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EDITORIAL NOTICE.

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Contents of this Issue

Table listing article titles and page numbers: Cleveland City Stock Increase (1221), Right of a Property Owner to Sue (1221), Strike at Scranton (1221), etc.

Cleveland City Stock Increase

At the January meeting of the stockholders of the Cleveland City Railway Company a proposition will be considered to increase the capital stock of the company from \$8,000,000 to \$9,000,000.

Right of a Property Owner to Sue

Judge Bigger, of the Common Pleas Court, decided, in a recent suit in Columbus, Ohio, that if a property owner fails to consent to the granting of an electric railway franchise, he can not take advantage of the fact and bring injunction proceedings unless he is about to sustain some substantial damage.

Strike at Scranton

The employees of the Scranton Railway Company, of Scranton, Pa., went on strike Dec. 23, and, as a result, all street car traffic is suspended in Scranton, Carbondale, Forest City, Olyphant, Dunmore, Blakely, Priceburg, Archbald, Jermyn, Winton, Mayfield, Taylor, Moosic, Oldforge and Avoca.

Traction Litigation Ended

The litigation regarding the consolidation of the Consolidated Traction Company, United Traction Company, Southern Traction Company and the Monongahela Traction Company, of Pittsburgh, in which the Consolidated Traction Company and Whitney & Stephenson were involved, has been settled.

Many Trolley Men Made Happy

Several days before Christmas the Boston Transcript asked the management of the Boston Elevated Railway Company if there was any objection to it making a public announcement that the employees of the company could receive any amount in excess of 5 cents in payment of fare by patrons of the road on Dec. 24, such excess to be retained by the conductor and divided with the motorman at the end of the day's work—a Christmas gift from the public.

Chester Traction Secures Important Lines

The Chester Traction Company, of Chester, Pa., has just completed arrangements for leasing the Philadelphia & Chester Railway Company and the Southwestern Railway Company for a period of 999 years. Under the lease the Chester Traction Company guarantees the interest on the bonds of the underlying companies and has placed their stock in its treasury. The Philadelphia & Chester Railway Company is capitalized at \$350,000, and bonded at \$350,000. The Philadelphia & Southwestern Railway Company is capitalized at \$450,000, and bonded at \$450,000. The leasing of these lines gives the Chester Traction Company a clear right of way from the heart of Chester to the southern boundary of Philadelphia at Third Street and Jackson Street, and Third Street and Tasker Street, from which points the run to Chester will be made in forty minutes.

New Tactics of the N. Y., N. H. & H. R. R.

The announcement is made that the New York, New Haven & Hartford Railroad Company is to equip its Waterbury, Middletown and Meriden road with electricity, using the third rail system, and that a similar change is contemplated on its Derby line. This is generally considered "an announcement," being believed to be a new method of fighting the proposed electric lines encroaching on its territory instead of opposing the roads in the Legislature. The method of the New York, New Haven & Hartford Railroad has been to oppose the granting of electric railway rights in the Legislature, and then to put every barrier in the way of the road if it finally succeeded in passing the Legislature. As a last resort, the New York, New Haven & Hartford purchased the road, if it was finally placed in successful operation.

Negotiations for the Consolidation at New Orleans

Negotiations are now being carried on for the purchase of the Orleans Railroad by the New Orleans & Carrollton Railroad Company. The latter company has, through its agents, secured an option on the majority of the stock of the Orleans Railroad Company, and the final consummation of the deal lies with the directors of the New Orleans & Carrollton Railroad, who will consider the matter shortly. In acquiring control of the Orleans Railroad, the New Orleans & Carrollton will secure a very valuable property. The system comprises 10.33 miles of track, with a well equipped power house and car houses. The system was converted and electrified by Ford, Bacon & Davis, of New York, and the lines extend to the Fair Grounds and City Park, places not now accessible by the lines of the New Orleans & Carrollton. This deal is supposed to be the first move in the consolidation of all the city lines.

Suit to Recover Return of Cars and Damages

Suit has been brought by the Jewett Car Company against the Indianapolis & Greenfield Rapid Transit Company, of Indianapolis, Ind., to secure \$5,500 damages and the return of six cars now being operated by the company. The Jewett Car Company avers that the cars have not been paid for, and that they have been damaged to the amount of \$5,500. The defense is that the Jewett Company has not fulfilled its contract, which required the delivery of eight cars March 1; that none were delivered until July 1, two in August, and two in September, and two are not yet delivered. By the terms of the contract \$14,000 were to be paid for eight cars in instalments of \$5,000, and that the Jewett Car Company was to forfeit \$100 a day for each day after April 1 that cars were not delivered. The first \$5,000 has been paid, and, when the forfeit money is deducted, nothing remains due the plaintiff, the secretary says. The suit promises to be interesting, especially the attempt to enforce the forfeiture clause of the contract.

Increase of Metropolitan Stock

Official announcement is made that \$7,000,000 par value of the unissued authorized capital stock of the Metropolitan Street Railway Company, of New York, is offered for subscription to the stockholders at the price of \$160 for each share of the par value of \$100 upon the following conditions:

1. Each stockholder of record upon the books of the company at the close of business on Dec. 26, 1900, may subscribe for such number of shares of stock as will be equal to seven-forty-fifths of his holdings or any less part thereof.

2. Subscriptions must be in writing and must be delivered to the secretary of the company at the office of the company before 3 p. m., on Jan. 15, 1901, and subscribers must specify in their subscriptions their name and the full amount of stock standing in their name upon the books of the company.

3. Payments at the rate of \$60 per share in cash or by check must accompany each subscription, and the balance at the rate of \$100 per share must be paid on or before Jan. 30, 1901, whereupon stock certificates will be issued, except that for fractional parts of a share non-dividend bearing scrip will be issued for which, when presented to the secretary in amounts representing entire shares, stock certificates will be substituted.

4. Default in making the final payment will, at the option of the company, forfeit the subscribers' rights, both in regard to the stock subscribed for and in regard to the sum paid at the time of subscription.

The issue of new stock was authorized early in the year, and the purpose of the issue is to close out the floating indebtedness created by the purchase of the Third Avenue stock and by extensive improvements and changes in our own equipments.

New Car House and Power House at Chicago

The Chicago City Railway Company has completed negotiations for the purchase of fifteen acres of land at Seventy-Seventh Street and Vincennes Avenue, and for a tract of land at Halsted Street and Thirty-Eighth Street. The latter tract is 278 ft. x 376 ft. The plans of the company provide for the erection of a car house on the former tract to cost from \$500,000 to \$600,000; and for the erection of a power house on the latter tract to cost more than \$1,000,000. The two power houses of the company will be consolidated into the new one, and the machinery in the three cable houses will be driven by motors fed from Thirty-Eighth Street and Halsted Street, instead of by steam, as at present.

D. G. Hamilton, president of the company, says, in reference to the purchase: "They were made in anticipation of the time when increased traffic will demand greater facilities. More and larger cars will have to be housed in the near future, and we bought the fifteen acres for that purpose before it was sub-divided. The Halsted Street tract is especially well fitted for our purpose, as it is on the railway and river, and advantageously located. No definite plans for either the sheds or power house have been drawn, and it may be a year or a year and a half before we begin work on either. Change of motive power is a matter that will undoubtedly come up with the renewal of franchises. If we are compelled to keep the cables we shall drive the machinery by electricity from the new power house in Halsted Street, and do away with steam power. If the power is changed to electricity the new plant will supply all the power direct. While I have always been a strong advocate of the cable, I believe an electric system throughout on the south side would meet conditions better. In any event we have now ground upon which to build such power house and sheds as we may need, no matter what power is ultimately decided upon."

Relations of the Street Railway and the Public

In a short article, under this title, in the *Syracuse Post-Standard*, E. G. Connette, vice-president and general manager of the Syracuse Rapid Transit Railway Company says:

"Street railways are quasi public corporations, or, in latter day phraseology, are 'public utility' corporations, and the nature of the enterprise should make the conditions existing between the street railways and the people of the most cordial nature. There should be a liberal and co-operative spirit on the part of the management and a proper appreciation and responsive sentiment on the part of the public.

"The car service should be attractive, convenient and comfortable, and the employees polite, attentive and courteous in the discharge of their duty. The frequency and regularity of the service is what the public most desire, and while the frequency should be extended to the furthest limit, still, like any other business enterprise, it must keep within the bounds of business prudence and discretion, and, therefore, must govern the frequency of its service by the income and increase it from time to time as the patronage may warrant.

"Under ordinary conditions a regular schedule can be maintained and the enterprising and intelligent manager realizes the importance of running cars so that his patrons may rely on the

time of cars to pass a given point, and even if the service is not very frequent, if people know 'when to catch a car' they are generally satisfied unless the cars are so few in number that they seldom have the pleasure of a seat; but the natural difficulties and impediments to a prompt and regular service are numerous which the public are loath to consider in forming an opinion of the car service.

"It is impossible for cars to always run on time when there are steam railroad grade crossings, canal bridges, wagons loading and unloading alongside of streets so as to obstruct the car tracks; wagons breaking down, cars occasionally becoming disabled and many other kinds of unavoidable obstructions to the maintenance of a regular schedule, but, as a rule, these delays are not frequent, and if the public would appreciate the difficulties and be charitable enough to credit the service when the cars are on time as cheerfully as they are inclined to find fault when they occasionally have to wait a few minutes for a car they would find that the balance was largely on the credit side of the ledger."

Mr. Connette then refers to the decentralization of population with the introduction of the electric railway, referring to the up-building of the suburbs, etc. Continuing, he says:

"With all the conveniences and advantages of rapid transit and a full realization that street cars are almost an indispensable commodity, there is sometimes an inclination to deal unfairly with street railways, perhaps because the management does not show a proper disposition to deal fairly with the people, but in most cases because a street railway is a corporation.

"People as a rule confound corporations with trusts and monopolies, and the prejudice that exists against corporations *per se* is unwarranted, unjust and wrong. Street railways may consolidate and in one sense resemble a trust, but a consolidation is always beneficial to the people, as it can only be done under the law which restricts the charge of one 5-cent fare from one point to any other point within the city limits, which gives the people a longer ride and accessibility to more parts for the same 5-cent fare.

"A mutual good feeling between the public and the street railways redounds to the interests of all concerned, and a happy, contented and satisfied state of mind produces a natural inclination to see the pleasant things of life."

Street Railways in Pennsylvania

Isaac B. Brown, superintendent of Railways of the Department of Internal Affairs of Pennsylvania, has just completed his report on the operation of the steam and electric lines of the State. In making his report, Mr. Brown speaks of the introduction of the automobile and the passing of the bicycle, but does not make any predictions as to the effect of the introduction of the former vehicle in competition with the electric railway. Continuing his report, Mr. Brown says, in part: "During the year there has been no material change in the financial or physical condition of the electric railways of Pennsylvania. The rapidity that characterized

\$3,000,000; Pittsburgh & Birmingham Traction Company, \$1,500,000; Scranton Railway Company, \$3,000,000; United Traction Company, of Pittsburgh, \$10,000,000; Wilkesburg & East Pittsburgh Street Railway, \$2,000,000; Wilkesbarre & Wyoming Valley Traction Company, \$1,819,000; making \$21,319,000, or more than one-half the entire amount of funded debt outstanding.

The total amount of current liabilities for the year is reported at \$11,585,004, making the total street railway capitalization of operating companies \$153,736,225. If to this amount be added the capital stock outstanding amounting to \$68,094,525, and the funded and unfunded indebtedness of the companies whose lines are subsidiary to or operated by other corporations, amounting to \$21,764,354, the total capitalization is found to be \$243,595,104. As the total mileage of these corporations is 1654, the capitalization per mile of road is \$147,276, or over double the capitalization per mile of road of the steam railways of the United States.

