing the C. P. R. Company and electing members to support Sir John.

VICTORIA PARK, one of Toronto's favorite suburban summer resorts, is in good hands this year, the lessees being Messrs. George Jackson and Robert O'Hara. Good steamboat and tramway facilities exist for reaching the park, and there are all facilities for picnic and excursion parties.

ZEBRA SPIRAL STEEL FENCING WIRE, which was described in a late issue, is gaining favor in this country. After testing it during the winter the Northern and North-Western Railway have ordered 42,000 lbs. from Mr. John J. Gartshore, for the summer's supply. The Grand Trunk have put up a few tons and will probably use it in large quantities. This wire has stood the frost of last winter better than anyone anticipated, and there is no doubt as to its value as a railway or farm fence in this climate.

THE following is from the *Railway Age*—The sad fate of Jumbo, the mighty elephant who undertook to transport his grand trunk by the Grand Trunk Railway and got killed in the attempt, will be remembered. The proprietor of the unchecked and badly damaged trunk aforesaid demanded \$100,000 damages from the unfortunate railway company

Personal.

MR. B. D. WEBSTER is appointed general Eastern agent of the Canadian Pacific despatch freight at Boston.

AN old Irishman who had worked for the Milwaukee and St. Paul Railway Company for many years, when hearing of Mr. Mitchell's death, without any intention of being facetious, said: "Ar' so the old man is dead. Heaven rest his soul. If he has as much influence with St. Peter as he had with St. Paul he's all right."

MR. JNO. WHITTLE, A. G. P. A., Lehigh Valley R. R., Sayre, Pa., died in California on 9th inst., where he had gone for the benefit of his health. The remains were returned to Cayuga, N. Y., his former residence, for burial, and the funeral on 18th was attended by representative officials of the L. V. R. R. and many connecting lines. The deceased was an efficient and much respected officer, and his loss will be deeply felt by all over whom he presided.

A circular from Mr. Van Horne, vice-president of the C. P. R., announces the following appointments, to take effect on the 1st of June, proximo: Mr. I. G. Ogden to be controller and to have general supervision over the accounts of the company in all departments. Mr. H. L. Penny to be auditor of disbursements and to have immediate charge of the general accounts of the company. Mr. Chas. J. Flanagan to be auditor of freight and telegraph receipts. Mr. Jno. H. Shearing to be auditor of passenger receipts.

Construction.

THE WINDSOR ELECTRIC RAILWAY COMPANY will soon commence relaying the track with new rails.

WORK has been resumed on the New Brunswick road. Tracklaying is in progress from Cocaigne. The line will be 32 miles long.

THE MANITOBA RAILWAY COMPANY, in order to hasten the work of construction on their line, will make use of the electric light to work in the night.

THE survey of the Gatineau Valley Railway will be concluded within two weeks, when Mr. H. J. Beemer will be in Ottawa to direct the commencement of construction.

IT is stated that the Canadian Pacific Railway Company have decided to expend between \$1,500,000 and \$2,000,000 on the mountain sections of the line, widening cuttings, building snow-sheds, etc.

THE Grand Trunk Railway Company have not adequate side tracks for their rapidly increasing business in London, Ont., and are laying several thousand feet of switching in the east end of the city.

THE jubilee celebration in London was joined with a great railway demonstration in

honor of the entry into the city of the Michigan Central and Canadian Pacific railways. The affair lasted over two days and was a grand success. It comes too late in the month to be spoken of at length in this issue.

ARRANGEMENTS are being made for building an extension of the Canada Atlantic Road from La Colle, Quebec, to Allburgh Springs, Vt. Only twelve miles of track are required to complete the link, which gives direct communication between Ottawa and the New England system. The estimated cost is \$150,000.

MANAGER TURNER, of the Vandepole Electric Railway System, Detroit, has contracted to put in the largest plant for an electric railway in St. Catharines, yet built. The road is to be six miles long, and will take ten motors of 15 horse-power each to run it. The apparatus will cost \$82,000 and the complete rail road \$100,000.

THE Grand Trunk having succeeded in preventing the incorporation of the South-Western Railway from the south side of the Lachine Bridge to Beauharnois, and so on to Dundee, are expected to go on with the construction of their line to Beauharnois and Valleyfield, chartered by the Local Legislature of Quebec. A despatch from Montreal states that the Canadian Pacific will begin at once to construct a branch to Beauharnois on an old charter, probably the Great Eastern.

THE *Toronto World* says:—A report was in circulation yesterday to the effect that the Canadian Pacific Railway was about to proceed with the erection of a new passenger depot. The truth is that the company has been for some time past quietly securing the property on the water front between York and Yonge Streets, and they do not expect to have possession of all the land they need for another year. The exact site of the new station will not be decided until then, nor has anything been done in regard to the proportions and probable cost of the building.

THE work on the International of Maine Division of the Canadian Pacific is proceeding rapidly under the able direction of Mr. James Ross, manager of construction. The line is being built from Holey, Me., to Mattawamkeag, Me., where connection will be made with the Maine Central. The total distance is 128 miles. The following is the list of contractors having charge of sections of construction with the length of line allotted to each: Luke Madigan, of Mount Forest, 24 miles; Stoers, Askwith & Co., Ottawa, 17 miles; Wm. McKenzie, Kirkfield, Ont., 22½ miles; D. D. Mann, Winnipeg, 31 miles; Angus Sinclair, Chatham, 23½ miles; James A. Gordon & Son, Sherbrooke, P.Q., 10 miles.

A proposition has been submitted to Mr. Daly, M.P., through Mr. Andrew Allan, of Montreal, agreeing to build the Saskatchewan & Western Railway between Rapid City and Brandon this year, provided the North-West Central removed their starting point to Virden or any other place west of Brandon. The Saskatchewan and Western Road is applying this season to confirm its local act, declaring

it to be for the general advantage of Canada. Mr. Daly has so far opposed the legislation, as it will tend to permit occupation of the territory of the North-West Central. The Mayor of Brandon has been telegraphed to hold a public meeting in order to consider the matter and to instruct Mr. Daly as to what course he should pursue in the interest of the constituency. A member of the Clewew synchate states that fifty miles of the road will be built this year and that the contract has been signed.

A despatch from Winnipeg, dated May 27th, says:—A deputation from Southern Manitoba interviewed Mr. Van Horne. Their object was to urge the extension of branch lines in Southern Manitoba. Mr. Van Horne received them very courteously, and said the agitation here did the Canadian Pacific Railway a great injury, and rendered it impossible to raise money except upon the personal efforts of the directors. He said Sir George Stephen and Sir Donald Smith had practically put their hands in their own pockets to build branch lines in Manitoba. He spoke of the feeling between the province and Sir George and Sir Donald, and expressed the hope that as time passed all breaches would be healed and harmony would once more prevail. He promised to communicate with the deputation in a few days in regard to the intention of the company. The deputation withdrew, much pleased with the interview.

A letter from St. Johns, Nfld., to the *Montreal Gazette* says:—The ancient French capital will ere long be connected by rail with St. Johns. The present railway between the capital and Harbor Grace, at one point comes within twenty-six miles of Placentia, and, as I mentioned in previous letters, the government decided last year to commence a branch railway to Placentia, as being one of the most useful public works on which the destitute people could be employed. The work was prosecuted during last fall and winter with great vigor, from 1,500 to 2,000 men being employed on it. Resolutions approving of the action of the government in this matter, and in favor of the completion of the work, were recently submitted to the house of assembly, and adopted almost unanimously, only two members voting against them. Placentia is but thirty hours' steaming from Louisburg, a harbor that is open throughout the winter. Were this railway completed, and a line of steamers placed on the route to Louisburg, and were the continental system of railways extended to that place, as I believe will shortly be the case, we should then have a mail route by which our communication with the outside world would be quickened and improved. Instead of a fortnightly mail we might have one twice a week. It would also be a favorite travel route. It is not thought there would be any greater difficulty in keeping open the communication during winter than there is at present via Halifax and St. Johns. This branch line of railway will open up a considerable extent of cultivable land. The facilities for construction are so great that the cost is expected not to exceed \$10,000 per mile.

Duluth and Port Arthur.

A CORRESPONDENT of the *Railway News* of England says—Duluth is at the head of lake navigation, on the American continent, and is the terminus of the Northern Pacific Railway. In the year 1870 this position began practically to attract attention as a point of national importance to be one of the great distributing centres of trade and commerce. The population in 1868 was 2,000, and there was great activity and growth until 1873, when the failure of Jay Cooke, the financial agent of the Northern Pacific Railway, caused a calamitous relapse. In 1878 the population was only 2,200, but in less than three years it increased to 7,800, and in 1885 it reached 18,000, and for 1886 is estimated as 25,000. The city is now described in this extract from the *Duluth Daily News* as being

"furnished with all the essential appliances of modern cities. Her streets are lighted both by gas and electricity, traversed for miles by street cars, and underlaid with sewers and water mains. There are schools and churches, musical, literary, and social clubs, a handsome opera house, where the highest class of musical and dramatic works is rendered, hotels in great number and of every grade, mills, factories, elevators, warehouses, docks, railway terminals, wholesale houses, and retail stores in all lines."

In 1886 the receipts of wheat amounted to nearly 23,000,000 bushels, which is more than received by Chicago and Milwaukee combined. The shipments of flour for the same time were 1,500,000 barrels. This is marvellous, but when it is considered that the Northern Pacific and other railways, running into Duluth pass through unrivalled wheat lands and a country developing many industries—agricultural and manufacturing there is no question that Duluth is destined to be a great city. This idea is now influencing enterprise, and capital gravitates towards the city, stimulating a wonderful growth and enhancement in the value of real estate. Property in the principal business street is expected to be as high as \$750 per foot front this present year, and villa lots are worth \$2,500 each. In St. Paul, Minnesota, business property has sold in the past year as high as \$2,000 per foot front. Outside property at Duluth, which a year ago brought \$250 per acre, is now worth \$1,200. This advance includes all outside property within a belt three miles wide. Duluth has the prospect of business in iron manufacturing and shipping ore and products on a vast scale. The Duluth and Iron Range Railway has recently been opened, a distance north-east of sixty-five miles, reaching the Vermillion Iron Mines, from whence over 700,000 tons of ore have already been shipped. This line will be extended to the Canadian boundary line, where it will join the Port Arthur, Duluth and Western Railway, and so reach the shipping port of the Canadian Pacific Railway, and make connection with that railway for eastern business with Canada and the sea-board. Looking at the wonderful growth and promise of Duluth, the position of Port Arthur, with reference to Canada and the Canadian Pacific Railway, may be regarded as of a parallel character. The population of

Port Arthur is now 6,000 what Duluth was about seven years ago. What may a like number of years bring it to, and what may then be the value of the surrounding land? Land now selling at \$3 up to \$20 per acre will probably be worth as many hundreds. Port Arthur is the shipping point of the Canadian Pacific Railway, and brings the wheat of Manitoba for shipment thence, and the supplies of a vast region coming in and products going out are there transhipped, a colossal business of the future already treading with buoyant steps.

