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Street Railway Men's Register at the Pan-American

Appreciating the pleasure which street railway men take in each other's society, we have placed at their disposal a means of bringing all such in communication while visiting the Pan-American. In our booth near the northeast corner of Electricity Building will be found a street railway men's register wherein our friends are cordially invited to place their names together with their address while in Buffalo. In this way it is hoped to get together any old friends who are visiting the Exposition, so don't forget to look us up in the Rainbow City.

Within Trolley Range

It is evident in many ways that city populations have hardly yet got accustomed to the new range of distance that one can travel by trolley, and that, on the other hand, those who lie comfortably beyond urban access under the older régime of stage coaches, omnibuses and ponderous steam trains, are very much disturbed now that the trolley brings all mankind easily to their very doors. One of the instances is, this is the manner in which in many of our American cities institutions have been driven from the suburbs much further afield, and now England offers an interesting example in the dispute over the trolley line from London through Willesden, Edgware and Harrow. The famous old school has hitherto been at a safe distance from the metropolis, but now the temptation to the boys to "break bounds" and have a fling in London will be irresistible. The same plan includes taking 5 ft. off the top of the celebrated Harrow Hill, which naturally provokes more complaint. One journal ejaculates: "Surely the time has come to check the indiscriminate expansion of London." We don't know how our friend is going to do it, but agree with him that that is what ought to be done at once. At the same time there is no need to hurl objurgations at the trolley. It is only an instrument, and a good one. "Vandalism" was rampant long before Van Depoele and Sprague licked the trolley into practicable shape, and there will be "vandalism" long after the trolley has done its good work and ceased to be.

Seven Types of Faces

The public in different parts of the country has become familiar with the scheme to render transfers non-transferable by clipping the ticket at a point where a series of seven typical heads are supposed to give the range of possible variety in the human physiognomy. The plan has the undoubted advantage of making a quick approximation to the identity of any passenger, and we are not aware that any superior plan has been devised. For want of a better it may endure, but, of course, there are members of the community with whom it will never be wholly popular. Its talented inventor found that just as there are seven ages of man, there is only one of woman, and was gallant enough to insist that the best way to distinguish between them was to designate their headgear; that is, whether the fair owner wore a hat or a bonnet. On the other hand, the five types of masculine face imprinted on the ticket imply a greater variety in the "unpleasing" sex than would at first thought have been imagined, and to almost any man the roughest form of identification would suffice, provided he got the transfer all right. The Reading United Traction Company is one of the last to employ the picture gallery passport, and in Reading again, if we may believe the local press, it is the woman's side of the matter that arrests attention and invites to trouble. It seems that the ladies in that city have misunderstood the method of differentiating between them, and have come to the hasty conclusion that the portraits on the transfer slip are intended to represent young and elderly women respectively. The stories in the local press as to the indignation betrayed by fair recipients of slips punched at the place supposed by them to represent the "uncertain" age, strike us as rather apocryphal; but one can imagine dramatic possibilities in the situation, as well as some that are comic.

### Legible Street Signs

Quite a large percentage of the needless work thrown upon the busy street car conductor might be avoided if there were legible signs at the street corners, enabling passengers to know where they are. Even a passenger who lives all the time in New York, for example, can not readily tell the corner or junction he wants, and he has to appeal to the conductor; whereas, a neat, not too conspicuous sign, of the useful blue-and-white kind they have in Paris, would be a helpful relief to everybody, and especially to those on the swiftly moving cars which are far beyond the right block before a man can find it out. It appears that in New York City Corporation Counsel Whalen's opinion denying the city's right to compel the owners of corner lots to put street signs on their buildings may exclude from the consideration of the Municipal Assembly many of the designs thus far suggested for such signs. Among the plans suggested for making the lamp-post signs intelligible, both to pedestrians and street car passengers, are these: (1) On each panel to print the name of the street with which it is parallel in large letters, and the intersecting street in smaller type; (2) to print the parallel street's name horizontally, and the cross street vertically; (3) to print the avenue name only on the side away from the cars, and the name of the cross street on the other three faces. This matter in New York is being followed up by the Municipal Art Society, but it is matter to which, in a good many places, the street railway companies can appropriately give their assistance. Everything that enables a conductor to concentrate attention on his passengers is a distinct gain. He should be relieved as much as possible of answering questions and acting as a city directory.