The assets of street railways are classified as follows: Total cost of road, cost of equipment, stock owned, bonds owned, cash and current assets, other assets, total assets. The total cost of roads as reported for the year is \$87,806,26. The companies contributing most largely to this amount are the following: Conestoga Traction Company, of Lancaster, \$3,401,100; Consolidated Traction Company, of Pittsburgh, \$3,582,642; Monongahela Street Railway, of Pittsburgh, \$2,079,418; Pittsburgh & Birmingham Traction Company, \$1,372,288; Pottsville Union Street Railway, \$1,498,062; Scranton Railway Company, \$4,570,535; United Traction Company, of Pittsburgh, \$29,575,641. The latter amount, however, includes cost of equipment, as this company for some reason or other fails to divide the cost of road and equipment in a manner that will show the separate accounts. Union Traction Company, of Philadelphia, \$1,899,252; West End Traction Company, of Pittsburgh, \$5,526,691; Wilkesburg & East Pittsburgh, \$2,942,414; Wilkesbarre & Wyoming Valley Traction Company, \$6,645,943. The total cost of road last year was \$87,411,512.

The total cost of equipment reported for the year is \$12,334,380. Last year the amount was \$9,128,533, but the cost of equipment of the Consolidated Traction Company, of Pittsburgh, is not included in this amount.

The total amount of assets reported for the year is \$156,368,465. Last year the amount was \$149,934,302. By adding the assets of subsidiary companies, or those whose lines are operated by other corporations, amounting to \$80,186,452, it will be seen that the total assets of the street railway corporations of Pennsylvania are \$236,554,917.

INCOME

The total income of all the street railways in Pennsylvania during the year was \$24,477,181. Last year the amount was \$22,569,256. There are several large steam railroad corporations in the State whose receipts from operations fall considerably below the receipts of some of the street railway companies. When it is understood that the source of revenue of these corporations is practically from passengers alone, and that the amount received from each passenger is very small, the total income seems exceedingly large. Few industries have increased their receipts with

TABLE SHOWING CAPITAL STOCK, BONDS, CURRENT LIABILITIES, TOTAL CAPITALIZATION, MILEAGE OPERATED OF FOUR COMPANIES, WITH GROSS AND NET RECEIPTS PER MILE OF ROAD, PERCENTAGE OF EXPENSES TO RECEIPTS AND DIVIDENDS PAID.

	Capital Stock	Bonds	Current Liabilities	Total Capitalization	Mileage	Income	Expenses Exclusive of Dividends	Income Per Mile of Road	Percentage of Expenses to Income	Dividends Paid	Expenses Per Mile of Road	Net Income Per Mile of Road
Harrisburg Traction Co.....	\$2,000,000	\$75,000	\$47,069	\$2,122,069	40.50	\$368,645	\$272,147	\$9,102	73.82	\$100,000	\$6,720	\$2,382
Lehigh Valley Traction Co.....	1,700,000	3,000,000	357,017	5,059,017	51.89	328,676	273,027	6,334	83.37	-----	5,242	1,092
Scranton Railway Co.....	3,000,000	3,000,000	139,885	6,139,885	73.78	464,807	411,450	6,290	88.52	-----	5,576	714
Wilkesbarre & Wyoming Valley Traction Co..	5,000,000	1,819,000	233,360	7,052,360	64.00	574,645	445,751	8,978	77.57	150,000	6,964	2,014

the development of these corporations a few years ago is no longer present, and there seems to be more stability in the financial conduct of these enterprises.

CAPITALIZATION

The total amount of outstanding capital stock of the operating street railways reporting for the year is \$103,176,121. This amount comprises the stock of ninety-four companies. Last year the total amount was \$103,122,319. The corporations whose capital stock makes up the greater portion of this amount are: Consolidated Traction Company, of Pittsburgh, \$27,000,000; Union Traction Company, of Philadelphia, \$10,499,912; United Traction Company, of Pittsburgh, \$20,000,000. More than half of the total amount belongs to these three corporations, and \$47,000,000 of it to the two corporations in Pittsburgh.

The total amount of funded debt reported for the year is \$38,975,100. Last year the amount was \$31,309,425. The Lehigh Valley Traction Company has bonds outstanding to the amount of

the same velocity as the street railways. They have certainly become a very important interest in the commercial world.

Relative to the income and expenditures of street railway corporations, it is of interest to compare the operations of one of these street car companies with others that are similarly located. It would be unreasonable to compare a street railway in Harrisburg with the Union Traction Company, of Philadelphia, or the Consolidated Traction Company, of Pittsburgh, but there is interest in comparing the street railways of the Commonwealth whose capitalization, mileage, income and expenditures are similar. A table has been arranged, and is published herewith, relating to the Harrisburg Traction Company, Lehigh Valley Traction Company, Scranton Street Railway Company, and Wilkesbarre & Wyoming Valley Traction Company, showing the capital stock, bonds and current liabilities of each; also the total capitalization, the mileage operated, the income per mile of road, the expenditures, the expenditures per mile of road, the net income per mile of road, the percentage of expenditures to income, and the gross dividends.

DISBURSEMENTS

The total amount expended for operations during the year was \$12,114,609, as against \$10,519,810 last year. Of this amount the Consolidated Traction Company, of Pittsburgh, paid \$1,341,565; and the Union Traction Company, of Philadelphia, paid \$5,624,898.

The total amount of taxes paid during the year was \$1,579,284. Last year the amount was \$1,314,470. The increase in this amount is, no doubt, due to the increased valuation of the capital stock, the 5 mill tax being based on the market or appraised value of the stock. During the last two or three years there has been a marked increase in the market value of all kinds of stocks, but no material increase in the par value. While it is known that the street railways are an important factor in the commercial world, it would also seem as if they were an important factor as a source of revenue for the maintenance of the State government.

The rentals paid during the year amounted to \$5,954,232. Last year the amount was \$6,237,691.

There was paid during the year \$398,326 for other expenses. Last year the amount was \$279,453.

Of the total number of operating companies there are only twenty that pay dividends. They are the Beaver Valley Traction Company, \$6,000; Chester Traction Company, \$2,500; Connellsville, New Haven & Leisenring Street Railway, \$1,750; Connellsville Suburban Street Railway, \$5,000; Consolidated Traction Company, of Pittsburgh, \$649,806; Delaware County & Philadelphia Street Railway, \$36,000; Harrisburg Traction Company, \$100,000; Holmesburg, Tacony & Frankford Street Railway Company, \$10,500; Johnstown Street Railway, \$23,193; People's Street Railway Company, of Nanticoke and Newport, \$2,000; Pittsburgh & Birmingham Traction Company, \$90,000; Roxboro, Chestnut Hill & Norristown Street Railway, \$15,872; Stroudsburg Street Railway, \$1,384; Tamaqua & Lansford Street Railway, \$5,000; United Traction Company, of Pittsburgh, \$150,000; United Traction Company, of Reading, \$24,000; West End Traction Company, \$125,000; Wilkesbarre, Dallas & Harveys Lake Street Railway, \$6,000; Wilkesbarre & Wyoming Valley Traction Company, \$150,000; York Street Railway Company, \$6,552. There are fifty-three subsidiary companies that report payment of dividends, which, of course, is derived from rentals received. The amount of such dividends is \$5,427,590.

The total disbursements for the year were \$23,976,312, as against \$21,788,663 last year. This amount includes all dividend payments.

EQUIPMENT, MILEAGE, NUMBER OF PERSONS EMPLOYED AND PASSENGERS CARRIED

The total mileage of the street railways of Pennsylvania is 1654, as against 1493 reported last year, an increase of 160 miles. The total length of all tracks, including sidings and switches, is reported for the year as 1898.69 miles. Last year the total was 1812.94 miles. These figures indicate that the mileage of the street railways is materially increasing.

The total number of cars in the service of the street railways of Pennsylvania during the year was 6395. Last year it was 5864, a material increase. The total number of employees reported for the year is 14,798. Last year it was 12,506. The total amount paid to street railway employees during the year was \$8,043,589. Last year the amount was \$6,569,204. The total number of passengers carried during the year was 538,194,532. Last year the number was 473,313,258.

STREET RAILWAY ACCIDENTS

As the result of the operation of the street railways during the year twenty-eight passengers were killed, as against seventeen last year. This is at the rate of one passenger to each 19,221,233 carried. The total number of passengers injured was thirty-three. There were only six employees killed during the year. One to each 2499 in the service. Last year the number killed was three. During the year ninety-four employees were injured. One in each 157. These figures indicate very clearly that the hazard for employees is not nearly so great on the street railways as on the steam roads, as one employee in every twenty on the steam railroads was injured. During the year 107 persons other than passengers or employees were killed. Last year the number was seventy-seven. These persons were run over by the cars, or in some other way lost their lives in connection with the operation of the street railways. During the year 567 persons other than passengers or employees were killed. Last year the number was 504. The total number of persons killed during the year was 141. Last year the number was ninety-seven. The number injured was 1441; last year 1127. The total number killed and injured for the year was 1582.

Franchise Discussion in Columbus, O.

During the discussion, still being carried on in Columbus, Ohio, on the question of franchise renewals, the Columbus *Journal* published certain statements, claiming the street railway company was making large profits, and could afford to make greater concessions than it had proposed. R. E. Sheldon, president of the Columbus Railway Company, refuted these statements in a letter in the *Dispatch* of Dec. 12. This letter was such a powerful argument in favor of the company's proposition that it is published in full below:

LETTER OF MR. SHELDON

In an article in Thursday morning's *State Journal*, 6th inst., the editorial writer refers to the fact that the Columbus Railway Company recently gave out a statement showing as a result of its year's operation, that it had paid 5 per cent upon its \$3,000,000 of preferred stock and had a surplus of \$47,000, and dwells upon the fact that this is a large sum of money to carry into surplus earnings account.

If additional reasons were necessary, the statement ought to be a strong argument in favor of an adjustment of the franchise question, and doubtless will to the thinking public. There is not a manufacturing concern in our city, or a private business house, that would think of entering into a business if the percentage of surplus on its capital were sure to be so meagre. Forty-seven thousand dollars is a sum that might be wiped out twice over any hour of the day by an accident. Even if the hazard of our business, which is enormous, were not considered, the placing of 1½ per cent to surplus earnings is an exceedingly small quantity when it is remembered that we have made a proposition to the city, whereby that amount might be entirely absorbed, and an actual deficit occur, as the result of our offer to sell twenty-eight tickets for \$1, a sum that would net us, if all availed themselves of our offer, a little over 3½ cents per ticket.

As we said in a former communication, we feel that we are taking a great risk, and no one can foretell the result upon the company's earnings. Our proposition to the city, for reasons over which the board had no control, owing to the frequent changes which have occurred during the past six months, has lain dormant. We have made no haste in the matter, and the authorities as well as the people had had ample time in which to consider a proposition that we consider most fair toward both patrons and the city, and yet when it is known that a franchise is being prepared by the Board of Public Works, this paper comes forward and seeks to prevent the consummation of any agreement by naming a sum to be paid and terms to be granted that it knows the company can not and will not accept.

In a recent case tried in New York, the testimony of manufacturers and jobbers of merchandise was taken, and the consensus of opinion was that business men would not engage in business unless they were reasonably assured of profits of 15 per cent as reasonable remuneration for capital, time and the risks incident to business. We doubt if the Ohio *State Journal* company considers 15 per cent an unreasonable sum, either on its capital or that of its advertisers engaged in business in this city.

It magnanimously concedes that there may be \$3,500,000 invested in this railway with its 100 miles of trackage, all its equipment, its power plant and real estate. We doubt if any manufacturing plant or business house in this city, with a capital of \$1,000,000 would be satisfied with the returns that came to the Columbus Railway management through the \$3,500,000 the *Journal* claims this plant might be replaced for.

Our reason for replying to such articles is that they are calculated to disturb readers who have not fully considered the risk attending the care of the large concerns, and might feel that the statements are reasonable. Manufacturers, business men and others, however, who realize the responsibility attaching to the management of the larger organizations, know that the Columbus Railway Company's proposition is exceedingly fair.