In the immediate neighborhood of Port Arthur are vast deposits of silver and gold now being worked, and towards the frontier line is an extensive region of iron ore. The Port Arthur, Duluth and Western Railway will accommodate a number of these mines, and, passing through the iron regions, will connect with the Duluth and Iron Range Railway, forming a direct route to Duluth, St. Paul, Minneapolis, and the Northern Pacific Railway. Within three miles of Port Arthur is Fort William, on the Kaministiquia River, navigable for miles, on which the Canadian Pacific Railway has extensive dockage and warehouse property. Port Arthur, with its piers, where the lake steamers arrive and depart with passengers and goods, and Fort William, where heavier trade is transacted, have but a narrow mile or two between, and must be linked together as one city—the Port Arthur of the future.

Model of a Steel Car.

THERE has been for some time on exhibition in Chicago a model of a steel passenger car, invented and patented by Mr. James Murison, of Minneapolis, and Mr. W. W. Green, of Chicago. The plan of construction is the bending of thin, wide bars of steel edgewise into a shape conforming to the outlines of a transverse section of the car, and bent bars forming a flattened arch. These steel bars or sections are set like the skeleton beams of an iron ship, and strongly bound together with sixteen 1½ inch rods and braces. Pieces of iron pipe, through which the stay rods pass, are set between the sections, and the whole structure bound into a very strong unit. The outside is covered with corrugated iron, and the inside lined with galvanized iron and asbestos finishing. We understand that a company has been formed to construct some full size cars after this principle. The intention is to fill up all spaces between linings with mineral wool and make the cars entirely fireproof. Estimates have been made which show that a car can be built in this way which will be considerably stronger than first-class wooden cars, and yet be only two thirds of their weight. Mr. Murison is a native of Montrose, Scotland, where in his youth he saw considerable iron ship building, and his invention of a steel car is a modification of the system pursued in designing iron ships.

The model has been examined by a great many leading railroad officers, and this departure in car construction is warmly spoken of by those best able to judge as to its merits.

Railway Corruptors, Attention.

OUR Ottawa correspondent writes—Since I closed my letter, a new move has been made by the railway committee which is of the greatest importance to all interested in the incorporation of new railway companies. Instead of wading through a separate Bill for each new company, the committee has adopted a form of bill covering all the necessary points in the incorporation of a railway company which will serve as the basis of all future railway charters. Special powers will be provided for by special clauses. Other rules have been laid down to facilitate the work of the committee. I append the rules with the suggestion that any of the LIFE'S readers who are interested in railway legislation should paste them in their hats. They are in addition, of course, to existing rules relating to private bills.

All Private Bills for Acts of incorporation of, or in amendment of, acts incorporating Railway Companies, shall be drawn in accordance with the model Bill adopted by the house on 23rd June, 1887, copies of which can be obtained from the Clerk of the House; the provisions contained in any Bill which are not in accord with the model Bill, shall be inserted between brackets, and when revised by the proper officer shall be so printed; Bills which are not in accordance with this rule shall be returned to the promoters to be re-cast before being revised and printed; and any sections of existing Acts which are proposed to be amended shall be re-printed in full with the amendments inserted in their proper places and between brackets; and any exceptional provisions that it may be proposed to insert in any Bill shall be printed in the Notice of Application for the same.

No bill for the incorporation of a Railway Company, or for changing the route of any Railway Company already incorporated, shall be considered by the Railway Committee until there has been filed with the Committee, at least one week before the consideration of the Bill, a Map or Plan, upon a scale of not less than half an inch to the mile, showing the location upon which it is intended to construct the proposed work, and showing, also, the lines of existing or authorized works of a similar character within, or in any way affecting the district, or any part thereof, which the proposed work is intended to serve; such map or plan to be signed by the Engineer or other party making the same; and an exhibit showing the total amount of capital proposed to be raised for the purposes of the undertaking, and the manner in which it is proposed to raise the same, whether by ordinary shares, bonds, debentures, or other securities, and the amount of each, respectively.

Before any Private Bill is considered by the Committee to which it may be referred, a report shall first be submitted to the Committee by the Examiner, stating that he has examined the same, and has noted, opposite each section, any variations from the provisions contained in the model Bill; and, to insure uniformity, the Examiner shall revise and certify every Private Bill passed by the Committees, and the reports thereon, before they are presented to the House.



PUBLISHER'S NOTICE.

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Post office boxes or street and number should be added to address to secure a safe delivery.

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*

Offices - 64 Bay Street, Toronto.

TORONTO, JUNE, 1887.

TWENTY-FOUR O'CLOCK.

THE American Society of Civil Engineers, in a recently issued pamphlet, gives a summary of replies received from railway companies on the subject of the adoption of the twenty-four o'clock system. The society, being composed mainly of level-headed men, favors the adoption of the system. The confession has to be made in the pamphlet, however, that further agitation will be necessary in order to educate American railway managers up to the new idea. Sixty one roads, representing 35,645 miles, are in favor of the general adoption of the system, as against thirty-eight roads representing 26,572 miles on the other side. Even among those who do not favor the proposal, there are evidently many who are willing to bow to the wish of the majority, for when the question is asked whether they would adopt the new system if connecting roads did so, seventy-six roads, representing 47,004 miles, answer in the affirmative,

and only twenty one roads, representing 20,109 miles, in the negative. The majority of the roads do not think that it would be necessary to their adoption of the system that the people along the lines should adopt it also, and even a larger relative majority seem to think the people would not follow the lead anyhow. "Do you think it to be practicable to bring about this change?" is the last question, and thirty-eight roads, representing 25,435 miles, answer in the affirmative, and forty four roads, representing 33,843 miles, in the negative.

The principal feature of these answers is that such a large proportion of roads have not answered at all. The great trans-continental lines are in favor of the reform; but there are some very important systems, such as the Chicago & Alton and the Michigan Central opposed to it, and do not believe that it could be carried out. It is natural that the lines extending the furthest longitudinally and feeling most severely the inconvenience of the present system, should be most strongly in favor of a change.

Canadians have not a little reason to congratulate themselves on the advanced position taken by railways on this side of the line in this respect. The Canadian Pacific led the van by the adoption of the twenty-four o'clock system as soon as the road was in operation through to the coast. On the 13th of this month the Intercolonial, the great government railway of Canada, adopts the same system. In the west, judging by what visitors say and from the constant use of the words "eighteen o'clock," "twenty-one o'clock," in the newspapers, the people have "caught on," as they say in that region, and are as well accustomed to the absence of "a.m." and "p.m." as we here are to the use of standard time. Doubtless the same result will soon follow in the Maritime provinces. The general adoption of the system is a mere question of time.

This, when it comes, will be a step nearer to the realization of the views of those who have long advocated the adoption of absolute time, the system under which the hour will not depend upon the sun but will be called by the same name throughout the civilized world. And this also will be due mainly to the genius and efforts of a Canadian, Mr. Sanford Fleming.

NEW YORK CANADIAN CLUB.

MR ERASTUS WIMAN, president of the Canadian Club, New York, writes to RAILWAY LIFE:

"It is the intention of certain members of the Canadian Club, in New York, to issue, in the form of a beautiful book, the papers which have been delivered before the club during the past winter by prominent parties, together with those which are to be delivered during the remainder of the season.

"These papers will include a speech on 'Commercial Union,' by the Hon. Benjamin Bitterworth, member of Congress, who is said to be one of the most eloquent men of that body. A remarkable production by Prof. Goldwin Smith on 'The Schism in the Anglo-Saxon Race.' A paper by Dr. Grant of the Queen's University on 'Canada First.' One by J. W. Bengough, editor of *Toronto Gossip*. By Mr. Le Moine, of Quebec, on 'The Heroines of New France.' By J. A. Fraser, 'An Artist's Experience in the Canadian Rockies.' By Edmund Collins, on 'The Future of Canada.' By Professor G. D. Roberts, of Kings College. By Gen. Stewart, jr., of Quebec. By the Rev. Dr. Eccleston, on 'The Canadian North West.' By John McDougall, on 'The Minerals of Canada.' And by the editor, G. M. Fairchild, jr., on 'The History of the Canadian Club.' The work will also include extracts from the speeches and letters of the president.

"The book is to be issued in beautiful style, at \$1 per copy.

"A great many Canadians will doubtless desire to possess themselves of this rare compilation, and, by purchasing copies, indicate the interest which is manifested throughout Canada in the attempt of the Canadian Club to lay before Americans the resources, advantages, and attractions of their native country.

"Parties desirous of obtaining copies can do so by enclosing the price of the book to James Ross, Canadian Club, 12 East 29th St., New York."

The Canadian Club in New York, judged by the accounts given of it in the press and by those who have visited it, is an institution of which Canadians may be proud. It has done much, not only to keep alive the love of native land among Canadians in New York and in the United States generally, but has done more than any other institution to make known to New Yorkers and to Americans generally the position and resources of Canada and the views and aspirations of Canadians.

We are glad to be able to say that this club owes its success in large degree to the enterprise and thorough Canadianism of a newspaper man and railway man, Erastus Wiman. We are not prepared to endorse Mr. Wiman's action in remaining a Canadian in heart and in name, notwithstanding his long residence among New Yorkers. But the fact that he has done so, notwithstanding the many temptations which must have beset him to become an American, is a testimony to his thorough

love of Canada and to his pride in the name of Canadian.

The work which is to be issued will be an exceedingly valuable one, judging by the list of papers named in Mr. Wiman's letter. We are glad that the Canadian Club will issue, in handsome form, such a collection of the views of some of the brightest minds in Canada.

THE FIRST STEAMER.

THE arrival in Vancouver of the *Abysinia*, the first of the new Canadian Pacific steamship line to China, marks another step in the progress of Canada in connection with the great transcontinental route. The voyage was made in good time and without mishap, and the passengers speak in terms of the highest praise of the treatment they received at the hands of the officers. No better evidence could be given as to the advantages of the new route in the most important respect—time—than the associated press despatch which appeared in the daily papers, as follows :

Montreal, June 20.—The passengers per *S. S. Abysinia* arrived here this morning from British Columbia, and will reach New York to-morrow, making the journey from Yokohama in twenty-one days, three days ahead of the San Francisco route.