### How to Abolish Hazing

If some of the youths who come up as freshmen were not so unutterably bumptious and self-opinionated, hazing would probably die out of its own inherent uselessness, but it seems to be the only way that boys know of taking the conceit out of each other. Various remedies have been tried, but while the brutality has largely gone, we fancy the thing itself exists in undiminished vigor. One possible thorough cure or substitute for hazing is suggested by the statement that during the summer vacation many students have picked up jobs as motormen, conductors and machinists with street railways. Now, instead of "sending a man to Coventry," it might not be a bad idea to give him the choice of acting as conductor on a car for three months. If that discipline did not knock all the chips off his shoulder, reduce him to meek pliability, and convince him that he did not know it all, nothing ever would have that effect. We are confident that the men who have been undergoing such an ordeal are the better for it. Assistant Superintendent Sherwood, of the Brooklyn Rapid Transit, is quoted as saying of the employees: "We'd like to keep such men at work on our cars and in our repair shops all the time. They make excellent employees. They are courteous, painstaking and efficient. All of the college boys that we have employed so far we have found to be trustworthy and scrupulously honest in their dealings with the company." We could never see that students acting as waiters learned much except human nature—which is well worth knowing—but these street railway men, if interested in mechanics and electrical engineering, are also learning something about their future professions.

### City and Country

John W. Bookwalter, the well-known Ohio agriculturist, who is very much of a globe-trotter and has recently returned from a 2000-mile bicycle ride around Europe, seems to think there is something wrong in the relations between city and country. "He is thoroughly convinced that a crisis is imminent between the urban and rural population of the world. In the rise in the price of grain he sees the beginning of a struggle of the agricultural element against the concentrations of capital in cities." Other utterances of the worthy farmer, who was once Democratic candidate

for Governor of his State, would indicate that the quotation puts his views in a rather extreme form, but for a summary it will do pretty well. In our belief, the facts do not support his theory. Thanks to electricity, the farmer, with the aid of the trolley and the telephone, is not a man apart, but actively a member of the community nearest to him; and, as we noted last week, he can enjoy all the pleasures and benefits of the town to the full without paying its taxes. The farmer, it might be urged, is thus having life made enjoyable at the cost of the "cit," besides "taking it out" of his urban relative by putting up the price of his grain, his hard peaches and his acidulated tomatoes. We fear that Mr. Bookwalter is out of touch with present conditions and actual events. Kansas is no longer populist but plutocratic. We would like to ask him what he thinks of the theory of C. N. Jackson, the English university coach, a great authority on college sports, who holds that there is sad deterioration in British brawn, and asks: "What is the reason for the decline? Here are two primary reasons—bicycles and tramcars. The athlete of to-day can not walk." Probably the reason why athletes are beating old records is that the bicycle and the trolley save them the bother of walking, and give them more time for "stunts." Besides, did not the Leander crew, after all, beat our Pennsylvania boys? And yet, Mr. Jackson might regard Mr. Bookwalter, intellectually considered, as a living example in support of his theory of degeneration, his powers of reasoning and observation having atrophied while he developed his calves.