If those in authority are not disposed to grant a renewal of the franchise upon the terms of our proposition, we can continue to operate as now organized, but it is needless to say that it would be to the profit and convenience of many thousands of people daily, whom we might serve more acceptably and at cheaper rates of fare, if the roads were properly joined and our system perfected and extended according to our plans.

We take this opportunity to again call attention to the giving to patrons under our twenty-eight tickets for \$1 proposition. We are now carrying 20,000,000 of passengers annually. At the average received in 1899 (4.58) this would amount to \$916,000, and at twenty-eight tickets for \$1 (or 3.57 each) to \$714,000, a difference of \$202,000. So, if patrons avail themselves of the rates thus offered, it will be found that in fourteen years, even if there should be no increase in the number of passengers carried, this would

amount to a saving to our patrons of \$2,828,000, or over \$550 daily. We have made the above calculations upon the basis of fourteen years only, but call attention to the fact that if the franchise for the period of twenty-five years is renewed, the saving to the public upon the above basis between the average received by the company last year and that which would be received at twenty-eight tickets for a dollar, would amount to the enormous total of \$5,050,000.

We do not wish to be considered arbitrary, but under all the circumstances and in justice to the stockholders of the company, and a proper regard for the citizens of Columbus who demand a high standard of operation, we can not consent to a rate that would necessitate the curtailment of the service, wages, or the character of the plant. We have a natural pride in our system, and while willing to meet, so far as we can, the wishes of all concerned, we can not consent to terms and conditions that will result in either a deterioration of the property or a loss to its owners.

With about fourteen years remaining of our rights upon our principal lines, during which time we are not obliged to make the slightest concession in fares, nor even issue a transfer, as we now do voluntarily, we are willing to begin immediately to give the public the benefit of a lower rate of fare than is in force on the street railway system of any similar city in the United States.

A comparison between Columbus and the other cities of the country of 100,000 and over in population will show that none can compare with Columbus in excellence of service and cheapness of fares.

In the *Journal's* "Blanket" article of inaccurate and misleading figures in its Sunday issue not a word was written by its mathematician about the vast sum, amounting to at least \$2,000,000 in the fourteen years yet remaining of our grant, it may cost this company by our offer to establish the low fares at once. If the expert mathematician will be good enough to give us credit for these \$2,000,000 that this community may save, to apply on the eleven years renewal we ask (for eleven years is all we ask renewal for), then the absolute fairness of our offer must be apparent to every patron of our company.

In its Sunday article, the *Journal* indulges in prophecy, and is most optimistic. It estimates that Columbus will contain in 1920 a population of 200,000, and that the gross receipts of the Columbus Railway Company will amount to \$2,240,000, and makes the further claim that the company will be able to operate its system as low as 44 per cent. Let us see what the facts are, as against theories. Taking the receipts and operating expenses of street railway companies in cities approximating 200,000 population, as found in the 1900 edition of the *American Street Railway Investments*, published by the *STREET RAILWAY JOURNAL*, an acknowledged authority in all matters pertaining to street railway matters, and ascertain the facts:

LOUISVILLE, KY.

Present population, 204,731. Mileage, 140.	
Gross receipts.....	\$1,436,828
Operating expenses (66.4 per cent).....	954,573
Net	\$482,255

Louisville has a population of 4,731 more than the *Journal* claims for Columbus in 1920, yet the receipts for 1899 were \$1,436,828, or \$803,170 less than the *Journal* estimates that the receipts of the Columbus Railway Company will be in the year 1920.

ROCHESTER, N. Y.

Present population, 162,435. Mileage, 102.	
Gross receipts.....	\$874,983
Operating expenses (58.8 per cent).....	515,237
Net	\$359,746

Note that this is practically same mileage as Columbus, and the identical 37,000 increase in population claimed by the *Journal* that Columbus may have in 1910.

DETROIT, MICH.

Present population, 285,704. Mileage, 163. "Citizens" and "Detroit" combined.	
Gross earnings.....	\$1,496,188
Operating expenses (54.2 per cent).....	810,827
Net	\$685,361

Detroit has a population of 85,704 more than the *Journal* claims for Columbus in 1920, yet the receipts for 1899 were \$1,496,180, or \$743,820 less than the *Journal* estimates that the receipts of the Columbus Railway company will be in the year 1920.

NEW ORLEANS, LA.

Present population, 287,104. Mileage, 162. The combined systems of "New Orleans," "N. O. & Carrollton" and "St. Charles."	
Gross earnings.....	\$2,198,336
Operating expenses (57.7 per cent).....	1,270,491
Net	\$927,845

New Orleans has a population of 87,104 more than the *Journal* claims for Columbus in 1920, yet the receipts for 1899 were \$2,198,336, or \$41,664 less than the *Journal* estimates that the receipts of the Columbus Railway Company will be in the year 1920.

MILWAUKEE, WIS.

Present population, 285,315. Mileage, 141. The Milwaukee Electric Railway & Light Company.	
Gross earnings.....	\$2,007,139
Operating expenses (51 per cent).....	1,026,403
Net	\$980,736

Milwaukee has a population of 85,315 more than the *Journal* claims for Columbus in 1920, yet the receipts for 1899 were \$2,007,139, or \$232,861 less than the *Journal* estimates that the receipts of the Columbus Railway Company will be in the year 1920.

It may be of interest to give just here the terms of the franchise just granted to the Milwaukee Electric Railway & Light Company.

The company offered to the city for a grant to run thirty-six years \$50,000 per year for the first year, and \$10,000 additional each year until the sum should reach \$100,000. The company was to pay \$100,000 annually for the remaining thirty years. The Council refused the offer, but granted a franchise upon the following terms, as being in the interest of the citizens, viz., fare, 5 cents with transfer privileges. One hour in the morning and one hour in the evening; tickets to be sold in packages of twenty-five for \$1. After five years the company to sell on demand, at all hours of the day, packages of twenty-five for \$1. These terms our patrons have enjoyed for many years. We now offer, not waiting five years, or any term, twenty-eight tickets for \$1, at all hours of the day.

A "taxpayer" obtained an injunction in the court at Milwaukee to prevent the enforcement of the contract. It was taken to the Supreme Court of Wisconsin, and on Oct. 13, 1900, the case was decided in favor of the company, the court holding that the contract was a fair one and favorable to the citizens. We quote this language of Justice Winslow on this point:

"The defendant company in the year 1898 offered to pay the city annually on the 1st of January of each year a large sum of money, beginning with \$50,000, and increasing the sums each year by \$10,000, until it reached \$100,000 annually, on condition said city would grant the right to charge 5-cent fares until the year 1935. These offers were, however, rejected by the city, and the present ordinance adopted, by the terms of which no moneys are to be paid to the city, but the company is required to sell twenty-five tickets for \$1, good for travel during certain morning and evening hours until Jan. 1, 1905, and after that time good during all hours of the day.

"It seems very plain to us that this action of the Council cannot be called in any proper or reasonable sense a squandering of public funds or property."

If the Supreme Court of Wisconsin finds that twenty-five tickets for \$1, after five years, is fair and equitable to Milwaukee, is not our proposition to give twenty-eight tickets for \$1 to our patrons, beginning at once, a generous one? Chief Justice Winslow considered twenty-five tickets for \$1, after five years, better than \$100,000 annually paid to the city.

BUFFALO, N. Y.

Present population, 352,219. Mileage, 164.66. Buffalo Railway Company.	
Gross earnings.....	\$1,728,653
Operating expenses (51.6).....	892,088
Net	\$836,565

Buffalo has a population of 152,219 more than the *Journal* claims for Columbus in 1920; yet the receipts for 1899 were \$1,728,653, or \$511,347 less than the *Journal* estimates that the receipts of the Columbus Railway Company will be in the year 1920.

The above comparisons will be found interesting, and will show clearly the fallacy of the *Journal's* figures.

In closing, let us take the two cities of Toledo, Ohio, and Worcester, Mass., more clearly approximating in size and general conditions that of Columbus.

TOLEDO, OHIO

Present population, 131,822. Toledo Traction Company.

Gross earnings.....	\$1,006,384
Operating expenses (54.3).....	546,356
Net	\$460,028

WORCESTER, MASS.

Present population, 118,421. Worcester Consolidated Street Railway Company.

Gross earnings.....	\$610,153
Operating expenses (71.9).....	439,160
Net	\$170,993

It will be observed that in the larger cities the percentage of operations is higher than in Columbus, and there are no grounds for the claims of the *Journal* that the operating expenses of our system will decrease, however gratifying such results might be to the management.

Safety Regulations for Street Railway Installations

As has been previously reported in the STREET RAILWAY JOURNAL, a commission of the Verband Deutscher Elektrotechniker has been in existence for a year, whose duty it is to devise regulations suitable for electric street car installations. This commission made little headway until a committee, consisting of practical men, was appointed by the Verein Deutscher Strassenbahn- und Kleinbahn Verwaltungen, when the following rules were laid down, which now have to be conformed to by the various companies. As yet the question of grounding the apparatus in the car has not been decided, but with the exception of this still open question the rules have been adopted for a trial period of one year.

All new installations have to conform to these rules, but it is optional with the road managements to make the necessary changes on existing roads. After the trial period, any shortcomings which have suggested themselves, will be remedied, and then the rules will probably be put into the form of a law, and passed.

The following rules for electric railway installations are intended for overhead systems, as well as accumulator traction, for pressures between 250 volts and 1000 volts. If this voltage is exceeded, the high tension regulations apply.

POWER STATIONS

SEC. 1.—For railway power stations the mean pressure regulations for central stations are applicable. The car houses are considered as a part of the power station.

CONDUCTORS

SEC. 2.—For railway conductors the mean pressure conductor regulations are applicable, with the following exceptions:

- a. For railway circuits weatherproof-covered wires are permitted to be freely strung.
- b. Trolley wires and feeders which are not supported on double porcelain insulators must be doubly insulated from the ground.
- c. Wires must be strung at least 5 m above the street surface. A smaller height is permitted where the circuit passes under a structure or through a tunnel, but safety regulations and a warning sign must then be provided.
- d. Electric roads having their own roadbeds, which are inaccessible to the public, can suspend their wires any desired height above the track, if the employees receive proper instruction as to the dangers involved. At stopping places or crossings the wires must be guarded, and danger signs be put up.
- e. Lengths of spans must be so chosen that supports of wood have a safety factor of ten, those of iron a factor of four, and wires of 20 degs. Cels. a factor of five. Hard-drawn copper need only have a factor of safety of three. The wind pressure is taken as 125 kg when acting vertically on 1 sq. m of surface.
- f. The freely suspended wires are to be protected by lightning arresters, which remain operative even if repeatedly struck by lightning. They must be well grounded, all curves being avoided. The rails may be used for ground returns.
- g. All bare conductors in streets that are inhabited must be arranged in sections, which can be cut in and out separately.
- h. In regard to the protection of existing telegraph and telephone lines the telegraph law of April 6, 1892, must be obeyed.

SEC. 3.—Trolley wires are not subject to the regulation which requires tension to be removed at branch or terminal points of freely suspended conductors; but it is necessary to anchor the same rigidly to the frog or switch wherever a joint or branch occurs.

SEC. 4.—The insulation resistance of overhead conductors must be at least 50,000 ohms per km, measured in rainy weather and at

the working pressure. Every six months measurements must be taken, in which each feeder, with its corresponding section of trolley wire, form a separate circuit. The measurements must be recorded in books, and preserved.

SEC. 5.—Work must only be done on live wires by experienced workmen, who are stationed on an insulated tower wagon or ladder. Two workmen must always work together, so that they might render assistance to each other in case of need.

SEC. 6.—If the rails are used as return conductors, the negative pole of the generator is to be connected to the track by means of insulated cables.