We do not believe with those who talk about the trade from the east, in terms which would lead the people to suppose that it means an immediate shower of wealth upon Canada. We recognize what officers of the Canadian Pacific are reported to have said, that this route is an experiment and the maintenance or abandonment of it will depend upon the results. At the same time those—and they are not few—who look upon this hope of a large Oriental trade through Canada as a mere chimera must admit that, judging from the reports in the daily press, the trip of the first vessel has been a success. The vessels now on the route are not so fast as others that can be constructed on the latest designs; and even should the marked success of the first vessel not attend the voyages of others to follow her, the occasional failure will not be the criterion by which the route should be judged. The general results will indicate what can be accomplished with the latest improved steamers.

To be thoroughly successful this new route across the continent must hold its

own against the Suez Canal and must carry goods not merely to the great cities of the United States but to Britain and the rest of Europe as well. If that can be accomplished the benefits to Canada, come when they may, will be enormous.

Meantime the *Abysinia* has done as well as the projectors of this line could expect and they deserve the congratulations of all Canada upon the success so far achieved.

Editorial Notes.

OUR thanks are tendered to Messrs. Douglas, Reid & Co., of Dundee, Scotland, who, among our British subscribers, have been most kind in sending us information of current events and opinions affecting Canadian railway interests in Britain, enabling us to add not a little to the value of RAILWAY LIFE to our readers.

THERE is a marked increase in the number of summer resorts within easy reach of Toronto, and priced within the limits of the ordinary purse. This is as it should be, and it is to be hoped that it will cause even a greater exodus than usual from Toronto during the summer. The people will benefit by the fresh air, and the railways will benefit by the increased travel.

THE railway bonuses by the Dominion Government this year cover only about one-twelfth of the amount asked for. It was believed at one time that the grants this year would be very heavy owing to ante-election promises of candidates in various constituencies. There is probably a smaller proportion of merely paper railways in this year's bonused roads than in any previous year.

THE legal hints for travellers in the *A. B. C. Pathfinder Guide* have been compiled in the form of a neat little pamphlet, and in that shape it forms one of the most useful hand-books ever placed before the travelling public. The writer of these hints is Mr. Myron T. Bly, of the Rochester bar; and the way in which the book is prepared shows that the writer has a knowledge not only of law but of clear terse English. It requires no legal lore to understand

this book and, strange as it may seem, the work actually makes very entertaining reading.

WE regret very much the information given by our Ottawa correspondent that Mr. McCarthy's Bill for the protection of railway employees cannot pass. The taking under Dominion jurisdiction of the railways of Ontario, deprives a large number of men of protection, afforded them under the Ontario Railway Act. That Act was passed after a full investigation into the actual state of affairs, in which the testimony of the most experienced railway men was taken. It was a boon to railway men, and it was unjust to them to practically wipe it off the statute book. When the roads were taken over the protection formerly enjoyed should have been continued.

WE call attention to the statement of railway construction from the *Railway Age* in another column. It shows an activity on the other side of the line greater than in any previous year since 1882. One of the phenomena attendant upon this rapid railway extension, according to universal testimony of the press, is a great real estate boom. The former is a good sign, the latter a bad one. Winnipeg went crazy over real estate, and in a short time collapsed into a lethargy from which it is only now awakening. What is true of Winnipeg is true of other places, and when a boom takes possession of a continent, the general prospect is not improved by it.

WE have received from the *Railway Age* Publishing Company, of Chicago, a neat and handy volume. The scope and purpose is well set forth in its title, "Light on the Inter-State Commerce Law." This is a most valuable help to the student of current railway affairs—and no man can know the age we live in if he does nothing to keep up with events in railway circles—and contains in short form the cream of the discussion of the Bill. The debates in the Senate are summarized in the interpretations of the law by Mr. Albert Fink, and the controversy between Mr. Fink and President Alexander, the rulings of the Inter-State Commerce Commission and other most valuable portions of the literature of this subject. This Bill should be carefully studied in Canada, for it is one of the beacons of rail-

way legislation, and by the light of it either as a warning or an example we, as a country, avoid some grave blunders. In fact the United States is trying an experiment. We may profit by it. Every lawyer, every public man and, above all, every railway officer ought to have a copy of this excellent work.

Railway Legislation.

Our Ottawa correspondent writes: I cannot hope to be allowed space in one issue to give an un-understandable account of all the legislation affecting railway interests which has been before the House since my last letter, or all the gossip of the lobbies affecting railway affairs. If I did there would be room for nothing else, for in the Parliament Buildings here concentrates the railway history of the whole country. Schemes which have been quietly worked up for years, changes of the law which have been pondered and discussed by many able men, as well as the operations of existing roads, for the year, are all found set out in dry-as-dust form in the bills, returns and reports submitted to the representatives of the people. They are not very interesting reading as they stand, but the subjects are of the most vital consequence, and, if allowed expression in ordinary English, will, I believe, be read with great interest by the readers of RAILWAY LIFE.

In the first place the legislation affecting private companies is greater than in almost any previous year. The most important scheme of all probably is that described in my last letter which will result in the Canadian Pacific securing connection with almost every important point in Western Ontario, giving a magnificent system of feeders to the main lines from Detroit to Niagara, and from Detroit to Montreal. The Grand Trunk Sault line is also of the first magnitude of importance. There are many lines chartered in the North-West, and some previously chartered are asking for amendments of various kinds. Details cannot be given here, but it may be said generally that the companies generally seem to be of a strong character and there is a prospect of less of this scandalous charter mongering than in former years. The Government is doing a great deal for the Maritime Provinces in the way of building railways as public works or giving heavy cash bonuses toward them. The work on the Cape Breton road, as reported in the LIFE last month, is proceeding rapidly.

As everybody knows, Ottawa is the centre of the controversy over the question of railway monopoly in the North-West. The progress of the agitation now going on in Winnipeg is being watched very closely by the Government and its supporters. The debate on this question should have a separate letter, but it is perhaps as well not to deal with it at length seeing that the circumstances affecting the question change every day and what is written now may not be applicable or interesting by the time this issue of the LIFE is printed. The Parliament of Canada has supported the policy of disallowance of Manitoba charters to the

boundary, and the Government has declared that it will adhere to it. In this it is supported by two members from Manitoba and all those from the North West, while there are two members who, while voting against the Government on this question, give an unvarying support on every other question. It is fair to believe that if the people of Manitoba were really in earnest in their protests against Disallowance there would be a stronger manifestation of that sentiment among their members than only one representative opposing the Disallowance Government. However this is drifting off into politics which it is no part of the duty of a railway paper to touch. The belief here seems to be that the Red River Valley road will be built and that the Canadian Pacific will find some means of circumventing its opponents in Manitoba even though the power of Disallowance is not exercised in its favor.

Among the measures relating to railways generally is one of the greatest possible importance which, unfortunately, cannot pass this session. This Bill is entitled "An Act for the Protection of Railway Employees." It was introduced by Mr. Dalton McCarthy, one of the ablest men in the House, the promoter of some of the most important measures that have ever come before the House. Doubtless next session the proposals of Mr. McCarthy will become the law of the land. The Bill makes it imperative upon railway companies to have railway frogs, guard rails and wing rails packed so as to leave no space at the smaller part more than one and three quarters inches wide, and at the wider, less than five inches wide. Running boards at the top of box cars must be thirty inches wide, safely supported and running the whole length of the car to a point not less than two inches of the outer edge of the bumper. The Bill provides that along the side of this board there shall be a chain or rail sufficiently strong to support the weight of a man. This is the only fault in the Bill, but it would doubtless be struck out when the danger of such a contrivance to a man jumping from car to car in the dark is made known. The oil cups of locomotives, it is provided must be inside the cab, so that it shall not be necessary for a man to go outside while the train is in motion for the purpose of oiling.

Mr. Mulock has a Bill, which like the one last mentioned must go down in the "slaughter of the innocents" at the end of the session. It is an application to Canada of the principles of the Inter-State Commerce Law and its provisions would indicate that that measure has been carefully studied. The main point is an effort to overcome the difficulty of differences made in charges by reason of terminal expenses. So far as mere weight is concerned it costs no more to have one class of goods than another, and, if more car room were not required, more trouble experienced in loading and unloading and more responsibility incurred in case of some goods than another, a east iron scale of rates would be possible. Mr. Mulock seeks to divide the hauling charge from the others and to make it necessary for railway companies to adopt a tariff for each and to make that schedule public. Before a

schedule can be adopted it must be approved by the Governor General in Council. Two months notice must be given of the proposed tariff, the same to be posted in the stations, and persons objecting are to be heard before the Governor-General in Council. The principle of the main clause of the Inter-State Commerce Law is embodied by Mr. Mulock in his bill in the following terms:

It shall be unlawful for a railway company to charge or receive any greater rate of compensation for the transportation of goods, similar in quantity and kind, for a shorter than for a longer distance, which longer distance includes the shorter.

Any manager who knowingly causes to be levied tolls not authorized by the Bill is made liable to a fine of not more than \$100 and imprisonment for not more than three months, either or both. Wages and debts for supplies are made first lien upon the earnings of the railway.

Ottawa, June 20th, 1887

The Oriental Steamers.

THE *Abyssinia*, the first of the new Canadian Pacific Line of Pacific steamers, arrived at Vancouver at 5.30 a.m. on the 14th inst. The following account of her arrival appeared in the daily press:

About 3.30 a telegram was received saying the *Abyssinia* had passed Victoria at 3.10 p.m. without stopping there. This announcement set everybody on the *qui vive*, and speculations were rife as to the hour at which the vessel might be expected at the wharf. At 6.30 p.m. the steamer *Eliza* left the landing stage, having on board the health officer, Dr. Breckingsale, Captain Webber, the agent here for the new line; Mr. D. E. Brown, freight agent C. P. R., and your correspondent, and steamed out the harbor to meet the *Abyssinia*.

Preparations were now made to give the pioneer vessel a hearty welcome. The city council met and immediately adjourned, the mayor and most of the aldermen making their way down to the wharf. Presently the strains of music were heard and the city band went marching down the street, playing a lively air, towards the wharf, where hundreds of people were congregated. The city was decorated with flags and the ships in the harbor were gay with bunting. As the evening wore on and it began to get dark fireworks were sent up and many of the principal hotels were illuminated, particularly the Regina, owned by Mr. Cosgrave. It may be remarked that the Regina was the only house left standing in this city after the terrible fire of a year ago. Eleven o'clock came and there was no word of the steamer. The crowd gradually dispersed when it was known that she would anchor in the bay till daylight.

After midnight the steamer *Eliza* returned bringing back the party she took out to the *Abyssinia*. The *Eliza* also brought ashore three sacks of letters which will be forwarded by train to-day. The *Eliza* ran out until opposite the lighthouse, where she hailed the China steamer. It was 9.25 p.m. when the *Abyssinia* ran into English Bay and dropped anchor. Immediately after the occupants of the *Eliza* went aboard, preceded by Dr.