### Railroad Statistics

Each year the steam railroad statistics of the country grow in magnitude and become more deeply impressive, and those just issued by the Interstate Commerce Commission in its thirteenth report are certainly more striking than ever. They show that the number of passengers carried during the year was 576,865,290, an increase of 53,688,722, and the passenger mileage, 16,039,007,217, an increase of 1,447,679,604. The number of tons of freight carried was 1,101,680,238, an increase of 141,916,655, and the ton mileage 141,599,157,270, an increase of 17,931,900,117. The amount of railway capital outstanding on June 30, 1900, was \$11,491,034,960, a capitalization of \$61,490 a mile of line. Of this amount \$4,522,291,888 was common stock, \$1,223,387,755 preferred stock, and \$545,455,367 in the form of a funded debt. On 54.34 per cent of the total capital stock no dividend was paid, and 5.44 per cent of mortgage bonds, 3.61 per cent of miscellaneous obligations and 43.40 per cent of income bonds paid no interest. On the capital stock upon which dividends were declared the average rate paid was 5.23 per cent. The gross earnings were \$1,487,044,814 for a system of 192,556 miles of track, and the net was \$525,616,303. The aggregate length of railway mileage, including tracks of all kinds, was 259,788 miles, of which 193,345 were single track, 12,151 second track, 1095 third track, 830 fourth track and 52,387 yard track and sidings. During the year the 1,017,653 employees of the railways received \$577,264,841 in wages or salaries, representing 60 per cent of the operating expenses of the roads and 39 per cent of their gross earnings. Compared with the fiscal year 1895 the amount paid in wages and salaries showed an increase of \$131,756,580.

These are, indeed, interesting and suggestive figures, but, knowing what one does of the rapid manner in which cross-country third rail and trolley systems have sprung up and multiplied of late years, the doubt arises whether the steam régime is likely to increase at the rate that has been maintained up to this point. As an actual matter of fact, the main lines are concentrating into groups, and the day of the "deadly parallel" seems to have gone by, each line controlling, or being protected in, its own territory. Of course, as population increases, there will be development, but it does seem fair to assume that much of what would once have been steam railroad growth will now form part of the trolley or third-rail industry, associated with and evolving from street railway networks.

### Private Cars and Coaches

Among the chief objects of curiosity to the tourist in Europe are the state coaches that are preserved here and there. Even to-day new ones are built, as, for example, that which illustrates the archaic republican simplicity of President Kruger. It is painted in royal blue, picked out with vermilion, and double fine lines of white and green, the state colors of the late South African Republic. The hammer-cloth is in sky-blue, and trimmed with laces in red, white, blue and green. Inside the carriage is lined with sky-blue satin, with silk laces and velvet pile carpets to match. On each door and on the front and rear panels are emblazoned the arms of the late republic; while a soaring eagle of liberty is painted on the side quarter panels. At the top corners of the roof solid silver soaring eagles are fixed, eagles also forming the crowning ornaments of the lamps. Each side of the hammer-cloth has a solid silver impression, the fittings are of silver, and the body of the carriage is finished off with heavy silver beading and ornaments. At the back there is a standard for footmen. Now the fact that this was bought rather than a fine private trolley car, shows the difference between the New World and the countries that are still under Old World guidance and inspiration. King Edward VII. will doubtless have a new "Juggernaut" coach for his coronation, but we should be infinitely more impressed to see him order a first-class private trolley car after any of the excellent models current in America. President McKinley would die rather than be exhibited in such Barnum wagons as those which the tourist inspects at the cost of a pourboire, but every plain American is glad to see him taking his rides abroad in the democratic trolley car, no matter how luxurious it may be.

### Trolley Excursion Cars

Pleasure traveling by trolley during the hot summer evenings is to many residents of our crowded cities the easiest and cheapest way of keeping cool, and hence has come to be regarded by many almost as a necessity. This is one of the sources of income which the advent of electricity has created in street railroading, for no one ever thought of riding on a horse car for pleasure, and nearly all of the large roads, and many of the smaller ones, too, for that matter, are now deriving a considerable income from this class of traffic. The question now shapes itself, whether by cultivation a road can not increase this pleasure traveling, and by the term, in this connection, we mean, not the use of the cars in going to and from a pleasure resort, but traveling purely for the pleasure of passing over the ground, seeing the scenery or being cooled by the breeze created by the speed of the car. Observation cars have been run in some cities on a scheduled tour, chiefly for the benefit of sight-seers from out of town, but for ordinary pleasure riding passengers have had to depend upon some one or more of the ordinary routes. Now, it seems that if regular excursion cars could be run at intervals for this purpose only, a profitable business could often be secured. The advantages of this arrangement are that a route can be selected which will be attractive, and not necessarily the same as those taken by the ordinary cars, that passengers will not have to change cars, that they will not try to return to near their starting point by means of a transfer over a parallel line, and that in virtue of giving them a round trip a double fare can be charged.