III. ROLLING STOCK

SEC. 7.—a. Insulation. An insulation is considered satisfactory if it does not break down under a pressure exceeding that used in service by 1000 volts. In addition, the insulating material must be of such a nature that under ordinary conditions there will be no surface leakage. In the controller impregnated wood is permissible as insulating material.

b. Grounding. The electrical connection between wheels and truck is a satisfactory ground connection.

c. Insulated conductors must have the ability to stand an excess of pressure of 100 volts for one hour after the wire has been immersed in water for twenty-four hours.

d. Fireproof apparatus. Any piece of apparatus which cannot be ignited, or which, after ignition, will not continue to burn, is considered fireproof.

SEC. 8.—Generators, motors and transformers. The frames and supports of stationary generators, motors and transformers must be permanently grounded. The machines must be so set up and protected that persons cannot touch parts which carry current or are in motion. They must be so set up that if fire should break out it cannot ignite any combustible material.

SEC. 9.—Accumulators. Accumulators can be set on wood, if non-hygroscopic insulators are employed. The public must have no access to the battery during ordinary service. Celluloid must not be used for jars or battery boxes.

SEC. 10.—Switchboards. Wood may only be used as supports for switchboards in or on the cars. Current-carrying parts and such apparatus which emit sparks during operation must be mounted on fireproof bases, and must be so placed that the sparks cannot injure persons or set inflammable material on fire.

SEC. 11. Conductors. a. The cross-section of .11 conductors within the car must bear the following relation to the fuse protecting them. This also applies to conductors for the braking mechanism:

Cross-section in sq. mm	Normal current rating of fuse	Cross-section in sq. mm	Normal current rating of fuse
0.75	2	35	80
1	4	50	100
1.5	6	70	130
2.5	10	95	165
4	15	120	200
6	20	150	235
10	30	185	275
16	40	240	330
25	60	..	..

b. Insulated conductors must have a covering of rubber, in the form of a continuous, seamless and watertight sleeve. This rubber must be protected by a cotton covering.

c. Stranded conductors are permitted, if each conductor is treated as stated in b. The cotton covering, however, may be woven over the entire number of bunched conductors.

d. When vulcanized rubber insulation is used the wire must be tinned.

e. Bare conductors can only be used to connect the several cells or portions of resistance frames, but they must be supported on insulators and protected against contact.

f. Insulated conductors must be so placed that the heat of adjoining resistances will not destroy the insulation.

g. All stationary conductors are to be so run that they are accessible only to the employees and not the public.

h. Wires must only be jointed to each other by means of a soldered, screwed or similarly effective joint. Twisted joints are prohibited, and no acids are allowed for soldering purposes. The joint must be carefully insulated.

i. The joints between conductors and apparatus must be soldered or screwed. Cables above 6 sq. mm, and wires above 25 sq. mm, in section, must have cable terminals at their ends. Cables not provided with terminals must be soldered at their ends.

k. Parallel running conductors must either be protected by means of a common watertight cover, so that a movement of or contact between them is impossible. The place where the wires come out must be made watertight. The wires may also be

separated by insulators, and be run through insulating tubes when passing through walls or floor.

l. Insulated wires may be run in wooden molding.

m. Connections between motor car and trailer must be made in such a manner that the public cannot possibly come in contact with them. Movable couplings must be covered with insulating material, so that even if the contact piece should fall to the ground it could not cause trouble.

n. Conductors which undergo much bending or turning must be made flexible, and be provided with a rubber tube, slipped over the insulation.

o. When in close proximity to metal parts insulated conductors are to be covered by a dampproof insulating tube. In this case the grounding and the connecting of metal parts is not insisted upon.

p. Clamps are permitted solely for connecting bare wires permanently to the frame of the car.

g. Insulated wires on walls, ceilings and floors may be run through tubes if the latter protect the wires against moisture. They may be made of metal or moisture-proof insulating material, or lined metal tubing. In the case of a single or polyphase system the wires of the same circuit must be grouped together in one tube. Connections must be made only in junction boxes, which can be opened at any time. The tubes must be so constructed that no protruding parts can injure the insulation of the wires. The metal tubes must be connected electrically and grounded. The tubes must be so laid that water cannot accumulate at any point.

SEC. 12.—Apparatus. Those parts of apparatus which carry current which may be touched accidentally must be surrounded by covers. The contacts are to be of such a size that in service they do not attain a temperature exceeding 50 degs. C. above the surrounding air.

SEC. 13.—Controller. The handle of the controller must be removable only when the current is off.

SEC. 14.—Fuses. *a.* Each motor car must have at least one main fuse in the motor circuit. Separate fuses must be placed in the lighting, heating and accumulator circuits. There is to be no fuse in the circuit of the short-circuit brake.

b. The fuses, including the automatic circuit breakers, must be so constructed that during operation (even short circuit) there can be no permanent arc. The fuses must be provided with copper terminals when the fusing metal itself is soft. The maximum pressure and normal current rating must be stamped on the fuse.

c. The fuses must be so arranged that in case they blow they will not be a source of danger to the passengers, nor be able to set fire to any adjoining inflammable substances.

SEC. 15.—Switches. The lamp circuit, the heating circuit and the accumulator circuit must all have their individual switch. The latter must be so constructed that no permanent arc can be maintained, and give a plain indication whether the current is on or off. Knife contacts only will be permitted. Switches must be so placed as not to endanger the passengers nor be able to set fire to neighboring inflammable substances. Handles and cases must be made of insulating material.

SEC. 16.—Resistances. Resistances and heating coils must be so arranged that contact between the heated apparatus and inflammable material is impossible. Too great a rise in temperature of the latter must also be avoided. The current-carrying parts must not be accessible to the public while in service.

SEC. 17.—Lamps and Accessories. The current-carrying parts of the lamps must be protected by an insulating covering. The socket may have a fireproof base, and parts which may be ignited or have their shape changed when heated, must not be placed within sockets. For arc lamps the ordinary mean pressure regulation is applicable.

SEC. 18.—The Verband Deutscher Elektrotechniker reserves the right to make such changes or additions to these rules as may be deemed advisable.

BOSTON, MASS.—The Railroad Commissioners have granted the petitions of the Boston Elevated Railway for the removal of its horse car tracks on Dartmouth, Marlborough, Arlington and Beacon Streets. The Commissioners in their decision relative to the removal of the Back Bay horse car tracks state that the car service on this line has been substantially substituted by electric on Boylston Street, Massachusetts Avenue and Charles Street. Increased service to residents in that vicinity is guaranteed by an agreement made by the company to introduce a new line of electric cars to run through Boylston Street from a point beyond Massachusetts Avenue to the Northern Station by the way of Charles and Cambridge Streets, to run every fifteen minutes. In closing their decision, the Commissioners say: "The introduction of additional cars on Boylston Street will not tend to appreciably hasten the day, for obvious reasons near at hand, when provision must be made for other through service from the suburbs to the centers of the city. With these tracks removed, the question of future facilities can be taken up and treated without embarrassment or prejudice."

Street Railway Patents

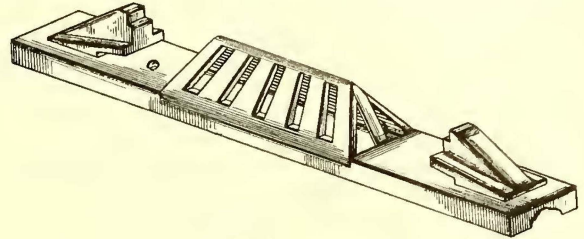
[This department is conducted by W. A. Rosenbaum, patent attorney, 177 Times Building, New York.]

UNITED STATES PATENTS ISSUED DEC. 18, 1900

663,872. Railway Switch; C. A. Dunn, Denver, Col. App. filed Dec. 11, 1899. A device operated by the motorman for throwing the switch tongue, and at the same time cleaning out the rail.

663,882. Rail Connection for Railways; W. C. Gregg, Honolulu, Hawaii. App. filed March 22, 1900. A novel form of shoe or cradle receiving the ends of the rail.

663,894. Rail-Joint; A. G. Heinle, Esplen, Pa. App. filed May 16, 1900. A wedge-shaped recess is formed by the meeting of the rails, into which a wedge projection from the fish-plate extends.



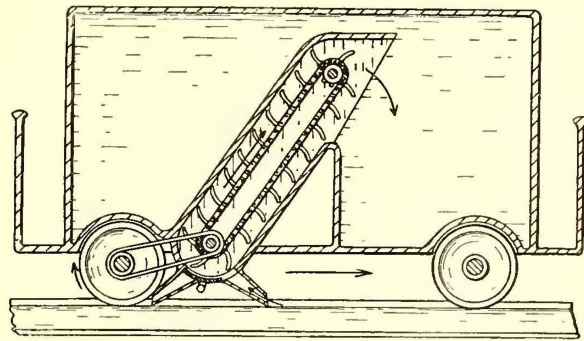
PATENT NO. 664,042

663,958. Brake-Shoe; J. H. Cardwell, Chicago, Ill. App. filed Aug. 10, 1899. The insert plate and shoe-frame are dovetailed together and formed with strengthening parts.

664,020. Metallic Railway Track Construction; G. B. Harper, Menoken, Kan. App. filed April 13, 1900. String plates under the rails are connected together by channel iron, which also secures the flanges of the rail.

664,042. Metallic Railway Tie; W. H. Hillyer, Freeport, Ohio. App. filed March 23, 1900. The middle portion of the tie is formed with a pyramidal projection for stiffening purposes and to prevent walking on the ties.

664,103. Fare Registers; J. O. Sloan, Indianapolis, Ind. App. filed April 2, 1900. A device carried by the conductor, into which passengers insert their fares. The conductor, by pressing a button, first records the fare and then sounds a bell notifying the passenger that the fare has been received and recorded.



PATENT NO. 664,165

664,165. Means for Cleaning Tramway Rails; O. Michaelis, Berlin, Germany. App. filed June 18, 1900. A cart with an endless carrier adapted to take up the dirt, regardless of the direction in which it travels, of over the rails and without shifting the position of the carrier.

664,199. Rail-Joint; S. B. Wharton, South Bend, Ind. App. filed March 27, 1900. A nut-lock bar is held in position against all of the nuts by engagement with the rail chair.

664,309. Car Fender; P. Best, Elizabeth, N. J. App. filed March 22, 1900. Details.

PERSONAL MENTION

MR. DAVID HYMAN has been elected manager of the Ithaca Street Railway Company, of Ithaca, N. Y.

MR. D. H. LOUDERBACH has just returned from London, Eng., where he represented Mr. Charles T. Yerkes.

MR. E. L. FULLER, of Scranton, Pa., has been elected president of the Ithaca Street Railway Company, of Ithaca, N. Y., to succeed Mr. E. G. Wyckoff, resigned.

MR. A. B. DU PONT, general manager of the Detroit Citizens' Street Railway Company, has been elected to the newly created position of second vice-president of the St. Louis Transit Company. Mr. du Pont will assume his new duties Jan. 1.

MR. H. E. BRADFORD, who recently resigned as general manager of the Marlboro Street Railway, Framingham Street Railway, Southboro & Marlboro Street Railway, and Framingham Union Street Railway Companies, to devote his entire attention to the interests of the Worcester-Boston syndicate, which now controls some 140 miles of road, centering in Worcester, Mass., was tendered a banquet and reception by his late employees, Dec. 4. The reception was held at the Gleason House, Marlboro, Mass., and the affair was a most enjoyable one, all but three employees being present. Mr. Henry W. Angier acted as toastmaster, and after making a few complimentary remarks regarding the efficient manner in which Mr. Bradford managed the street railways under his charge for the past thirteen years, presented him, in behalf of the employees, with a solitaire diamond ring. Mr. Bradford responded with an extended speech, full of practical points for the welfare of his late fellow employees. Mr. Bradford is president of the New England Street Railway Club, and first entered street railroading in 1888, when he entered the employ of the Marlboro Street Railway Company. He was born in Keene, N. H., in 1858, and was apprenticed as a machinist, serving eleven years at the trade. Mr. Bradford came to Marlboro in 1883, and entered the employ of Gen. Henry Parsons. He resigned this position after a few months, and accepted the position of master mechanic and chief engineer for the Boyd-Cory Shoe Company, the largest shoe manufacturers in the city. He resigned this position to accept a minor one with the Marlboro Street Railway Company. By perseverance and attention to duties he secured advancement, and is well fitted for the position to which he is now chosen.