Breckingale, the health officer, who found upon examination that the vessel showed a clean bill of health. Immediately upon boarding the steamer your correspondent inquired for the captain, who was found on the bridge, looking after the moving of the vessel. Captain Marshall received him with the utmost cordiality and on being informed of your representative's mission, kindly gave the following particulars. The *Abyssinia* left Yokohama on the morning of May 31st at 7 a.m. She was billed to leave on the 29th, but several delays occurred, which prevented her sailing before the 31st. The first eight days out the weather was thick, at times foggy, and the winds were light and variable, which prevented sails being used. It was not until the last day of the voyage, on entering the Straits of San Juan de Fuca, that sail was set. Nothing of importance occurred during the trip, and no accidents of any kind marred the pleasure of those on board. The *Abyssinia* made her course over what is known as the great circle, and found it to be ten miles shorter than the distance set down in the Canadian Pacific Railway map.

On being questioned as to the passengers and prospects for that particular traffic, Captain Marshall said: "I could have taken over fifty passengers more than the vessel had accommodation for. I think this route, via Vancouver, will be a favorite one, as passengers coming this way avoid the hot weather that is experienced, if the Suez Canal route is taken. Our time, although good, will be beaten by the *Parthenian* about two days. The route is bound to be a favorite, and I expect to see some very fast vessels put on before very long. The passengers all speak in the highest terms of the vessel and route, and a few of them who have made many trips from Japan and China to Europe say that it is by far the pleasantest voyage they have ever undertaken. The officers all carry masters' certificates, which is a most unusual thing in any sea-going vessels.

The distance from Hong Kong to Vancouver is 5,758 miles and from Yokohama to Vancouver 4,232 miles. The voyage was made in 13 days and 14 hours. The longest run made in 24 hours was 324 miles and the shortest 279 miles.

At a dinner last night, Capt. Marshall was presented with an address signed by each passenger praising him for his kindness, courtesy and general readiness to oblige and make everybody comfortable and happy. They speak in the highest terms of the route, and in the address wish the promoters of the new line every success. Capt. Marshall replied in fitting terms.

THE San Francisco *Chronicle* says:—The Canadian Pacific will carry our fruits, wool and other products to eastern markets at rates that transcontinental lines would consider, if they were not engaged in an effort to break down the Inter-State Commerce Act. And again: The Canadian Pacific is on a fair way to convince transcontinental lines that the Inter-State Commerce Act does not require as high rates as they originally thought.

The Railway Subsidies, 1887

The schedule of cash railway subsidies to be voted by parliament this year was given notice of by Hon. J. H. Pope, Minister of Railways, on the 18th inst. They are as follows:

That it is expedient to authorize the Governor in Council to grant the subsidies hereinafter mentioned to the railway companies and towards the construction of the railways also hereinafter mentioned, that is to say:

St. Catharines and Niagara Central Railway Company, for twelve miles of their railway from the City of St. Catharines to the bridge over the Niagara River, \$3,200 per mile .. \$ 38,400

Vaudreuil and Prescott Railway Company, for thirty miles of their railway, from Vaudreuil towards Hawkesbury, \$3,200 per mile .. 96,000

Richmond Hill Junction Railway Company, for five miles of their railway from Richmond Hill Junction on the Northern Railway to Richmond Hill Village, \$3,200 per mile .. 16,000

Drummond County Railway Company, for thirty miles of their railway, from Drummondville towards Nicolet, \$3,200 per mile .. 96,000

Joggins Railway Company, for one and a quarter miles of their railway extending from the southern end of the portion subsidized by 49 Victoria, chapter 10, to the wharves, \$3,200 per mile .. 4,000

Moncton and Buctouche Railway Company, for two miles of their railway for the west end of the portion subsidized by 49 Victoria, chapter 10, to Moncton, not exceeding \$3,200 per mile .. 6,400

Beauharnois Junction Railway Company, for thirty miles, from St. Martin's towards St. Amcet, \$3,200 per mile .. 96,000

Harvey Branch Railway Company, for three miles of their railway, from the southern terminus of the Albert Railway to Harvey Bank, \$3,200 per mile .. 9,600

Brantford, Waterloo and Lake Erie Railway Company, for eighteen miles, from the Town of Brantford to the Village of Hagarville or the Village of Waterford, or some intermediate point on the Canada Southern Railway, \$3,200 per mile .. 57,600

Guelph Junction Railway Company, for sixteen miles of their railway from its junction with the Canadian Pacific Railway to the Town of Guelph, \$3,200 per mile .. 51,200

Massawippi Railway Company, for ten miles of their railway, from a point on the Atlantic and North-Western Railway, near the Village of Magog, to Ayer's Flat Station, on the Massawippi Valley Railway, \$3,200 per mile .. 32,000

Napanee and Tamworth and Quebec Railway Company, for four miles

of their railway, from the north end of the section subsidized by 48-49 Vic., chapter 59, to Tweed, \$3,200 per mile .. 12,800

Arthabaska and Wolfe Railway Company, for seven miles of their railway, from a point on the Quebec Central Railway, in the Township of Dudswell, to the Dominion Lime Company's quarries, \$3,200 per mile .. 22,400

South Norfolk Railway Company, for seventeen miles of their railway, from Port Rowan to the Town of Simcoe, \$3,200 per mile .. 54,400

Jacques Cartier Union Railway Company, for extending and completing their railway, a subsidy of .. 20,000

Teeswater and Inverhuron Railway Company, for twenty-four miles, from Mount Forest to Walkerton, \$3,200 per mile .. 76,800

Oshawa Railway and Navigation Company, for seven miles, from Port Oshawa toward Raglan, \$3,200 per mile .. 22,400

Chicoutimi and Lake St. John Railway Company, for thirty miles, from Lake St. John towards Chicoutimi, or from Chicoutimi towards Lake St. John, \$3,200 per mile .. 96,000

Great Eastern Railway Company, for thirty miles of their railway, from the River St. Francis to the Arthabaska Railway, at St. Gregoire Station, \$3,200 per mile .. 96,000

Ontario and Pacific Railway Company, for six miles of their railway, from the northern end of the portion subsidized by 47 Victoria, chapter 8, to the Town of Perth, \$3,200 per mile .. 19,200

Caraquet Railway Company, for seven miles of their railway, from Lower Caraquet to Shippegan, in lieu of the subsidy granted by 49 Victoria, chapter 10, .. 32,000

St. Lawrence and Lower Laurentian Railway Company, for the section of their railway from the Grand Piles, on the St. Maurice River, to its junction with the Quebec and Lake St. John Railway, in lieu of the subsidy granted by 48-49 Victoria, chapter 59, for a line of railway from Grand Piles, on the St. Maurice River, to its junction with the Lake St. John Railway—a distance of about fifty miles, a subsidy of .. 217,600

St. John Valley and River du Loup Railway Company, for twenty-two miles of their railway, from the Village of Prince William towards the Town of Woodstock, \$3,200 per mile .. 70,400

Lake Temiscamingue Railway Company, for four short sections of railway, in all about two miles in length, to overcome the rapids of the Ottawa River, known as "La Mi-Charge," "La Cave," "Les Etables," and "La Montagne," and for the construction of wharves and landing stages at these rapids, to connect the Canadian Pacific Railway at Mattawa with Lake Temiscamingue by steam-

boats, railways and other works (in lieu of a portion two miles in length, out of the eight miles of railway subsidized by 48-49 Victoria, chapter 59, under which about six miles of railway have already been built from the foot of Long Sault proper to the foot of Lake Temiscauingue, and in lieu also of the subsidy granted by 49 Victoria, chapter 10)

Carillon and Grenville Railway Company, for twelve miles of their railway from St. Eustache to Sault au Recollet

Minudic Branch Railway Company, for five and a half miles of their railway, from its junction with the Joggins Railway, near the River Herbert Railway bridge, to the Village of Minudic, \$3,200 per mile

Lake Temiscauingue Colonization and Railway Company, for ten and a half miles of their railway, from the Long Sault to Lake Kippewa, \$3,200 per mile

Leamington and St. Clair Railway Company, for two miles of their railway, from a point on the fourteen miles subsidized by 48-49 Victoria, chapter 59, between the Town of Chatham and Lake Erie, to the Village of Comber, \$3,200 per mile

Cumberland Railway and Coal Company, for fourteen miles of their railway, from a point on the Spring Hill and Parrsboro Railway, near Spring Hill, to a point on the railway between Oxford and New Glasgow, near Oxford Village, \$3,200 per mile

Montreal and Champlain Junction Railway Company, a subsidy of

Quebec and Lake St. John Railway Company, for nine miles of their railway, the distance in which the previous subsidies granted are short of covering from the City of Quebec to Lake St. John, \$3,200 per mile

Temiscouata Railway Company, for thirty miles of a branch of their railway, from Edmundston towards the St. Francis River, \$3,200 per mile

Cornwallis Valley Railway Company, for thirteen miles of their railway, from Kentville to Kingsport, \$3,200 per mile

Nova Scotia Central Railway Company, for thirty-four miles of their railway, from Lunenburg, \$3,200 per mile

Tobique Valley Railway Company, for fourteen miles of their railway, from Perth Centre Station towards Plaister Rock Island, in lieu of the subsidy granted by 49 Victoria, chapter 10, for a railway from Perth Centre Station, on the New Brunswick Railway, to a point near Plaister Rock Island

For a railway from Woodstock towards Centreville, twenty miles, \$3,200 per mile

For a railway bridge over the St. Lawrence River at Coteau Landing,

on the line of the Canada Atlantic Railway, a subsidy of 15 per cent. on the value of the structure, not to exceed

Lake Erie, Essex and Detroit River Railway Company, for twenty-seven miles of their railway, in lieu of the subsidy granted by the Act 49 Victoria, chapter 10

12,400

36,400

17,600

33,600

6,400

44,800

64,000

28,800

96,000

41,600

108,800

89,600

64,000

180,000

118,400

These subsidies are granted on following conditions: Where no company is named, the money goes to the company first establishing to the satisfaction of the government that it can build the road; subsidized lines must be begun in two years and finished in four years from August next, location to be satisfactory to the government, payments to be made on construction of ten-mile sections; the government to have the power to arrange running power, etc., so as to afford equal facilities and rates for all roads connecting with the subsidized lines.

The following land subsidies for railways in the North-West were already passed by the House of Commons when the above was written.

Alberta and Athabasca Railway, 6,400 acres per mile of the company's railway from some point on the Bow River or the Canadian Pacific Railway, at or between Calgary and Crowfoot Creek, to a point on the Athabasca River, crossing the North Saskatchewan near the town plot of Edmonton, a distance of 300 miles.