A service of somewhat this kind has recently been inaugurated in Buffalo, under the name of the "twilight trolley tours." Special cars leave the main square in the center of the city every evening between 8:15 and 8:45, and a tour of about 8 miles is made. The cars are provided with special illumination on the roof to distinguish them from the other rolling stock, and 10 cents is charged for the excursion. In Buffalo the trip is naturally to the Pan-American grounds, as that is now the center of interest, but in other cities excursions could be made in more than one direction, and varied from time to time as circumstances might require.

### Assessments Increased in Cleveland

The action of Mayor Tom L. Johnson in causing the City Board of Equalization to demand an investigation into the financial condition of some of the largest public corporations to determine why tax valuations should not be raised has caused a tremendous sensation among the street railway, electric lighting and gas companies. As a starter the Board last week investigated the affairs of the Cleveland City Railway Company, and, as a result, increased the valuation of the company's property from \$600,000, the figure returned by the company, to over \$6,000,000. Mayor Johnson was placed on the stand as an expert witness before the Board of Equalization and gave information regarding the cost and valuation of street railway property in general, and that of the Cleveland City Railway Company in particular. According to the Mayor, the average value of the tracks of the company is \$20,000 per mile, exclusive of overhead construction which is worth perhaps \$2,200, while the company returned these at \$3,000 per mile and \$1,000 per mile. The Board considered the figures on the subject presented by the Chamber of Commerce Committee, those of Prof. John Langley, an expert, engaged by the City Council, and those of Mr. Bemis, an expert who is retained by Mayor Johnson; also statistics found in Poor's *Railroad Manual* and other financial papers. J. B. Hanna, Supt. Mulhern and Attorney Squire, who represented the company, were placed on the stand, but the Board gained little or no tangible information from them. The Board decided by a vote of 4 to 3 that the return made by the company was not a true one and made the heavy increase above mentioned.

It is believed the company will fight the increase on that the line that the law giving the Mayor power to appoint the equalizers was special legislation and therefore unconstitutional.

Later the equalizers took up the consideration of the properties of the Cleveland Electric Railway Company, and although no decision has been arrived at, it is pretty certain that its valuation will be increased in proportion to that of the other company. For some reason or other, most of the leading officials of the company were all out of the city when the examination took place, and the company was represented only by General Manager McCormack, several auditors and attorneys. Mr. McCormack gave out considerable interesting information, his tactics being practically the reverse of those of the representatives of the other company.

The total returns of the company was \$1,265,150, personal property being placed at \$868,000 and real estate at \$397,150. One hundred and one miles of single track were returned at \$3,000 per mile, and \$1,500 for overhead construction. First-class motors were put in at \$900 each, second-class at \$700 each and third-class at \$250 each.

Mr. McCormack stated that the company did not pay more than \$725 for the equipment of any of the first-class cars last year. He thought \$2,000 was a fair average price paid for first-class cars. He stated that the company employed about 15,000 electrical horse power and the average cost of installation about \$85, on which basis Prof. Bemis announced that valuation of the plants would reach \$1,275,000. Mr. McCormack stated that car houses cost the company from \$250 to \$400 per car; the new Cedar car house, which holds 100 cars, costing \$40,000. The cost of constructing a mile of single track without paving Mr. McCormack figured at from \$6,000 to \$8,000 per mile, the price of dressed block paving being about \$13,000 per mile. The cost of overhead construction varied from \$2,200 to \$2,700 per mile. The total amount of the company's bonds is \$4,350,000, bearing 5 and 6 per cent interest. The capital stock is \$13,000,000, the bonds are at par and the stock is selling at 80 and 81. The operating expenses last year were \$1,121,000. In his opinion the earning capacity of the road is on an increase, running from 7 to 9 per cent. The dividend paid last year was 4 per cent, and this will not be increased this year, the increase being paid out in additional wages to employees.