H. E. BRADFORD

MR. A. C. RALPH, who has recently been appointed superintendent of the Marlboro Street Railway, Framingham Street Railway, Southboro & Marlboro Street Railway, and Union Street Railway Companies, of Marlboro, Mass., to succeed Mr. H. E. Bradford, who has entered the employ of the Worcester-Boston syndicate, was born in Warren, Vt., in 1854. After attending the public schools, and graduating from the Vermont Normal School, he followed various occupations, such as school teacher, clerk in a country store and traveling salesman until after the West End Street Railway Company took charge of all the Boston roads. When this deal was consummated he entered the employ of this company as a driver, and was one of the first men to act as a motor-man when the electric cars were first installed on the ninth division of that system. His knowledge of the electric system was so apparent that he was shortly appointed foreman of the Grove Hall car house of the company, where he remained three years. This position he resigned to go to Knoxville, Tenn., in the interest of the Thomson-Houston Company, and he resigned the latter position to be-



A. C. RALPH

come master mechanic of the Atlanta Consolidated Street Railway Company, of Atlanta, Ga., where he remained for a year. He then accepted the position of master mechanic of the Paterson Street Railway Company, of Paterson, N. J., which position he held for four years. During the construction of the Brockton Street Railway and the Bridgewater & Brockton Street Railway, under Mr. James F. Shaw, Mr. Ralph acted as super-

intendent of construction in connection with his duties as superintendent of the Brockton & East Bridgewater, Bridgewater, Whitman & Rockland, Providence & Taunton and the New Bedford, Middleboro & Brockton Street Railways, which were at that time controlled by Mr. James F. Shaw, but have since passed into the hands of the Massachusetts Electric Companies, and form a part of the Brockton & Globe Street Railway systems. Mr. Ralph's success can be attributed to hard work and strict attention to business, and no one appreciates this fact better than Mr. Shaw, who has appointed him superintendent of three street railway lines which he now controls.

ENGINEERING SOCIETIES

NORTHWESTERN ELECTRICAL ASSOCIATION.—The annual meeting of this association will be held at Milwaukee, Wis., Jan. 16-18.

ELECTRICAL CONTRACTORS' ASSOCIATION OF THE STATE OF NEW YORK.—The annual meeting of this association will be held at Utica, Jan. 15.

FRANKLIN INSTITUTE.—The annual meeting of the mechanical and engineering section of the institute will be held Jan. 10. John F. Rowland, Jr., the retiring president, will address the section on "Wear and Tear on Steam Boilers."

NEWS NOTES

GADSDEN, ALA.—The city officials and the street car company are at loggerheads. The Council recently passed an ordinance regulating the speed of cars and requiring the cars to be equipped with fenders, the provisions of which the company claims are unjust. Traffic was temporarily suspended, and the company threatens to remove the street car line to Anniston and also several large manufacturing interests in which the owners of the street car line are interested.

PUEBLO, COL.—The Pueblo Traction & Lighting Company has just been incorporated, with a capital stock of \$1,500,000. The incorporators of the company are: W. Rice, J. F. Vail, C. E. Gast, T. N. Devine and M. D. Thatcher, of Pueblo. Several of the officers of the Pueblo Traction & Electric Company are included in the list of the incorporators of the Pueblo Traction & Lighting Company, and the latter company is presumably organized as the successor of the Pueblo Traction & Electric Company.

DENVER, COL.—In the issue of the STREET RAILWAY JOURNAL of Nov. 17 it was reported that the Automatic Railway Switch Company, of this city, was expecting to build a factory for the manufacture of its device. Inasmuch as the apparatus is so simple that it can be easily and cheaply constructed by the various railway companies which may adopt it, this step has never been contemplated by the company, and this erroneous statement is now corrected. Practical tests of the system have been made on the Denver Railway with uniformly satisfactory results.

WASHINGTON, D. C.—A bill has been introduced in the House authorizing the Baltimore & Washington Transit Company to extend its lines in the District over a specified route. The bill also provides that the Baltimore & Washington Transit Company and the Brightwood Railway Company be permitted to enter an agreement for operating cars over each others' tracks.

CHICAGO, ILL.—The traffic returns of the Metropolitan Elevated Railroad Company for November have been made public. Below is given a table showing the total number of passengers carried monthly during 1900; comparisons are made with 1899 and the increase given:

	1899	1900	Increase
January	2,242,490	2,756,135	513,645
February	2,109,632	2,593,304	483,672
March	2,456,533	2,929,748	473,215
April	2,323,920	2,712,900	388,980
May	2,352,590	2,674,928	322,338
June	2,172,990	2,466,180	293,190
July	2,093,338	2,287,490	194,152
August	2,110,170	2,432,107	321,937
September	2,285,520	2,460,000	174,480
October	2,927,330	2,690,367	*236,963
November	2,664,600	2,694,660	30,060

* Decrease.

CHICAGO, ILL.—The traffic returns of the South Side Elevated Railroad for November have been made public. Below is given a table showing the total number of passengers carried monthly during 1900; comparisons are made with 1899 and the increase given:

	1899	1900	Increase
January	1,321,609	2,154,624	833,015
February	1,688,176	1,961,400	273,224
March	1,981,179	2,240,184	259,005
April	1,916,340	2,149,950	233,610
May	1,847,228	2,117,176	269,948
June	1,683,510	2,036,760	353,250
July	1,631,964	1,890,132	258,168
August	1,630,569	1,908,267	277,698
September	1,787,539	1,951,860	164,321
October	2,287,583	2,133,575	*154,008
November	2,099,160	2,161,710	62,550

* Decrease.

GREENVILLE, IND.—The Indiana Railroad Company has been incorporated, with a capital stock of \$100,000, to build two interurban electric lines. One will extend from Greenfield to Knightstown, a distance of 14 miles, and the other from Greenfield to Pendleton, a distance of 16 miles. The new road will connect at Pendleton with the line from Anderson to Greenfield, and it will connect at Knightstown with the proposed lines from Knightstown to Shelbyville. The directors of the company are: F. G. Banker, M. C. Binford, C. M. Kirkpatrick, E. J. Binford, W. C. Dudding, L. E. McDonald and W. R. McGowan, of Greenfield.

GOSHEN, IND.—J. J. Burns, of Chicago, who formerly owned the city electric lines in Goshen and Elkhart, and projected the connecting interurban line now in operation, has signed his acceptance to the franchise recently granted him by the City Council for an electric line from Goshen to Lake Wawasee.

INDIANAPOLIS, IND.—Two cars of the Indianapolis & Greenfield Electric Railway collided Dec. 21. Fourteen passengers and the motorman of one of the cars were more or less injured. The cars were badly damaged.

INDIANAPOLIS, IND.—Two cars on the Greenfield & Indianapolis line collided head-on Dec. 19, near Gem, Ind. The motorman of both cars were fatally injured and six passengers were badly hurt.

NEW CASTLE, IND.—A. D. Ogburn and others, of New Castle, have been granted a fifty-year franchise for an electric railway system in this city.

DES MOINES, IA.—The City Council has voted to accept the proposition of the Des Moines City Railway Company by which the company's taxes are to be reduced by 30 per cent for the years 1897 and 1898, and the company is to sell six tickets for 25 cents. The contract has been signed and will take effect as soon as the necessary steps are taken to take the controversy over taxes out of the courts, where they have been since 1898. The remaining back taxes of the company are to be paid in full by March 1, 1901. This includes only the general taxes, and not the special paving assessments, under the law, by which the company is still indebted to certificate holders for a large amount.

ASHLAND, KY.—Two cars filled with passengers collided near the heart of the city at 8 a. m. Dec. 19, during a heavy fog. Eleven persons were injured, and both cars were almost totally wrecked.

KITTERY, MAINE.—The Kittery, Eliot & South Berwick Street Railway Company is to be incorporated, with a capital stock of \$65,000. The company proposes to construct an electric railway to connect Kittery, Eliot and South Berwick. Among those interested in the new line are: Wallace D. Lowell, president of the Union Electric Railway Company, of Dover, N. H.; Francis Keefe, of Eliot; Herbert B. Dow, of Portsmouth; William J. Kelley, of Kittery.

WESTFORD, MASS.—The Selectmen have granted the Stony Brook Street Railway Company a franchise here. The company proposes to build a line from North Chelmsford to Ayer. Col. H. B. Parker, of Newtonville, is prime mover in the new company.

NEW BEDFORD, MASS.—The Selectmen have granted the New Bedford & Onset Street Railway Company a franchise for the construction of electric lines on the Mattapoisett and Wareham roads.

FALL RIVER, MASS.—The Globe Street Railway Company has petitioned the Legislature for the right to construct an extension in Swansea, Berkeley, and Freetown, and for the right to lease the Newport Street Railway Company, of Newport, R. I., for ninety-nine years.

CONCORD, MASS.—The Concord & Boston Street Railway Company, which originally intended having a track from Concord to Waverley, passing through Lexington, has changed its plans, and now intends to construct a line through Waltham, entering that city from Lincoln. At Waverley the Concord & Boston Railway will connect with the Boston Elevated system. By passing through Waltham, instead of Lexington, the route between Concord and Waverley will be 5 miles shorter. The company has petitioned the Aldermen of Waltham for a franchise to pass over Trapelo Road, from Woburn Street to the Belmont town line.

ANOKA, MINN.—The St. Francis Electric Railway Company has just been incorporated to construct an electric railway from St. Francis, a distance of 6 miles. The incorporators of the company are: C. T. Woodbury, J. S. Woodbury, of Anoka; G. D. Woodbury, of Walliston, Mass.; William Streetly and S. Hamblen, of St. Francis.

PONTIAC, MICH.—The Pontiac & Flint Electric Railway Company has completed its organization and filed articles of association with the Secretary of State. The object of the corporation is the construction of an electric railway from Pontiac to Flint, the distance on a direct line being 32 miles. The new road will connect with the Saginaw Suburban Electric Railway, now being constructed from West Bay City and Saginaw to Flint. The company will begin the work of securing the right of way at once, and the line will be constructed early in the spring, the idea being to have a continuous line in operation between Bay City, West Bay City and Saginaw to Pontiac via Flint before next fall. Among those interested in the company are: William Stoddard, of Minneapolis; G. V. Chandler, W. F. Stevens, W. G. Emerick and George Silsley, of Saginaw.

NEWARK, N. J.—The State Board of Taxation has rendered a decision reducing from \$3,100,000 to \$2,266,000 the assessment made against the North Jersey Street Railway Company by the city of Newark. The assessment included about \$500,000 representing franchise value. This the State Board held could not be taxed. A further reduction was allowed because of the liability of the company's rolling stock and equipment to wear and tear.

BROOKLYN, N. Y.—A Grand Street car of the Brooklyn Rapid Transit Company collided with a car of the Metropolitan Avenue line of same company at the terminus of the two lines at the foot of Broadway on Dec. 24. Both cars were badly damaged as a result of the collision, and one person was killed and several injured.

BROOKLYN, N. Y.—The new through train service over the Bridge and the Fifth Avenue line of the Brooklyn Elevated Railroad was begun Dec. 18



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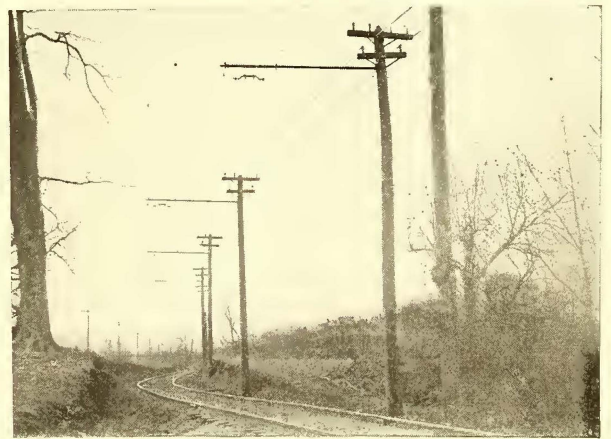
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by the Brooklyn Rapid Transit Company. The through trains will be operated during the hours between 10 a. m. and 4 p. m. and from 4 p. m. to 5 a. m. The trains are to be run between Park Row and Bath Beach. All of the cars used in this service have been equipped so that they may be operated by the third-rail system while on the elevated road and by the trolley arrangement when they travel on the surface.