Qu'Appelle, Long Lake and Saskatchewan Railway and Steamboat Company, 6,400 acres from the northern termination of the portion of that railway already completed to a point at or near where the 52nd degree of latitude crosses the South Saskatchewan, a distance of about 130 miles, and from thence to the Elbow of the North Saskatchewan, a distance of about 25 miles, with a branch to Prince Albert, a distance of about 85 miles, and also a branch to Battleford, a distance of about 85 miles, making a total of about 325 miles.

Medicine Hat Railway and Coal Company, 6,400 acres per mile of the company's railway from Medicine Hat station, on the line of the Canadian Pacific Railway, to the Medicine Hat Coal Mines, on the south bank of the Saskatchewan, a distance of about eight miles, to be selected out of such lands as are at the disposal of the government in the proximity of the line of the company's railway.

These grants are to be free grants, subject only to the payment by the grantees respectively, of the cost of the survey of the lands, and incidental expenses, at the rate of ten cents per acre in cash on the issue of the patents therefor.

An exchange says:—It is reported that a number of prominent railroad companies have agreed to unite in a scheme for selecting one automatic coupler for general use. The companies which have joined in the plan will appoint representatives, who will recommend some one coupler, and the companies all agree to adopt whatever coupler is thus recommended. Probably this is the only way that any agreement can ever be reached on this point.

C. P. R. Trans-Oceanic Mail Route.

The following summary of the debate in the House of Lords on the Canadian Pacific proposals for carrying the mails to China and Japan is from the *Railway Times* of London England: In the House of Lords, on the 20th ult., the Earl of Harrowby asked what course was intended to be taken by the Government respecting the proposals of the Canadian Government to establish a line of first class Royal mail steamers between the Pacific terminus of the Canadian Pacific Railway at Vancouver City and Hong Kong, China, and Japan. The noble earl said his motion arose out of the completion of that great work, the Canadian Pacific Railway, which had probably about the greatest revolution in the condition of the British Empire which had occurred in our time. The people of England had not yet appreciated the enormity of a change which had brought the Pacific ocean within fourteen days of the English Coast, whereas it could not be reached formerly within two or three months. The railway brought us into direct contact with the beautiful and productive territories of British Columbia and Vancouver's Island, which were the most singular and valuable possessions of the Crown. In comparing the time taken to go to Yokohama, Hong Kong, and Shanghai by the best steamers under the new contract for 1888, he found that from England by the P. and O. route, via Suez and Brindisi, to Hong Kong, took from 33 to 37 days, and by the Canadian Pacific Railway from 32 to 35 days; to Shanghai by the P. & O. route 37 to 42 days; by the Vancouver route 32 days; to Yokohama by the P. & O. route 41 to 45 days, by Vancouver 27 days. By the Cape, the time taken to go to Bombay was 31 days, by Vancouver 38 days; to Singapore by the Cape 32 days, by Vancouver 32 days; to Brisbane by the Cape 28 days, by Vancouver 27 days; to Fiji by the Cape 32 days, by Vancouver 27 days. Thus the route by Vancouver was, in many cases, better than the existing lines, and where it was not, it was an excellent alternative in case of difficulty or danger, as in time of war. Once this line were established the sub-marine telegraph would follow to the Australian Colonies, and we should not thus be left at the mercy of a hostile power for our communications in time of war. The strategical advantages of the position at Vancouver were important and undeniable. He believed that by putting armed cruisers into the hands of the Canadians in that most commanding position of Vancouver, more would be done to prevent hostile attack and convince the nations of the world that we were strong than by any other means.

Lord Brabourne thought that no economical considerations, unless they were of a very grave character, should prevent this country from responding to the appeal made to them by the Dominion of Canada.

The Earl of Onslow pointed out that the subject had occupied the attention of two committees, one of which had dealt with it almost entirely from the point of view of commercial and postal advantages, and the other from a strategical aspect. Since these committees had reported the subject had assumed

a somewhat different aspect. In lieu of a tri weekly service the Canadian Pacific Railway management proposed the service should be fortnightly, and that the vessels should be built according to Admiralty requirements both as to speed and capacity as armed transports. Her Majesty's Government had not seen their way to accepting so large a proposal. Since then a further proposal had been made—namely, that the service should be monthly, and that Her Majesty's Government should make a contribution of 60,000*l.* a year. Upon the receipt of that communication a telegram was addressed to the Canadian Government, inquiring whether they were prepared to assist in contributing towards the subsidy. At first it was understood that the Canadian Government declined to make any contribution whatever. Since then, however, a further communication had been received, in which the Canadian Government had expressed their willingness to make some contribution from the Canadian funds and that proposal was at the present moment under the consideration of Her Majesty's Government. The Canadian Pacific Railway management had already taken some steps to place themselves in an efficient condition. He was informed that they had purchased three ships from the Cunard Company, and that those ships were now on their way to Vancouver, with a view to being placed on that service. He could assure the noble earl that the matter was receiving the most careful attention of Her Majesty's Government, and that as soon as a decision was arrived at papers would be laid on the table.

The Earl of Carnarvon would gladly accept the monthly service, in the sure hope and conviction that it would soon become a fortnightly service, for he shared entirely in the belief of his noble friend that when once the service was established commerce would grow, trade would be developed, and that the line from Vancouver to the East would at once become a source of very great wealth and power to this country. The subsidy would give us five distinct Imperial and commercial advantages—first, a rapid through postal and passenger route to the East; second, the means of establishing an independent telegraphic line to the East; third, the means of rapid and cheap transport of troops and stores across the American Continent to our eastern possessions; fourth, a third, and possibly the most important route to the East; and fifth, the provision of ships which would form part of the service at the Pacific end of the route, and which would be constructed as cruisers in accordance with the Admiralty requirements.

The Earl of Dunraven said it was clear that from a commercial and military point of view it was of the utmost importance that this route should be utilized. It was not a matter to be looked at from the narrow point of view of economy; but, at the same time, it could not be disputed that the country would get good value for its money.

Earl Granville said he looked into the matter more than a year ago, when the noble earl put a question to him as Secretary for the Colonies on the subject. The result of his careful personal investigation into the circum-

stances was that he came entirely to the conclusion that what the noble earl now asked was a desirable thing to do. The question was still under investigation when he left the office, and he was glad to gather from the statement of the Under-Secretary, that some satisfactory arrangement was likely to be come to. (Hear, hear.)

The Earl of Harrowby, in asking permission to withdraw the motion, expressed his gratification at hearing from the Under-Secretary that Her Majesty's Government were still considering this matter.

The motion was then withdrawn.

C. P. R. and the Grain Trade.

The Ottawa Journal says—The Canadian Pacific Railway proposes to go extensively into the grain handling business in Manitoba and the North-West. It is said also they propose to take their first steps within the next twelve months in the direction of carrying out an extensive scheme of railway extension in the territories with the view of forming feeders for the main line.

This was in effect, the pleasant announcement conveyed to Messrs. Perley, M.P., of Moosomin, N. W. T., and Mr. Grandley a wealthy land owner of the Souris district, who interviewed Sir George Stephen, in Montreal a day or two ago. Various matters relating to the wants and requirements of the territories were discussed at length. The special object of the visit of Messrs. Perley and Grandley was to ascertain if there was any probability of the Canadian Pacific undertaking the extension of the C. P. R. South-western as far as the Dirt Hills, south-east of Regina. Sir George Stephen promised that the road would be extended a sufficient distance next year to meet the requirements of the country. The company, he explained, did not care to ask for money to carry on the work just now. The crops that year were not any too favorable, while the present state of trade did not warrant further expenditure in construction. The disallowance agitation had a tendency already to lower the credit of the company besides reducing the market value of the capital stock.

Sir George Stephen stated that the Canadian Pacific will commence purchasing and handling grain this fall, thus giving the settlers the benefits of two markets. Mills of enormous capacity will be erected at Kewatin, on Lake of the Woods east of Winnipeg. All grain milled will consequently reach the East via the main system of the C. P. R., thus precluding the possibility of this trade being diverted into American channels. The great Ogilvy firm of Montreal, who have hitherto enjoyed a practical monopoly in the North-West, will be treated as friendly competitors.

A train, consisting of twenty-five cars of cattle, made the run from Prescott to Montreal, via the C. P. Ry., recently in 6 hours and 43 minutes, a distance of 177 miles; changed engines and crews at Ottawa.

G. T. K. and the Free Pass System.

The Market Report, issued by Mr. William Abbott, F. R. G. S., speaking of the Grand Trunk, says: Shareholders cannot estimate the advantage to them of the union with the Great Western which was consummated in 1882. Immediately after that important fusion there was a stampede amongst the "Ticket Scalpers" and other harpies who had fastened upon both Companies, and fattened upon their rivalry. When I was in Canada, just after the union, I had an opportunity of forming an opinion of the immense advantages which the Companies would derive from the annihilation of the abominable system of ticket agencies too long existing. Of course the Grand Trunk was roundly abused by those whose interests were not identical with the Shareholders, but when I came to enquire more closely as to the cause of this bitterness, I invariably found that the whole cause of the indictment against the Company was that they did not grant "facilities." These facilities simply meant free passes to people known in America as "dead head" travellers, who pay nothing for the accommodation afforded them. I cannot too strongly applaud Mr. Hickson, the able General Manager of the Company, for his determination to put down this pernicious system. If the American Railways are now compelled to abandon this practice, and to kill these parasites, who have so long sucked the life blood out of American Companies, it will indeed give fair ground for hope that at last the robbery and jobbery on the American lines, which interfered to a great extent with the prosperity of the Grand Trunk, will be abolished. All the bonds on the subsidiary lines connected with the Grand Trunk have risen considerably, the four per cent. Debentures and the four per cent. Guaranteed Stock at their respective prices being regular dividend payers are cheap.

Track Laying This Year.