W. G. McDole, auditor of the company, testified that the floating indebtedness was \$331,764.02. He admitted that the property of the company could not be reproduced for twice the amount named in the return.

Engineer Carver testified as to the condition of the tracks and equipment, and from the figures presented by the various officials Prof. Bemis stated that he figured the value of the property at \$16,000,000. Capitalizing the net earnings as reported by the company, on a 5 per cent basis, he estimated the value of the stock to be worth over \$18,000,000. The per cent of yearly increase in net earnings has been about 10 per cent.

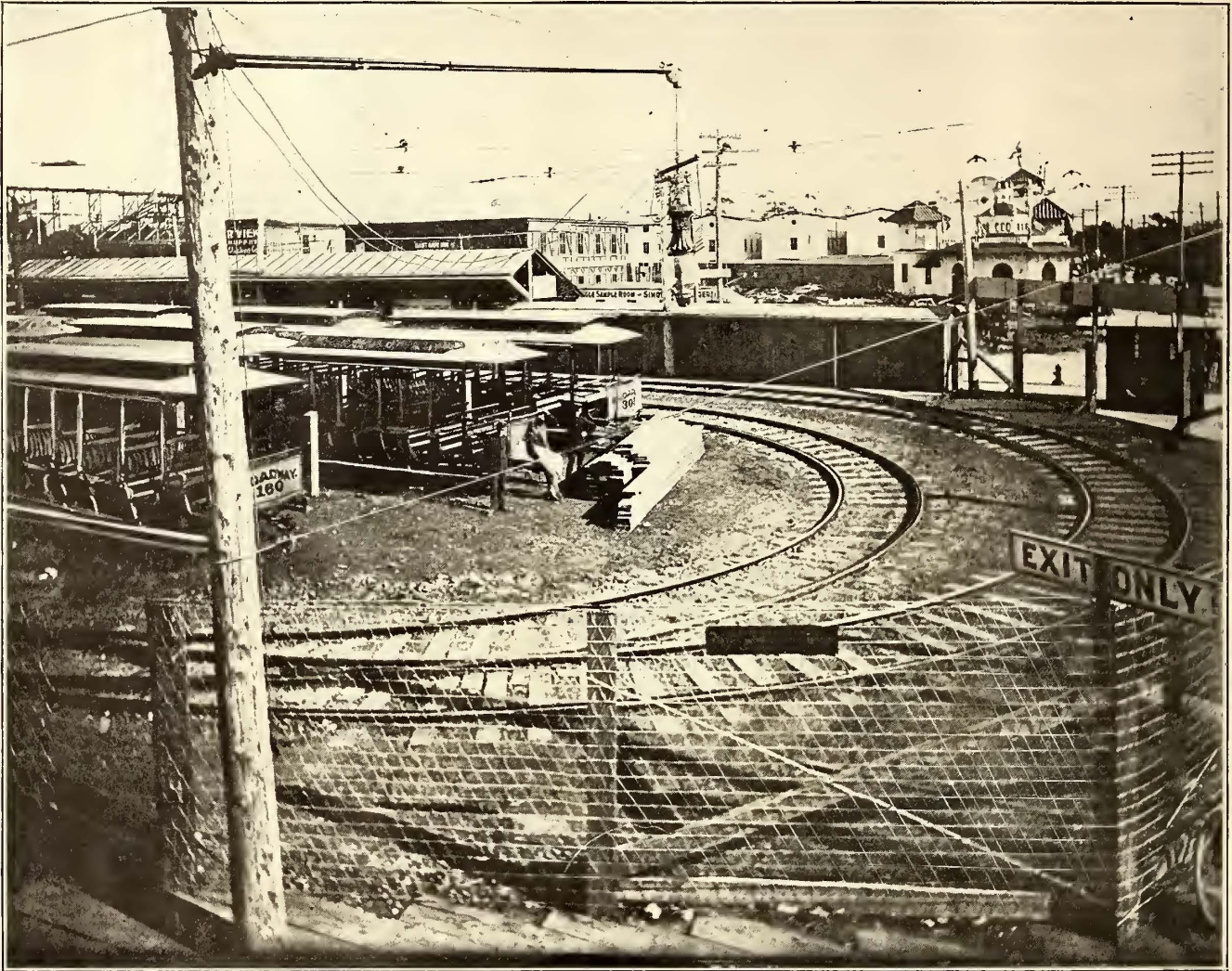
It is thought that the increase of valuation for the property of the Cleveland Electric Railway Company, as recommended by the Board, will be at least \$9,000,000. As this paper goes to press, however, the announcement is made that the company has secured an injunction preventing the Board from making any increase in the assessment.