WHITEHALL, N. Y.—Plans are being matured for the construction of the Whitehall & Granville Railroad. The company was incorporated Sept. 11, 1900, with a capital stock of \$750,000, and proposes to construct an electric railway from Whitehall through East Whitehall, Truthville, Middle Granville and Granville, and then to West Paulet, Vt., a distance of 20 miles. The district through which the road will pass is well populated, and rich deposits of slate are found in abundance. The company proposes to tap this slate region and thus secure an immense freight business. At present steam connections are poor, and much carting has to be done in order to make shipments. Many men are now employed at the mines, who will use the new road as a means of travel, and it is estimated that many new mines will be worked on the completion of the new road, because of increased facilities. The lack of facilities has always been a serious drawback to development in the vicinity. The company has secured water power privileges. The power station will be located about ½ mile from the main line of the road at a point about equal distance from the terminals of the road, and a side track will connect it with the main line. A company is to be organized under the laws of Vermont to operate a line from Poultney, Vt., along the west side of Lake St. Catherine, admirably suited for park purposes, to Granville. This company will operate in harmony with the New York company. The estimated cost of constructing this road is placed at \$350,000. The officers of the Whitehall & Granville Railroad Company are: Emmet J. Gray, of Whitehall, president; E. R. Norton, of Granville, vice-president; Charles I. Baker, of Troy, secretary; Daniel B. Woodward, of Granville, treasurer; Charles B. Story, of Hoosick Falls, general superintendent.

EAST LIVERPOOL, OHIO.—The Salem, Lisbon & East Liverpool Electric Railway Company will be incorporated within a few days, with a capital stock of \$500,000. The company contemplates building an electric railway from Salem to Lisbon and East Liverpool. Franchises and rights of way have been secured. Eastern capitalists are financing the project.

YOUNGSTOWN, OHIO.—The Youngstown & Sharon Electric Railway Company has applied to the City Council for a franchise to enable its road to reach the center of the city. The road is partially completed, but this is the first time an application has been made to the city for a franchise.

BRYAN, OHIO.—The Northern Ohio Electric Railway Company has been organized to build an electric railway from Bryan to Defiance. The towns are only 16 miles apart, but at present it requires over 100 miles of railway travel to go from one point to the other. Elias Bartholomew, of Toledo, is president of the company; W. B. Sherwood, vice-president and general manager; H. C. Warren, secretary and treasurer. Franchises have been secured.

MEDINA, OHIO.—The Council has canceled franchises granted some time ago to the Cleveland, Medina & Southern Railway and the Cleveland, Elyria & Western Railway, and has granted new franchises, imposing severe terms. Both roads must use the same tracks into town, and tracks must be laid by June 1, 1901, otherwise the grants will be withdrawn. The Cleveland, Medina & Southern Railway will be extended beyond Medina to Chippewa Lake, Seville and Wooster.

UPPER SANDUSKY, OHIO.—T. Olliver, of New York, is at work in the county securing right of way for a through line from Columbus to Toledo. The road would be almost an air line 150 miles in length, passing through Delaware, Marion, Upper Sandusky, Fostoria, and a number of other large towns. The promoter says the third-rail system will be used and from three to five cars in a train.

CLEVELAND, OHIO.—The Cleveland City Railway Company has leased Scenic Park, at the end of its Detroit Street line. It will be greatly improved, and will be operated as a place of amusement.

COLUMBUS, OHIO.—The Norwalk, Ashland & Southern Railroad Company has been incorporated by C. P. Wickham, G. T. Thomas, F. C. Jackson, J. R. McKnight and C. C. Curtis. It is the intention of the company to construct an electric railway from Norwalk to Ashland, passing through Olena, Fitchville, New London, Savanna and Savanna Lake, all isolated towns. The temporary capital stock of the company is \$10,000.

COLUMBUS, OHIO.—The Mansfield, Mt. Gilead & Columbus Electric Railway, Light & Power Company has been incorporated by T. Y. McCay, F. J. Boals, Thomas E. Barrow, Lewis J. McCay and T. Y. McCay, Jr. The purpose of the company is to build a system of roads in Richland, Crawford, Morrow, Delaware and Franklin counties. The main line is to extend from Mansfield to Columbus, with branches to Ashland, Savanna, Marion and Mt. Gilead. The capital stock of the company is \$20,000.

IRONTON, OHIO.—It is announced that the title of the Ohio Valley Electric Company, which controls the Ironton Electric Railway & Light Company, Ashland & Catlettsburg Street Railway Company, of Ashland, Ky., and the Consolidated Light & Railway Company, of Huntington, W. Va., will be changed early in January to the Camden Interstate Railway Company.

NORWALK, OHIO.—This city gives promise of becoming one of the greatest electric railway centers in the State. The Sandusky, Milan & Norwalk Railway is in operation; the Toledo, Fremont & Norwalk Railway; the Sandusky, Bellevue, Monroeville & Norwalk Railway are being built, and the latter proposes to build an extension south to Shelby; the Cleveland Elyria & Western Railway and the Sandusky & Interurban Railway, both propose to extend to this place, the former from Oberlin, and the latter from Ceylon, and within the past few days the Norwalk, New London & Ashland Company has been organized to build between these points.

OKLAHOMA CITY, OKLA.—The Oklahoma Light, Power, Fuel & Gas Company has just been incorporated, with a capital stock of \$300,000. The company proposes to build 20 miles of electric road in Oklahoma City

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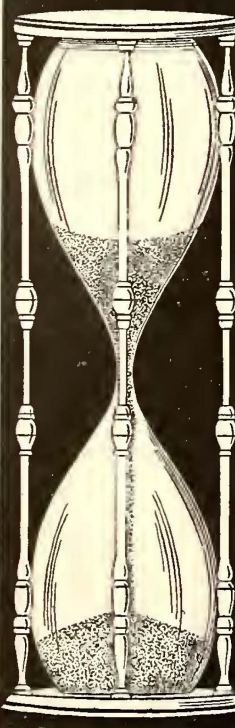
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and to operate an electric plant for furnishing light, heat and power. The directors of the company are: Norman W. Gifford, of Chicago; Roscoe D. Farmer, of Benton Harbor, Mich.; A. C. Root, T. F. McMeacham and A. R. Hayes, of Oklahoma City.

WILKINSBURG, PA.—The Monongahela Street Railway Company has been granted an extension of one month's time in which to complete its Franklin Street line.

SPRINGFIELD, PA.—The franchise of the Springfield Street Railway Company, which three years ago obtained a right of way from Darby, through Springfield, Marple and Upper Providence townships and other points, has been purchased at receiver's sale by Simon Bennet, of Springfield. It is stated that the company will be at once reorganized to build the road.

PROVIDENCE, R. I.—The Council has passed an ordinance restricting the size and weight of electric cars to be operated on the city streets. The ordinance is directed chiefly against the New York, New Haven & Hartford Railroad, and provides that no passenger car shall be propelled through the streets the maximum length of which shall exceed 42 ft. over all, the maximum width of which shall exceed 9 ft., the maximum weight of which shall exceed 42,000 lbs. when empty, and in no event to exceed 60,000 lbs. when loaded.

GALVESTON, TEX.—The Galveston City Street Railway Company has just been incorporated by W. G. Oakman, George R. Turnbull, Edward Connell, of New York; R. B. Baer, of Houston, and J. W. Terry, of Galveston, as successor of the Galveston City Railroad Company. The capital stock of the company is \$800,000.

CANADIAN NOTES

HAMILTON, ONT.—The Hamilton, Grimsby & Beamsville Railway Company has asked permission from the county to extend its lines from Beamsville to St. Catharines.

WINDSOR, ONT.—William Simpson has secured right of way for the construction of an electric railway from Essex to Wheatley.

LINDSAY, ONT.—Bemont & Ritchie, solicitors, of this city, will make application to the government to amend the act respecting the Dawson City Electric Company and to extend the time for the construction of the railway.

AYLER, QUEBEC.—The Hull Electric Company is now making an effort to secure entrance to Ottawa. If the company is successful it will build a depot and waiting room in Ottawa.

MONTREAL, QUEBEC.—Since the supply of power from Chambly has been cut off the Montreal Street Railway Company has been depending on its own plant for power. The capacity of the latter plant is limited. An accident occurred to one of the engines a few days ago, and the company was obliged to withdraw one hundred cars from service.

CONSTRUCTION NOTES

JACKSONVILLE, FLA.—The Jacksonville Street Railway Company is planning to make important improvements to its property. The Riverside, Main Street and La Villa lines of the company are to be extended and new cars are to be added to the equipment.

FLOVILLA, GA.—W. F. Smith, of Flovilla, general manager of the Flovilla & Indian Spring Railroad, announces that arrangements are now being perfected for the construction of the new electric railway between Flovilla and Indian Springs. It is expected that the road will be ready for operation early in the spring.

INDIANAPOLIS, IND.—It is announced that the Indianapolis Street Railway Company has decided to install an electric fountain in each of the parks touched by the company's lines. The electric fountain is said to have proved a great traffic inducer.

GREENWOOD, IND.—The Indianapolis & Greenwood Traction Company has put a large force of men at work grading the road from Greenwood to Franklin. The line will be extended and in operation by June 1, 1901.

FORT WAYNE, IND.—The official title of the new electric railway to be built by Townsend, Reed & Company from the center of Fort Wayne to the center of Huntington, and which was noted in the STREET RAILWAY JOURNAL for Dec. 22, is the Fort Wayne & Southwestern Traction Company. The company is now negotiating for the purchase of twenty acres of land just outside of the city limits, and it is the intention of the company to spend \$50,000 in fitting up the park and have it ready when the road is completed, June 1, 1901. The company now has a force of thirty men and eight teams at work grading and putting in culverts. The road will be constructed on standard steam railroad lines, and the grade will not exceed 1 per cent at any point. The company has under contemplation the building of a central power plant at Fort Wayne, which is designed not only to furnish power for the road, but for manufacturing and other enterprises in Fort Wayne, Roanoke and Huntington. The car houses will be located at Fort Wayne and Huntington. The company has awarded the Ohio Brass Company, of Mansfield, Ohio, the contract for the overhead material, and the contract for twelve cars has been placed with the Jewett Car Company, of Newark, Ohio. The latter will be equipped with four 50-hp Johnston steel motors, geared to 51 miles an hour.

DES MOINES, IA.—The Des Moines Street Railway Company has commenced the construction of several large cars at its shops in this city. They are to be completed within sixty days. The company will also construct the cars for its Army Post and Indianola lines.

PALMER, MASS.—The Palmer & Morrison Street Railway Company expects to build a new line between Palmer and Ludlow, a distance of 9 miles.

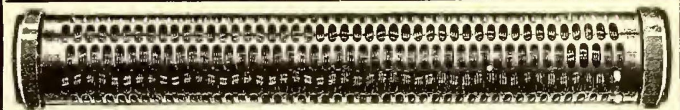
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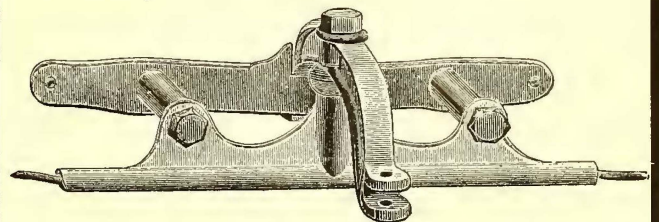
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The company will build a new car house (130 ft. x 60 ft.), boiler, engine and dynamo room, and has purchased a 500-hp cross-compound engine, 400-kw railway generator and 250-hp water-tube boiler.