The ablest of authorities on railway construction, the *Railway Age*, contains the following: The indications of extensive railway construction during the past year which were given by our records a month ago have been fully justified since that time, and the work of grading and track-laying is now going on in several portions of the United States at a more rapid rate than ever before in the history of the country. From returns received at this office up to the end of the last month we find that the new track, main line, laid in the United States from January 1 to June 1, 1887, a period of five months, aggregates no less than 2,351 miles, on 89 lines in 33 states and territories. This is an addition of 787 miles since our last month's report, and gives a total which has never before been equalled at this season of the year, with the exception of that year of extraordinary railway building, 1882, when the mileage constructed in the country reached the great total of 11,568 miles. When it is remembered that the work of the first four or five months of the year is mainly that of preparing the roadway for the

rails, and that by far the greater part of the track laying is done in the latter half of the year, and when a survey is made of the great number of enterprises on which construction work is now being actively pushed, it will be seen that the year 1887 is destined to be not able as a year of great railway building. Already the track laid down in the first five months in which frost and rains prevail aggregates about 80 per cent. of the entire mileage built in the year 1885. By way of further comparison it may be said that it considerably exceeds the total railway mileage of either Massachusetts, New Jersey, North Carolina, South Carolina, Florida, Alabama, Mississippi, Louisiana, Tennessee, Kentucky, or Arkansas, and indeed of either one of some twenty of the other states and territories. The work of construction is almost entirely confined to the new west, not a mile being yet reported from the New England states or New York, with the exception of Massachusetts, in which 11 miles have been laid, and only about 30 miles are credited to the great state of Pennsylvania. The south is showing considerable progress Florida, Alabama and Georgia being in the lead, but the chief activity is in the great central belt west of the Missouri River.

The Kingston & Pembroke Mining Company.

The *Financial Daily Record*, of New York, says: A careful investigation of the affairs of this corporation satisfies us that there is money to be made in buying stock, which has just been admitted to the unlisted department of the Stock Exchange. The company was organized and is largely owned by the same people who control the Kingston & Pembroke Railway, the stock of which we also recommended as a safe purchase at the time it was listed, and which has since had a very satisfactory advance. The stock of the Mining Company is \$5,000,000, and it owns or controls 8,000 acres of rich iron lands extending for sixty miles on the line of the Kingston & Pembroke Railroad, within easy reach of an excellent market for all its possible output. The company has no less than thirteen distinct mining properties, the most of which are now actively worked and under extensive development. It owns a very extensive plant and ample machinery, has \$200,000 of cash in its treasury, and its total output will soon reach 1,000 per day. At the present time the company is shipping 200 tons daily to the two cities of Chicago and Cleveland. The property is one of genuine value with no nonsense or over capitalization about it, is energetically and ably managed and will without doubt earn and pay good dividends.

In a later issue the *Record* says: The Kingston & Pembroke Mining Company's stock of the total par value of \$5,000,000 has been placed upon the stock exchange list, and from the important and influential interests associated in its support may be expected to make a good record for itself and become an active favorite in the trading. The management is in the hands of practically the same party of which Messrs. Flower, H. H. Porter, Thomas and Brice are leading members who are inter-

ested in the Kingston & Pembroke Railroad. The mining company is expected not only to aid materially in the development on the traffic of the railroad, but in itself prove a remunerative concern.

Railway Station Agents' Association of North America.

The following circular has been issued:

OFFICE OF PRESIDENT,
SHELBYVILLE, KY., June 7th, 1887.

The third annual meeting of the Railway Station Agents' Association of North America will be held at the Nicollet House, Minneapolis, Minnesota, commencing on Wednesday July 20th, 1887. The first session to be called to order at 10 a. m.

Each State Division is entitled to ten delegates, and a full delegation from each division is desired.

A cordial invitation to attend is extended to all station agents of North America, whether members of the association or not, and to railway officials and all others who entertain a kindly interest in the welfare of station agents, and the success of our association in its endeavors to elevate the standard of agents, to relieve the distress of its members and their families when caused by sickness, death, or other disability, and to form closer relations between employee and employer.

This meeting promises to be the largest and most profitable yet held. Various constitutional changes will be proposed; ways and means considered and plans adopted looking forward to the establishment of beneficiary and guarantee departments; the annual election of officers; appointment of the executive board, together with the reading of such papers as may be prepared on subjects that may be hereafter announced, and the transaction of such other business as may come before the meeting.

Officers of State Divisions are requested to assist us in carrying out the foregoing arrangements and as far as possible secure full delegation from their respective divisions, and to feel at liberty to offer any suggestions that will tend to make the meetings more valuable. Minnesota Division is sparing no pains to make the stay of the delegates in Minneapolis both pleasant and profitable. Delegates and members are requested to call on the secretary immediately on their arrival in Minneapolis, and register.

We hope to see the wives, daughters and sweethearts of agents at the meeting, for their presence adds largely to its success.

Reduced rates have been agreed upon for delegates, members and their families at the Nicollet House. It is suggested that rooms be secured in advance. Transportation has been arranged for, and circular giving information in regard to it will be cheerfully mailed to parties desiring to attend the meeting on application to the secretary.

O. L. RICKARD, Secretary,
Merrillan, Wis.
Geo. PERRY, President,
Shelbyville, Ky.

C. P. R. Prospects.

The *Railway News* says: The Canadian Pacific may become in the near future the Great Transcontinental Route, for it has not only had immense governmental support, but was built when the cost of doing so was very small, and besides is the shortest route across the continent. There are rumors in the air that the Canadian Pacific and the Michigan Central are about to make some binding mutual engagements.

Should an alliance such as is outlined be formed, it would be one of the most powerful combinations in America. The system would extend from Boston to Chicago, and branching at Detroit over the Wabash would extend into the almost limitless Southwest. The Northwest would, of course, be drained by the upper line.

The Michigan Central system comprises 1,079 miles of road and the Canada Southern 437 miles. There are 121 miles of second main track and 569 miles of side track, making an aggregate of 2,206 miles of track, of which 1,898 miles are laid with steel. The construction account has been increased by purchases of land, chiefly for additional station grounds at various points, to the amount of \$53,063; by balance of cost of Jackson, Lansing and Saginaw northern extension transferred to this account, \$52,086, and by the new Grand River Valley bond issue of \$1,000,000, making a total of \$1,105,149. The gross earnings were as follows:

	1886.	1885.
Freights	\$7,938,572	\$6,906,207
Passengers	3,670,926	3,162,342
Mail	188,811	226,469
Express	389,108	310,827
Miscellaneous	108,510	92,549

Total \$12,295,829 \$10,707,394

The Canadian Pacific has asked to join the Association of American Railroads, and in fact generally is trying to be an American road more than a British Club antagonist to American interests.

Railway Expenses.

The *Railroad Gazette* has published tables showing the percentage of various items of expense to the total operating expense on a railroad "operating a good deal more than 3,000 miles," the figures being the average of two years' actual practice. The following is a summary:

Summary of Percentage of Expenses to Total Expense.			
Average.	Average.		
Train service	9.85	Telegraphing	2.20
Engine service	20.30	Printing and advertising	1.00
Station service	11.43	General expense	6.25
Water service	1.50	Legal expense	0.75
Track repairs	18.30	Miscellaneous	0.10
Bridge repairs	4.00	Foreign agencies	1.50
Fence repairs	0.60	Insurance	0.30
Building repairs	2.10	Rent of cars	0.88
Docks and levees	0.25	(credit)	0.88
Engine repairs	8.50	Total	100.00
Car repairs	10.50		
Loss and damage (freight)	0.25		
Loss and damage (miscellaneous)	1.25		

Jay Gould's New Car.

MR. JAY GOULD has ordered the construction of a new private car which will be given the name of the "Atlanta." It will be divided into five apartments—kitchen, parlor, private room, toilet room and observation, and is to cost \$20,000. A description of the car is given as follows: The parlor, which will occupy the main part of the car, will be finished in satin wood and oak. The windows are to be of the large combination Gothic order, set in a single sash of mahogany. The glass will be the finest polished plate. A handsome book case and desk will be on the right side of the parlor, and in the centre a large extension table. Several comfortable easy chairs will be distributed around the room, and in one end an inviting lounge will tempt the wizard to rest his weary frame. Italian carvings will be tastefully distributed. The ceiling will be artistically decorated, and the floor of a yellow pine will be mostly concealed by a thick velvet carpet. The doors leading to the front part of the car will be embossed after the French style, with polished plate mirrors in which Mr. Gould may see the concentrated essence of a money king. Rich tapestry curtains will hang in the outer doorways. The refulgent rays from four massive silver-plated lamps will turn the darkness of the night into daylight and present to the common herd outside, unless heavy curtains bar their sight, a momentary glimpse of the discomforts of the wealthy. Connected by a passageway, also finished in hard woods of various kinds, will be Mr. Gould's private apartments, decorated to correspond with the rest of the car and arranged so as to be made into two bed rooms at night, each of which will be supplied with a satin wood folding bed. A neatly furnished toilet room with all the modern improvements for the removal of travel stains will separate the private room from the observation room, to which access may be gained by another passageway around the side. The ceiling of the observation room will be mottled mahogany. High-backed, spiral springed, plush covered chairs will abound. The sides and rear will be chiefly of heavy plate glass, through which the richest man in all America, while flying toward his journey's end with lightning-like rapidity, may gaze upon the ever changing panorama of America's varied scenery.

Canada Southern Board.

THE annual meeting for the election of directors of the Canada Southern Railway was held at St. Thomas, June 1st, when the following were elected directors for next year: Cornelius Vanderbilt, William K. Vanderbilt, Jas. Tillinghast, Anthony G. Dulman, Chas. F. Cox, Samuel F. Burger, Sidney Dillon, Joseph E. Brown, Edward A. Wicke. Meetings of the Niagara River Bridge Company, the Niagara Grand Island Bridge Company, the Sarnia, Chatham & Erie Railway Company, were also held. The old directors were re-elected.

A Welcome Invention.

AMONG the many recent improvements in the passenger service of the Grand Trunk is one which shows a generous desire to study the comfort of the travelling public. On car No. 196 of the "Standard" series they have fitted up a novel appliance in the form of a head-rest. This is let down on a hinge from the panels between the windows, where, when not in use, it is held by a spring fastening. The end next the aisle is held in position by a curved bolt which fits into a socket at the back of the seat. When thus in position the "rest" is about 4 inches above the top of the seat, and consists of a piece of wood whose top and sides are upholstered in cardinal plush, to match the seats. Being thickly padded, it forms a comfortable and ample support for the head, and at the same time admits of the turning of the seats, so that it can be utilized from both sides, or a seat can be turned without disturbing a person in the next seat. This richly upholstered top cushion adds elegance to the appearance of the car, and the passenger entering is impressed with an air of comfort. This new appliance has created quite a sensation in railway circles, and already many enquiries regarding it have been made from the States, where it has been patented. The idea is the invention of a young Canadian resident in Montreal.

Cylinder Counter Pressure Brake.