### Pan-American Notes

The records of the admissions to the Pan-American Exposition at Buffalo show that the increase in visitors is fully equal to the expectations of the managers for this time of the summer, al-

tracks are provided within the loop, so that there is never any difficulty in providing the cars for transporting the crowd.

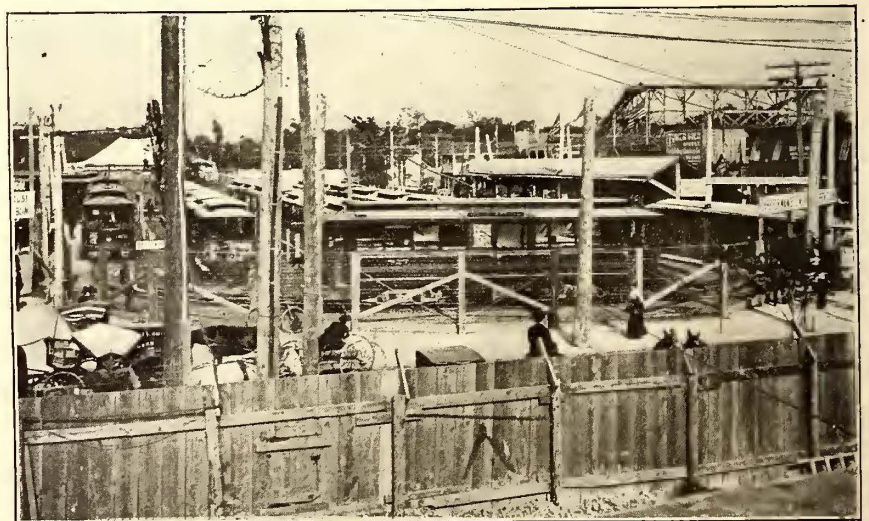
The other engravings give a further idea of how the manufacturers, in whom street railway men are interested, are represented at the Pan-American Exposition. Nearly all the principal



VIEW OF THE EAST AMHERST TERMINAL FROM EXIT GATE

though the maximum attendance will not be reached certainly until September, or possibly the first of October. Outside of the expressions of interest in the exhibits at the grounds, the verdict of all on the transportation facilities to and from the Exposition is that they could not have been improved. Both the International Traction Company and the New York Central & Hudson River Railroad Company are carrying excursionists to the Pan-American grounds in the minimum of time and with a minimum of discomfort, and to one interested in the handling of excursionists at rush times, this feature at Buffalo has in it as much of interest as any exhibit shown there. Full particulars and views of the terminal of the International Traction Company at the West Amherst Gate are published in the STREET RAILWAY JOURNAL for June 1, and the Belt Line Station of the New York Central & Hudson River Railroad Company was fully described in the STREET RAILWAY JOURNAL for July 6. Plans have also been shown of the East Amherst terminal of the International Traction Company, but views of it have not been previously published, so are presented herewith. The general arrangement of the terminal is similar to that at the West Amherst terminal, in that the cars enter and depart on loops, discharging their passengers at gates intended for exit only, and receiving their passengers at entirely separate gates. The outgoing passengers purchase their tickets before boarding the cars, so that the attention of the conductor is required only in looking out for the safety of his passengers until he has time to collect the tickets. Storage

booths have now been described and readers of the JOURNAL have become familiar with what they will see at Buffalo this summer