DE SOTO, MO.—Work has been started on the new electric railway to extend from De Soto to Victoria. The road will eventually be extended to Hillsboro, Riverside, Sulphur Springs and Jefferson Barracks.

KANSAS CITY, MO.—The Kansas City & St. Joseph Electric Railroad Company has just been incorporated, with a capital stock of \$1,500,000, to construct an electric railway north from Kansas City to Parkville, Platte County, to Platte City, Dearborn, Faucet and St. Joseph. The road will be built almost entirely over a private right of way, and active engineering work is to be begun in a short time. There will be but one or two bridges and practically no trestling. The three-phase system will be employed, and 70-lb. or 75-lb. T-rail and 90-lb. girder rail will be used. No contracts have been awarded for construction. The officers of the company are: P. A. Gibson, of Erie, Pa., president; Charles E. Gibson, of Kansas City, vice-president; Robert P. McGeenan, of Parkville, Mo., secretary and treasurer. The address of the company is New York Life Building, Kansas City.

MANCHESTER, N. H.—The Manchester Street Railway has been granted franchises for the extension of its lines to Goffe's Falls, Jewett Street and to Derryfield Park oval.

CAMDEN, N. J.—The Borough Council of Merchantsville has granted the Camden & Suburban Railway Company a franchise for the construction of an electric railway through the borough. The company has been trying for several years past to secure the franchise just granted. It now has a line under construction to Moorestown. The line will be constructed at once.

UTICA, N. Y.—The Utica Suburban Railway Company has completed and placed its extension to Capron in operation.

NEW YORK, N. Y.—The Union Electric Railway Company is now constructing an extension of its lines through Bronxville.

SYRACUSE, N. Y.—For the further extension of the service, the Syracuse Rapid Transit Railway Company is considering the purchase of several large 40-ft. double-truck closed cars for the Salina Street line. The company is also considering the extension of its Green Street line along Lodi Street, Highland Avenue and Oak Street.

GERMANTOWN, OHIO.—The Miamisburg & Germantown Traction Company has contracted with the Southern Ohio Traction Company for furnishing power to operate its new lines.

YOUNGSTOWN, OHIO.—The Youngstown & Sharon Electric Railway Company has awarded the Pabcock & Wilcox Company a contract for new boilers of 2000 hp.

COLUMBUS, OHIO.—The Columbus, London & Springfield Railway Company has awarded contracts for the construction and equipment of its road, and expects to have the road completed by June, 1901. The road will extend from Columbus to Springfield, a distance of 45 miles. The power house and car houses will be located at Columbus and London.

CLEVELAND, OHIO.—The Western Ohio Railway Company, which is building an electric railway from Lima to St. Mary's, has closed a contract for the erection of its power house at St. Mary's. A contract has also been closed with the Sterling Boiler Company for a 1500-hp battery of boilers. Contracts for engines and generators have not yet been closed.

CLEVELAND, OHIO.—The Cleveland & Chagrin Falls Electric Railway Company has closed a contract with Sipe & Sigler, of Cleveland, for the installation of a storage battery plant in its new station 3 miles east of Cleveland. The company's power house is at the end of the road at Chagrin Falls. The first installation will give 400 amp.-hours, and the plant is to be so arranged that this can be increased by one-half without change. When the new plant is placed in operation it is expected that the running time from Chagrin Falls to the city limits at Cleveland, 14 miles, will be reduced to thirty minutes or one hour to the center of the city. The company is in the market for four modern passenger coaches.

CINCINNATI, OHIO.—The Mill Creek Valley Street Railway Company is to place its new extension from Carthage to Glendale, a distance of 5 miles, in operation Jan. 1, 1901. The company's new power house at Hartwell is nearly completed. It is a brick and stone structure and is equipped with a Westinghouse 400-kw generator, direct-connected to a Buckeye compound tandem engine; two G. E. 500-kw units each, direct-connected to compound tandem McIntosh & Seymour engines. There are four 300-hp boilers of the B. W. type. The rolling stock consists of sixteen single-truck cars, equipped with Peckham trucks and G. E. motors; the overhead material was all furnished by the Ohio Brass Company. B. L. Baldwin & Company are the engineers and contractors for the power house and generating plant. Guy M. Gest is the engineer and contractor for the track construction.

HARRISBURG, PA.—The Rockville extension of the Harrisburg Traction Company's lines was opened for travel its entire length Dec. 23. The line was opened for travel as far as Lucknow Dec. 15.

LANCASTER, PA.—The Lancaster Traction Company opened its new line to Mechanicsburg Dec. 23. The new power plant will not be ready for operation, however, for about a week.

CARNEGIE, PA.—Preliminary arrangements have been made for the building of the Carnegie, McDonald & Canonsburg Electric Railway. It is expected that the line from McDonald to Oakdale will be completed by July 1. The line will extend from Canonsburg to Woodville, and will go through McDonald, Beechmont, Hickman, Federal and Rosevale. The officers of the company are: Edward McDonald, president; J. W. Nesbit, vice-president, and R. J. Stoney, Jr., secretary and treasurer.

FORT WORTH, TEX.—F. M. Haines, general manager of the Fort Worth Street Car Company, states that bids will be opened and the contract probably let for the construction of the interurban electric railway to connect Fort Worth and Dallas Jan. 1. Mr. Haines states that the company will be ready to commence construction early in January.

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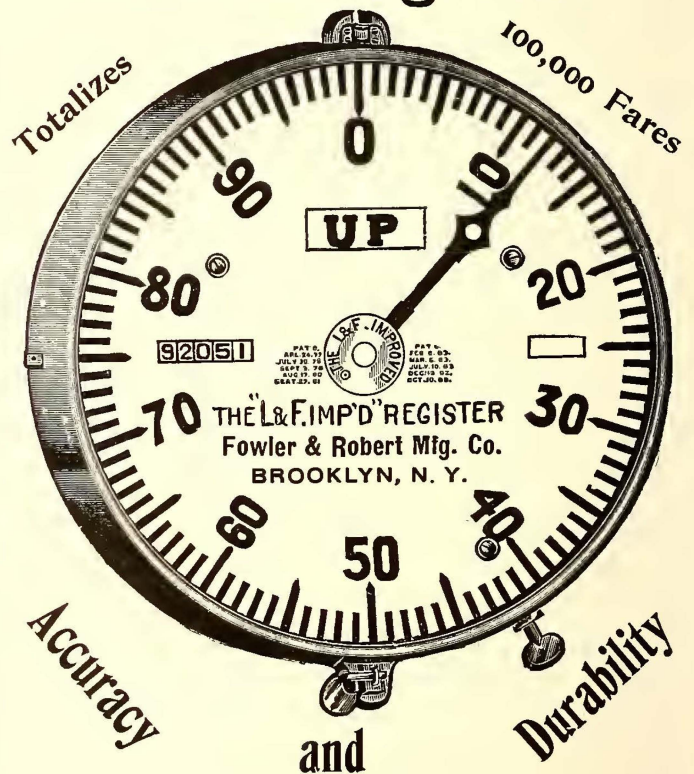
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Trolley Line Ears and Splicing Sleeves, Brass and Copper.

CANADIAN NOTES

HAMILTON, ONT.—John Patterson, of the Cataract Power Company, has announced that the construction of the Hamilton, Guelph & Gault Electric Railway has been abandoned, owing to the opposition of the residents of Hamilton to the construction of the road.

SARNIA, ONT.—The Sarnia Street Railway Company is now closing contracts for the reconstruction and electrification of its lines. The company has awarded the Ottawa Car Company, of Ottawa, the contract for the car bodies; the Taylor Truck Company, of Troy, N. Y., has been awarded the contract for the car trucks; the Ohio Brass Company, of Mansfield, Ohio, has been awarded the contract for the line material.

THE MARKETS

The Money Market

NEW YORK, December 26, 1900.

Although the range of the rate on call money has been from 3½ per cent to 6½ per cent during the past week, the price has been firm at practically 5 per cent, and still remains at this figure. Large sums of money will, of course, at the opening of the year, be freed and put in distribution, but the immense amount of trading which is taking place in the various markets throughout the country will probably have the effect of keeping the supply and demand evenly balanced. The bank statement for the week ending Dec. 22 indicates smaller gains in average cash than had been expected from the market movements. The surplus reserve shown is \$9,497,000, an increase of \$3,171,625 over the preceding week. The price for call money in various cities is as follows: Boston, 4½ per cent to 6 per cent; Chicago and Baltimore, 4½ per cent to 5 per cent; Philadelphia, 4 per cent; London, 3¼ per cent to 3½ per cent; Paris, 3 per cent; Berlin and Hamburg, 5 per cent; Amsterdam, 3½ per cent. Time money is still offered in New York with moderate liberality, and the rates have not materially changed, being 5 per cent for thirty days, 4¼ per cent for sixty days, and 4½ per cent to 5 per cent for four to six months.

The Stock Market

A continually ascending market was interrupted by the holiday season. The general increase in industrial and railway stocks was led by American Sugar Refining and General Electric in the former, and by Brooklyn Rapid Transit in the latter. The trading has been excessively active, breaking all records for this season. The combinations of large transportation and industrial interests, both assured and speculative, has been largely responsible for the prominence of the bull element among the brokers, and that its control will probably continue is shown by the care which is being taken by financial leaders to cover their shorts. The end of the century is therefore marked by a marvelously extended example of prosperity, caused by a sound financial policy of the government and general confidence in the business world, while all the indications point to a continuation of these excellent conditions into the century about to dawn. Last week's stock transactions amounted to 7,959,427 shares, against 5,204,400 shares for the corresponding week of last year. The transfers of bonds for last week, however, amounted to \$27,129,200, while for the same week in 1899 it was only \$15,981,350.

The usual quotations of stocks of the leading railways, industrials and tractions follow:

STREET RAILWAYS

	1900		Closing Bid	
	Year to Date High	Low	Dec. 17	Dec. 22
American Railways Co.....	37	27	33	34
Boston Elevated	158	695	156	157½
Brooklyn R. T.....	84¾	47½	77½	83¾
Buffalo Ry. ....	..	..	100	100
Chicago City	285	240	255	253
Chicago Union Tr. (common).....	..	..	10	11¼
Chicago Union Tr. (preferred).....	..	..	44	44½
Citizens' Pass. (Indianapolis).....	..	..	15	15
Cleveland City .....	..	..	102	103
Cleveland Electric .....	..	..	83	83
Columbus (common)	32½	20	32½	32½
Columbus (preferred) .....	..	..	89	91
Lake Street Elevated	11¼	6½	10	10
Louisville .....	..	..	82	82
Manhattan Ry.	114½	84	113	113¼
Massachusetts Elec. Cos. (common).....	29	15	26	26¼
Massachusetts Elec. Cos. (preferred).....	80¾	70	79¾	79
Metropolitan Elevated, Chicago (common).....	37½	24½	31¾	30
Metropolitan Elevated, Chicago (preferred).....	85	76	83	83¼
Metropolitan Street	182	143¾	173½	174
New Orleans (common).....	29½	18¼	22	22
New Orleans (preferred) .....	..	..	94	94
North American	21	13¾	19¼	19¼
North Jersey	31	21	24½	24½
Northwestern Elevated, Chicago (common).....	..	..	29½	29
Northwestern Elevated, Chicago (preferred).....	..	..	79½	79½
Rochester .....	..	..	22	22
St. Louis Transit Co. (common).....	..	..	20¾	18¼
St. Louis Transit Co. (preferred).....	..	..	69	66
South Side Elevated (Chicago).....	102½	93	99	98½
Syracuse (common)	15	11	11	11
Syracuse (preferred)	a40	a37
Third Ave.	135½	45¼	118	117
Twin City, Minneapolis (common).....	68½	58½	70	..

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Barney & Smith manufacture
—Seating capacity, 42.