THE following letter speaks for itself:—*Editors National Car and Locomotive Builder.*

Much interest has been recently taken in securing the best methods of controlling the speed of railroad trains, and the C., B. & Q. road has shown a commendable degree of enterprise in securing accurate data in relation to these matters, which places the travelling public under special obligations for the services they have rendered in aiding the perfection of this desirable and necessary equipment. During the trials of last year much progress was made, and no doubt those contemplated for next month will enable such a finding as will largely determine which system of train braking is the most reliable, effective and economical. I had intended, had the conditions of the trial been such as I could have pecuniarily reached, to have secured a train and engine equipped with my appliances for train braking, but being unable, I must content myself with regretting I could not add my quota to those assisting in accomplishing this desirable end. I forward, by express, a blue-print of an arrangement I have had attached since June, 1885, to an engine, so that it may be fairly said to have passed beyond the domain of experiment, and has proved on several trials to be a very effective and necessarily an economical method, by virtue of the fact that the power of the train's motion alone is utilized to gather the force necessary to stop it.

The equipment is extremely simple: it consists of a slide valve to pass over the exhaust nozzle, excluding all the impurities contained in the smoke box. Attached to the lever

working this valve, is another that opens an orifice to the outer atmosphere and is carried into the cab under control of the engineer. The second part consists of two valves and a three-way cock. The valve below the three-way cock is arranged so that the engineer can control the air pressure in the steam chests and pipes when running reversed between the maximum boiler pressure and the atmosphere. Three-way cock is intended to pass the stored air in steam-chests and pipes back to the air cylinder of the cars, and the other valve, above the three-way cock, is set at a fixed pressure, to prevent any undue strain upon the car air equipment.

JOHN HALL.

Grand Trunk Railway.

HAMILTON, Ont., April, 1887.

Inter-State Act—Results.

THE *Railway Age*, in the course of an article on railway earnings so far for this year, says:—Special interest centres in the results of railway operations for the month of April, for the reason that the new law went into effect on the 5th of that month. The returns of 106 roads indicate that railway business has not fallen off as much as might have been anticipated, considering the delay in preparing the new tariffs and the uncertainty in regard to rates which for the time prevailed. These roads report gross earnings for the month aggregating \$26,038,442, against \$22,639,785 in April of last year, a net increase of \$3,398,657. The mileage reported upon was 60,607 miles, an increase of 3,126 over last year. Thus the net increase of earnings appears to be 15 per cent., while the increase of mileage was only 5 per cent., which certainly is a favorable showing. But this is chiefly to be attributed to the very great increase in business activity throughout the country, and very little of it to an increase in rates which have been made as the result of the re-adjustment of tariffs under the new law. If the law had not gone into force there is no reason to doubt that the aggregate of railway earnings would have been still greater in comparison with those of the same period in 1886, because the business activity throughout the country has certainly been very much greater than it was a year ago, as the numerous "booms" in the western and southern states testify. It is to be noted that while for the first four months of the year only six lines showed a decrease, no less than nineteen reported a falling off during April; which certainly does not speak favorably for the effect of the new law upon these roads at least. It would be interesting to know what portion of the reported earnings are from freight and what from passenger traffic, so that some idea of the effect of the stoppage of free transportation could be obtained.

Still it is too early to gain a very definite understanding of the result of the new law from the workings of a portion of the railways of the country during the first weeks of its operation, and the statement of earnings for the next few months will be of much more interest and value, especially after the interstate commerce commission has settled down

to an understanding of its own mind in regard to the law and established a basis of action, particularly in regard to the long and short haul clause. It should be noted that the tables from which these figures are taken are very incomplete as representative of the entire railway system of the country, as they cover not much more than 40 per cent of the whole mileage, and do not include many of the principal lines.

The Railway Service.

THE Order of Railway Conductors has a membership of 10,330, the number having increased 2,386 in the last year.

A correspondent of the *Railway Service Gazette* says: The question is often asked as to how to secure the best results in the work of subordinates in the railway service. It has been demonstrated to the satisfaction of every thinking official that the best means by which the standard of excellence in the ranks of brakemen, yardmen, operators and agents can be raised is the certainty of promotion when deserved.

A syndicate of railway and newspaper men has been formed for the purpose of organizing a company to establish and carry on in New York a daily railway journal, the need of which is greatly felt. The able general press are not only compelled to neglect a great deal of railway news, but are also neither specialists nor sufficient technical to meet the requirements of the railway world. The capital of the proposed company will be \$100,000 cash.

THE *Locomotive Firemen's Magazine* says: The astonishing feature of the Pan Handle affair is the number of men involved, and the magnitude of the robberies. In this regard the case is without a parallel in the history of this or any other country. Fortunately, and to the honor and credit of locomotive firemen and locomotive engineers, not one of their number was in any way implicated, nor, so far as we have read, so much as suspected. Such facts speak volumes for the integrity of firemen and engineers, as a class, and must, of necessity, add immeasurably to their reputation for integrity and standing as men and citizens.

THE *Railway World* says: The New York Central reading-room at the Grand Central station is the most extensive institution of the kind in the United States. The structure is rapidly approaching completion, at an expense of nearly \$100,000. This sum covers the cost of the building, its furniture, and appointments. It is a solid, fire-proof structure, reminding one of a bank in the modern style of architecture, with spacious open air vaults, baths, dining rooms, and other appointments such as a board of directors would naturally require for a luxurious administration. The library will be filled with 7,000 volumes at Mr. Vanderbilt's expense.

THE Brotherhood of Locomotive Engineers will hold a union meeting at Ottawa on June 29 and 30. An afternoon session will be held

on the 29th, and in the evening a reception at the city hall and afterward a banquet. A session will be held in the morning of the 30th, and at 11 a. m. the delegates will visit the parliament buildings and conservatory. In the afternoon they will take a sail down the Ottawa River. Arrangements also have been made for those who wish to lay over for the Jubilee celebration on July 1 to remain at all the first class hotels at reduced rates. A large number of engineers and ladies will be there from all parts of Canada and the bordering states. Grand Chief Arthur, of Cleveland, will be present, as well as a number of other grand officers.

THE *Railway World* says: Reference was made in our last issue in general terms to the advisability of adopting a uniform draw bar and coupler for the freight train service of this country. The necessity for this uniformity is daily becoming more apparent to all who are actively interested in railroad management, and that it should be thus apparent is not wonderful, when we take into consideration that such uniformity would result first, in a saving of fully 50 per cent. on the original cost of the device, by enabling the company or individual manufacturing it, to dispense entirely with the system of agencies which are such fruitful sources of expenses; secondly, in a material reduction of hospital and other pay roll expenses naturally incident to the operations of a railroad under the old link and pin system, but from which positive immunity would be guaranteed under a system of uniform automatic coupling; thirdly, in an economy on the item of links and pins alone, which would be equivalent, according to the estimate of reliable experts, to a sum equal to, or perhaps largely in excess of, the interest on the amount expended in securing such uniformity.

Mechanical.

THE Philadelphia & Reading Railroad Company is having built at its shops 100 iron tubular cars. These are said to weigh less than wooden cars of the same dimensions, and to have a carrying capacity of 60,000 pounds.

MR. HICKSON, general manager of the C. T. R., has promised to take into consideration the proposition to have the railway cars lighted by electricity and heated by steam from the locomotives, as a protection against fire in case of accident.

WE learn from a subscriber in this city that a better system of securing railway rail joints (in which he has an interest), is soon to be introduced, by which a smoothness of the surface is obtained not attainable with fish plates and bolts.

THE trial of the Penneck battery incandescent electric light, on the New York Central, is said to have proven eminently satisfactory. The light is brilliant and reliable. One great advantage of electric lighting on trains is that the platforms are lighted as clearly as the interior of the cars and the ingress and egress of passengers is greatly facilitated.

A despatch from Pittsburg, Pa., dated 18th inst., says: The mail train from Altoona came through last night without a stick of timber or a scuttle of coal to make steam. The fuel used was raw petroleum, supplied from pipes from a two hundred gallon tank in the tender, and the experiment was a complete success. It will prove a great economy, and does away with smoke and cinders. The express east left this morning with the same fuel.

THE decline in the iron trade is attributed by General Manager Swank, of the American Iron & Steel Association, principally to the Inter State Commerce Act, which has disturbed the general business of the country, which has been weakening confidence, checking orders and in some cases actually preventing all access to markets which have been open heretofore, and also to a lack of a tariff which would prevent the importation of foreign iron and steel. The importations have been so large that they have injuriously affected the home trade.

THE Steel Car Company, of Boston, Mass., has proposed a new safety car which, from its construction, it is hoped will avoid most of the dangers arising from the tinder wood construction of the present cars. One of these cars is now under construction at the Old E. Railway Repair Shop in East Boston and great hopes are expressed of its future value. It is claimed for this car, which is made of steel and iron, cylindrical in form, that it is not only safer but is more durable and is better adapted for the constant strain. Better ventilation is obtained, and, moreover, the car will weigh from two to three tons less than the present ones now in use, which will allow of one more car being added to ordinary trains with no increase of motive power. If this last claim should be justified, it will help considerably to solve one of the greatest problems of railway management—that is the decreasing of dead weight which is hauled for each passenger, a result devoutly to be wished.

THE Committee of the Master Car-Builders' Association on Freight Train Brakes have issued a circular stating that up to date, (31st March,) the following brake companies had notified the committee that they have made arrangements for cars and engines, and will be present at the Burlington brake tests, commencing May 9: Eames Vacuum Brake Co., Boston, Mass.; Carpenter Brake Co., Berlin, Germany; Westinghouse Air Brake Co., Pittsburg, Pa.; Card Electric Brake Co., Cincinnati, Ohio; American Brake Co., St. Louis, Mo.; Hancock Brake Co., San Francisco, Cal. The Parke Electric Brake Co., of Chicago, Ill., and the Rote Brake Co., of Mansfield, Ohio, have their brakes ready, but have not yet succeeded in arranging for cars.

SPEAKING of the great brake trials at Burlington, Ia., the *National Car and Locomotive Builder* says:—The Westinghouse Automatic Air Brake Company, and the Eames Vacuum Brake Company effected important improvements upon their brakes that make them materially more efficient than they were for handling brakes by air or vacuum alone; but

they have both also shown what they could do by the aid of electricity, making the electrical appliances, however, merely supplementary to the automatic apparatus. With out electrical appliances the Westinghouse brake can now stop a train of fifty cars in about half the distance that was required when the July trials were made, and the Eames brake can do the stopping in about two thirds of the distance they used before, and the stops are short enough for all practical purposes and quicker than sensible rail road men will care to have their freight trains stopped. It appears to us that the general verdict of the Burlington tests will be, that railroad companies have no longer any excuse for refusing to equip their freight trains with an automatic brake. It is certain that either of the brakes mentioned with air or vacuum alone will control the longest freight train with ease.

Business at the Sault.