VIEW OF EAST AMHERST TERMINAL FROM WITHIN THE GROUNDS

if they have not already paid it a visit. It is hoped that sufficient merit has been shown by the descriptions of the exhibits appearing in these pages to attract many railway men to the fair, and in order to make the trip more profitable and pleasurable this paper

has included in its Pan-American booth a register in which all are requested to place their names and Buffalo addresses. The exhibit of the Street Railway Publishing Company is situated near the northeastern corner of Electricity Building, where its friends can find a comfortable resting place, keep appointments or obtain information. A warm welcome is assured to all.

THE SAFETY INSULATED WIRE & CABLE COMPANY'S exhibit has, as its distinguishing feature, the big piece of native rubber which never fails to attract notice and is a suggestive advertisement of the company's product. This is claimed to be the largest piece of native rubber ever produced. It is 4 ft. 9 ins. high, and 9 ft. 4 ins. in circumference. Its weight is 1120 lbs. The

THE CUTLER-HAMMER MANUFACTURING COMPANY, of Milwaukee, in addition to its exhibit of modern apparatus, has a lot of historical apparatus showing the improve-



EXHIBIT OF THE NATIONAL CARBON CO.

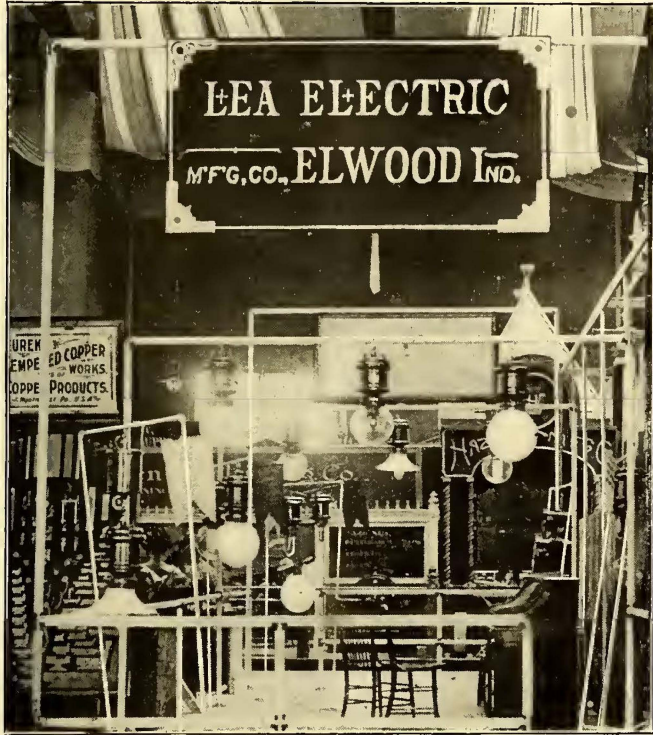


EXHIBIT OF THE LEA ELECTRIC MANUFACTURING CO.