One Combination Passenger
and Baggage Car—
Barney & Smith manufacture
—Seating capacity, 26.

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WANTED — Electrical Engineer,
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practice of manufacturing generators and
motors. Must be well up in latest design
and understand testing thoroughly. State
both engineering and practical experience
fully; also salary expected.
Address TAYLOR SIGNAL CO.,
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POSITION WANTED.—Salesman for
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trade is open for engagement. Practical
and successful. Accustomed to large
business. Well known from St. Louis
to Boston. Address RELIABLE,
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WANTED—Position as General Manager
or Superintendent by practical
street railway man of large experience,
capable of managing large properties.
Successful in handling men, and well ac-
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	1900			
	Year to Date		Closing Bid	
	High	Low	Dec. 17	Dec. 22
Twin City, Minneapolis (preferred).....	146	136
Union Traction (Philadelphia).....	40½	28½	36½	..
United Traction (Providence).....	110	107	109	109
Worcester Traction (common).....	34½	25	34½	34½
Worcester Traction (preferred).....	..	..	107	107

INDUSTRIALS

	1900			
	Year to Date		Closing Bid	
	High	Low	Dec. 17	Dec. 22
American Steel & Wire.....	59½	28½	c42½	44½
Cambria Steel (\$4.50 paid).....	22½	13%	20¼	20
Federal Steel	57%	28%	53	55¼
General Electric	199	120	171¾	195
National Steel	53½	20	38½	40%
National Tube	64½	40%	62	63¼
Republic Iron & Steel	27½	8%	16	16%
Tennessee Coal & Iron.....	104	49	61%	64%
United States Rubber	44	21	28	28¼
Westinghouse E. & M.	55%	40	55	55%

RAILROADS

	1900			
	Year to Date		Closing Bid	
	High	Low	Dec. 17	Dec. 22
Baltimore & Ohio.....	89%	55¼	82	81%
Canadian Pacific	99%	84%	87¼	89%
Chicago, Burlington & Quincy.....	142%	119%	138¼	141%
Chicago, Milwaukee & St. Paul.....	132	108½	132½	136½
C., C., C. & St. Louis.....	73%	55	70½	70½
Illinois Central	132¼	110	126¾	130%
Louisville & Nashville	87%	68%	85¼	87½
Missouri Pacific	70	38%	62%	69½
New York Central	145½	125½	142¼	145½
Northern Pacific	85½	45%	78½	83%
Pennsylvania	145	124%	143¾	144%
Southern Pacific	45%	30%	42%	44%
Southern Railway	23¼	10%	19%	22¼
Union Pacific	78	44%	75½	77¼

a Asked. b Bid. c Ex-dividend.

Iron and Steel

All reports from iron and steel centers show a healthy condition of affairs and a hopeful outlook. The business is more or less steady, with good prices reigning, and in many instances orders have been received which will require months for completion. Some markets, however, show a quietness, and there is a little uncertainty as regards the outcome of certain developments which readjustment of prices and wages may produce. The Pittsburgh quotations on Bessemer pig range from \$13.50 to \$13.75, and on billets \$19.75, delivered. The price of structural material remains the same, including the price of plates. Rumors are current, however, that both plates and beams will probably go up after the first of the year. Business is looked for also about that time from several large trunk lines for steel rails, the present quotation for standard sections being \$26 per ton at the mill. For girder rails \$33 is asked, but business is dull.

Metals

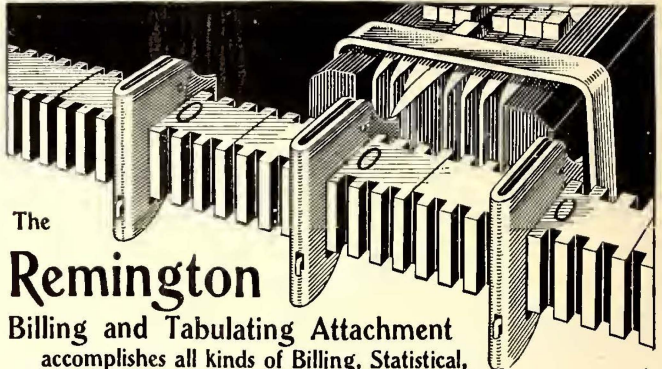
Pig tin and pig lead are both in good demand, although it is not particularly heavy. The domestic market for copper, however, is very dull. The nominal prices for this are firm at 16½c. for Lake and 16¼c. for electrolytic and casting stock. In large lots, pig lead is quoted at 4.27½c., and pig tin at 25½c. to 25¾c.

FINANCIAL NOTES

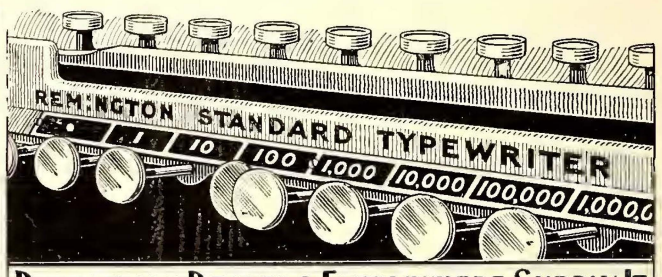
COVINGTON, KY.—The Cincinnati, Newport & Covington Railway Company reports earnings as follows:

	1899	1900
Gross receipts .....	.....	.....
Operating expenses	\$60,089	\$63,001
Earnings from operation	23,214	28,289
Fixed charges, etc.....	\$36,875	\$34,717
Net earnings	11,981	12,314
Year to Date	\$24,894	\$22,403
Gross receipts	1899	1900
Operating expenses	\$652,364	\$718,357
Earnings from operation	262,417	293,678
Fixed charges, etc.....	\$389,947	\$424,679
Net earnings	135,222	136,118
Year to Date	\$254,725	\$288,561

BOSTON, MASS.—At a special meeting of the stockholders of the Massachusetts Electric Companies held Dec. 24 it was decided to issue \$2,700,000 five-year notes, in accordance with the plan noted in the STREET RAILWAY JOURNAL for Dec. 22. The notes are to be dated Jan. 1, 1901, and will bear interest at 4½ per cent per annum, payable semi-annually. The companies will have the privilege of redeeming the notes after Jan. 1, 1902, on a 4 per cent basis. The indenture also provides for an additional issue of like



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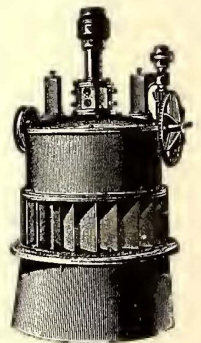
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notes, similarly secured, to the amount of \$500,000, making a total of the ultimate possible issue under the vote and indenture of \$3,500,000. The stock pledged as collateral to these notes is to be new shares of the Brockton Street Railway and Lynn & Boston Railroad and of other companies controlled by the Massachusetts Electric Companies, not including any of the stocks or other securities heretofore held by the trustees of the Massachusetts Electric Companies against which their own shares are issued.

BENTON HARBOR, MICH.—Granger, Farwell & Company, of Chicago, are now offering \$200,000 first mortgage 5 per cent \$1,000 gold bonds of the Benton Harbor & St. Joseph Electric Railway & Light Company for subscription at 103 and interest. The bonds are due Sept. 1, 1920, interest payable Sept. 1 and March 1 at the office of the American Trust & Savings Bank, of Chicago, trustee. The company is a consolidation of the St. Joseph & Benton Harbor Street Railway Company, Benton Harbor & Eastern Springs Electric Railway Company and the Benton Harbor & St. Joseph Electric Light Company.

NEW YORK, N. Y.—The regular quarterly dividend of 1¼ per cent on Metropolitan Street Railway stock is payable Jan. 15.

WATERTOWN, N. Y.—A certificate of consolidation of the Black River Traction Company and the Dexter & Brownville Street Railway Company, with a capital of \$105,000, has been filed with the Secretary of State. The new company will be known as the Black River Traction Company, and the directors are: Julius A. Lebkuecher, George Krementz, Chandler W. Riker, of Newark, N. J.; Hiram F. Inglehart, George H. Walker, Thomas Burns, N. P. Wardwell, Chester F. Inglehart, S. R. Smith, of Watertown.

BUFFALO, N. Y.—Bartlett, Frazier & Company and Edwin A. Bell have issued the following circular from their Buffalo office: "At present no stock or bonds of the International Traction Company have been actually issued, but instead J. P. Morgan & Company have issued \$10,000,000 International Traction certificates, or trust receipts, against the total issue of bonds, \$11,428,000, and 80 per cent of the preferred stock, viz.: \$4,000,000. Each certificate carries its proportionate share of bonds and preferred stock. A certificate for \$10,000 carries \$11,428 bonds and \$4,000 preferred stock. At first the certificates bore interest on their face value of 4 per cent, but the company has paid interest on the bonds itself since July, 1900, when it paid 2.285 per cent as semi-annual interest at the rate of 4.47 per cent annually on the face value of the certificates. These certificates bare the original date of March 1, 1899, and J. P. Morgan & Company have a practical option on them until Sept. 1, 1901, under an agreement incorporated in the original circular.

CLEVELAND, OHIO.—Cleveland, Elyria & Western reports earnings as follows for November: Gross earnings, \$15,813; operating expenses, \$8,381; net earnings, \$7,432; interest, \$3,270; surplus, \$4,162.

STUBENVILLE, OHIO.—The American Gas Company, of Philadelphia, is the purchaser of the property of the Steubenville Traction Company and the Steubenville Gas & Electric Company. The announcement of this sale was previously reported, but the name of the purchaser was not disclosed at that time.

CLEVELAND, OHIO.—The Cleveland Electric Railway Company reports earnings as follows: November: gross receipts, \$174,733; operating expenses, \$96,807; net earnings, \$77,925; interest, \$20,795; surplus, \$57,139. For eleven months: gross earnings, \$1,876,050; operating expenses, \$1,019,600; net earnings, \$856,449; interest, \$229,008; surplus, \$617,441.

LORAIN, OHIO.—The Lorain & Cleveland Railway Company reports earnings as follows for November: Gross receipts, \$6,377; operating expenses, \$3,058; earnings from operation, \$3,319.

PITTSBURGH, PA.—The Consolidated Traction Company reports earnings as follows:

	1899	1900
November		
Gross receipts	\$216,094	\$235,545
Operating expenses	102,483	106,588
Earnings from operation	\$113,611	\$128,957
Receipts from other sources.....	29,365	27,995
Net earnings	\$142,976	\$156,952
Fixed charges, dividends, rentals, etc.....	135,364	149,525
Surplus	\$7,612	\$7,427
First eight months of fiscal year	1899	1900
Gross receipts	\$1,759,098	\$1,968,391
Operating expenses	856,779	904,171
Earnings from operation	\$902,319	\$1,064,220
Receipts from other sources.....	223,503	225,866
Net earnings	\$1,125,822	\$1,290,086
Fixed charges, dividends, rentals, etc.....	1,082,675	1,189,897
Surplus	\$43,147	\$100,189

PORTLAND, OREGON.—The Waverley-Woodstock Electric Railway Company has called for redemption and proposes to pay, Jan. 1, 1901, at the office of the Security Savings & Trust Company, of Portland, bonds numbered respectively 92, 93, 94, 104, 105, 106, 107, 108, 109 and 110, secured by the mortgage issued in April, 1891, by the Security Savings & Trust Company, such redemption to be made by paying \$1,040, together with interest accrued on the same and unpaid at the time so fixed for redemption, for each of said bonds so called; interest upon said called bonds will cease at the date so fixed for their redemption.

TORONTO, ONT.—The Toronto Street Railway Company has declared the regular quarterly dividend of 1 per cent for the quarter just ended, payable Jan. 2, 1901.

OTTAWA, ONT.—The Ottawa Electric Railway Company has decided to increase its capital stock from \$781,000 to \$1,000,000, and to increase its bonded indebtedness from \$320,000 to \$500,000. These increases are made to cancel some outstanding bonds and for the losses sustained in the recent fire.

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