THE *Canadian American* says: Business is reported brisk at Sault Ste. Marie. The Canadian Pacific Railway contractors are hard at work on the construction of their line to that point, and expect to have the road completed in a few months. The Grand Trunk have several parties of surveyors and engineers laying out their line, and the contracts for the different portions of the work will be let early in August. Work has been commenced on the International Bridge, and will be pushed through with all possible speed. The building of the canal on the Canadian side is looked upon as a certainty, but many American capitalists are waiting the vote of the house on the question. If the majority vote yea, and the appropriation be made of \$1,000,000 for expenditure this year, they are prepared to develop the grand water power of the rapids in the St. Mary's river, and establish mills and factories of various kinds on the Canadian side, employing thousands of hands. Everything points to the continuous prosperity of the Sault.

Magnificent Railway Building.

A special to the St. Paul *Pioneer-Press* from Devils Lake, Dak., says:—Nothing in railroad building heretofore in the North-West has approached the rapidity and army-like system with which the Manitoba company is sending forward material for the construction of the Montana line. For the past three months there have gone through this place daily, on an average, 175 cars laden with all sorts of construction material. At Minot, the present terminus of the track, 137 miles west of Devil's Lake, the company has laid something like ten miles of sidings to receive this material, and along both sides of these numerous tracks are piled great quantities of ties, bridge material, piling and thousands of the best quality of steel rails. Said an old railroad conductor, after visiting Minot: "It is worth a day's travel to see these mountains of costly material." And still it goes forward in increasing quantities. For the past twenty-

four hours the trains have averaged one in every two hours. And it is estimated that it will require two hundred cars daily the entire summer for this material to be sent forward that there may be no delay in the building of this great line of road. All engines do not wait at the terminus for the unloading of trains, but heston back for more cars, and it is not an uncommon sight to see ten of these monster iron horses on their return, with a single caboose car attached to each, speeding along the track only a few hundred yards apart. In all this gigantic work there is no confusion, not an accident of any kind has occurred, all material is separated and placed where it can be reloaded and handled at the minimum cost. The roadbed for a hundred miles west of Minot is ready for the rails, and all bridges (one of which is 1,800 feet long) and water tanks are completed for a distance of thirty-five miles beyond that point. Track-laying will begin in a few days, and grading as soon as the frost is out of the ground sufficiently for that work. Several engineer corps are already in the field many miles in advance of last year's work making ready for the army of over fifteen thousand graders that will soon follow.

Tunnelling the Hudson.

THE project of tunnelling under the Hudson River, abandoned some time ago, after the expenditure of over a million dollars, is being revived, the necessary capital having been secured. A correspondent of the *New York Tribune* says: "The plan contemplates two single-track tunnels under the Hudson River, one for incoming and one for outgoing trains, this plan having been selected because of the impossibility of collision. Each of these will be lined with brick thirty inches thick, laid in hydraulic cement and encased in iron a quarter of an inch in thickness. The measurement of these tunnels will be sixteen feet clear in width by seventeen feet in height. The approach to the tunnels on the Jersey City side will be near Jersey Avenue, and the declivity to under ground will be 3,500 feet back from the bulkhead with a grade of 2 feet in 100. In New York city the tunnels will be almost directly under Washington square, that portion of the city having been chosen because of the absence of houses overhead. An excavation will be made here that will occupy as much space as does the square, and it is a part of the plan to light it up with electricity and give it all the conveniences and comforts of an above ground station. Passengers will be enabled to reach the surface by means of powerful elevators or staircases. It is also proposed to have the tunnels lighted by electricity and to have telegraphic and telephonic communication through them. The approach to the tunnel on the New York side will be upon a down grade of three feet in the hundred, beginning at Washington square, for half the distance to the river, where there will be a sharp ascent to get up under the river bed. The length of the tunnels from shaft to shaft will be 5,600 feet, and it is calculated that it will

take two years working regularly to complete them both. The approach on the Jersey City side will be 4,000 feet, and on the New York side 4,500 feet, making the total length of tunnel and approaches a fraction less than two and one-half miles. The calculation of the engineers is that there will not be less than twelve feet of earth between the top of the tunnel and the bed of the river. The estimates made of the cost of the work show that the expense of the terminals alone will be \$3,000,000; land in New York for tunnels will be \$1,000,000, and the terminal improvements will be \$5,000,000, making the total cost of the operation \$11,000,000.

The limited express train from New York to Boston on the New York, New Haven & Hartford Road, on the night of April 11, made seven miles in five minutes and a few seconds, a speed of over 80 miles per hour.

The Canadian Pacific is anxious, so it is reported, to enjoy a part of the traffic originating in the Mississippi Valley, and to that end has made an arrangement with the Wabash Railway. The former company will use the Canada Southern track to get from St. Thomas to Toledo, or else build a new line of its own. *Railway Register*.

The *Chicago Times* says:—There is a well defined rumor circulating in certain quarters to the effect that the Union Pacific stockholders are quietly preparing to surrender the old Union Pacific main line for government debt and abandon their Omaha & Council Bluffs termini, making the several branches of the Union Pacific which are owned by them independent of the government line.

The *Railway Register* says: The Canadian Pacific has been trying, with fair prospects of success, to obtain permission from the treasury department of our government to bond goods on its Pacific coast steamship line. This will amount to a privilege to carry goods from the Pacific to any city on the lakes and in the North-east under the same bond, thus constituting the Canadian Pacific the trans-continental lines for these points, because it can make rates that the United States lines, under the Inter-State Commerce Act, cannot meet.

AN exchange stated, early this month:—Vice-President Van Horne is in Chicago to establish a new through route from that city and St. Louis to Montreal, to compete with the Chicago & Grand Trunk. The intention is to run through freight from Chicago over the Baltimore & Ohio to Butler; thence over the Wabash, St. Louis & Pacific to Detroit; thence over the Michigan Central to St. Thomas, Ont., and from there to Montreal over the Canadian Pacific. At Montreal connection is made for Boston and all New England points. From St. Louis the line is to run over the Wabash, St. Louis & Pacific to Toledo; thence by the Michigan Central, etc. Through passenger cars will also be run between Chicago and Montreal by the route here described. The arrangements for beginning operations by this new line are said to be completed.

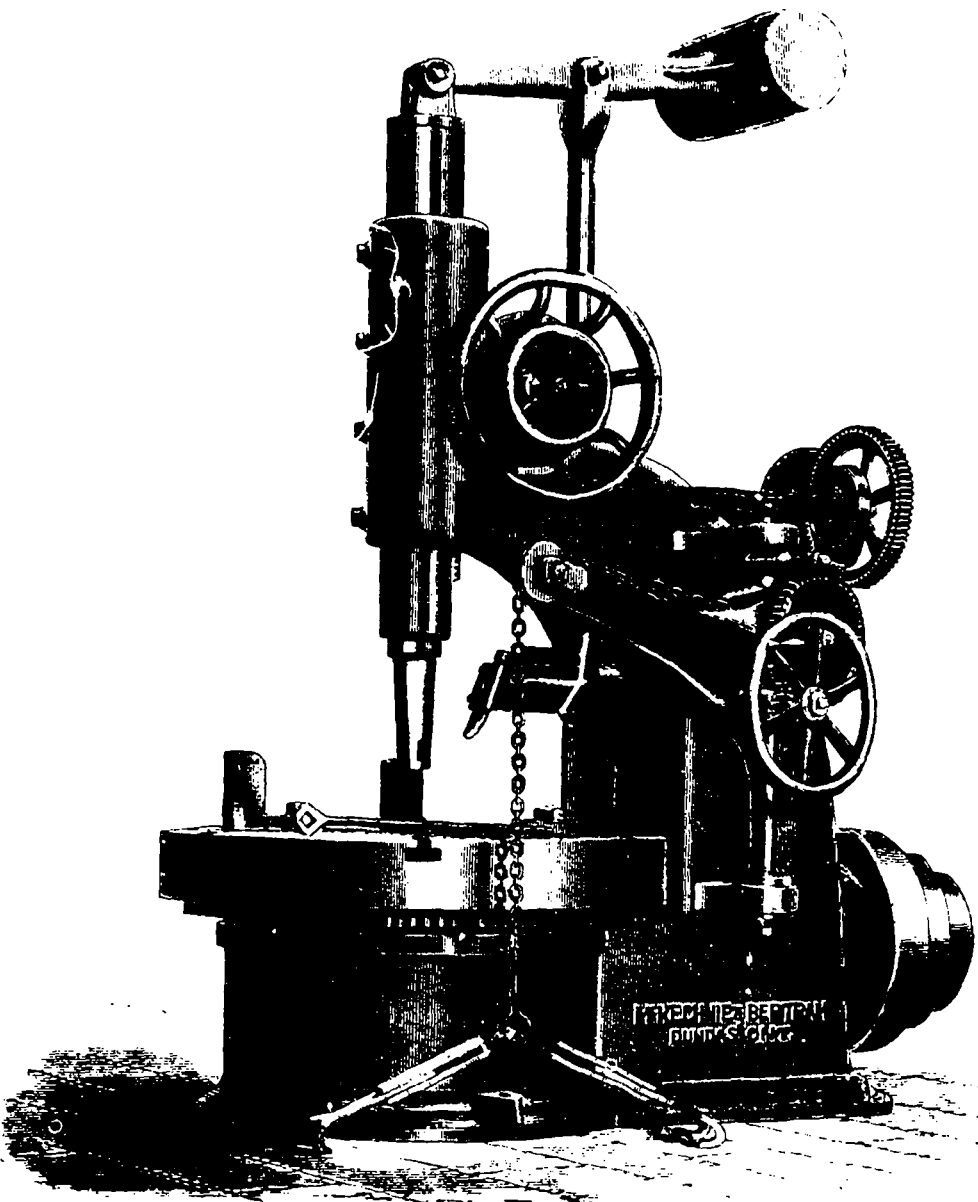
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L. VANKOUGHNET
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Department of Indian Affairs,
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Department of Railways and Canals,
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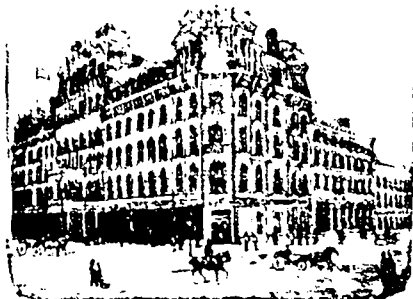
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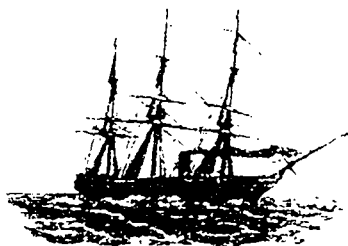
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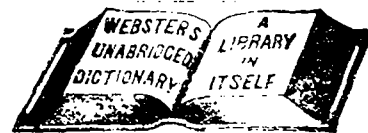
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