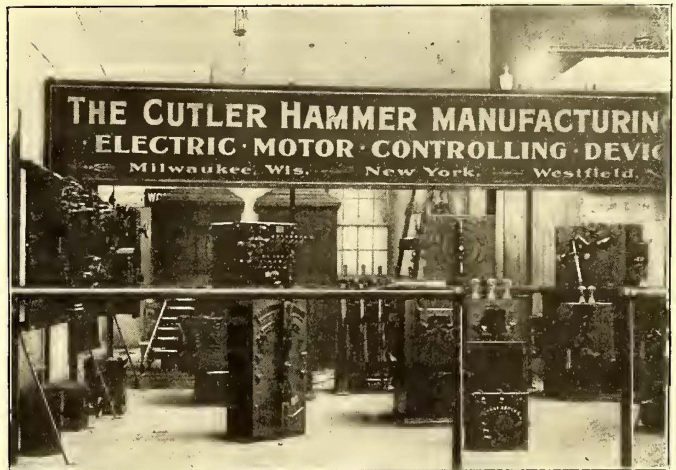


EXHIBIT OF THE CUTLER HAMMER CO.

products of the company are exhibited in cases and classified as "Army," "Navy," "Power" and "Intelligence." The street railway cables are, of course, found in the "Power" case. This company enjoys the distinction of having furnished all the rubber-covered wire, and also all the underground lead-covered cable for the Pan-American Exposition Company, and a case showing samples of

ments in rheostat manufacture for ten years back, beginning with the old wooden starting box made by the Thomson-Houston Electric Company, taking next the first automatic magnet-release rheostat and then showing all the important types of rheostats ever manufactured for stationary motor starting. The modern apparatus includes a number of time-limit starting rheostats.



EXHIBITS OF THE SAFETY INSULATED WIRE AND CABLE CO. AND OF THE BULLOCK-WAGNER CO.



all the kinds and sizes of wire furnished to the Exposition is very appropriately placed in the exhibit. In a case in one corner of the space is shown what a 25,562,500-circ. mil cable would look like. Orlando Monroe, assistant general manager, receives visitors at this company's space.

THE STANDARD PAINT COMPANY, New York and Chicago, has one of the seven or eight individual exhibition buildings at the fair. The well-known P. & B. products, which this company manufactures, the convenient location of the pavilion near one of the gates of the Exposition, and the unique character not alone

of the exhibit itself, but of the handsome building in which it is placed, is attracting many visitors, curious to see it. The pavilion is certainly an interesting affair, being constructed entirely inside and outside, walls, ceilings and floors of the Ruberoid roofing made by the Standard Paint Company. It is well lighted, and the Ruberoid, of which it is built, is handsomely painted both inside and outside with oil colors. The exterior color scheme is white and gold with the dome-shaped roof in blue.

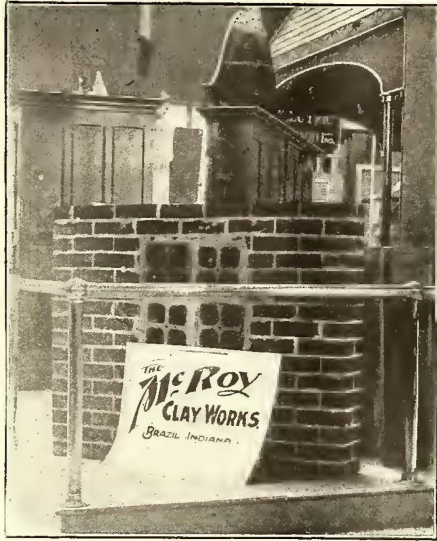


EXHIBIT OF McROY CONDUITS

displayed, but because of the massive carbon pillars and railings, of which it is made. The material for these pillars is the regular product of the company, the pillars being actual electrodes such as are used in heavy furnace work. Carbon brushes of all kinds and for all service, including the well-known Partridge self-lubricating motor brushes, are found in the company's exhibit. The representative in charge of the booth is Will M. Hoen.

THE BULLOCK ELECTRIC MANUFACTURING COMPANY and THE WAGNER ELECTRIC MANUFACTURING COMPANY have a joint exhibit which attracts considerable at-



EXHIBIT OF THE ROEBLING COMPANY

tention. The consolidation of the sales offices of these two companies has placed them in a very satisfactory commercial position and nearly every one interested in electricity finds something in the booth to attract them. The Wagner standard oil-filled transformers are shown in capacities ranging from 25 kws down, and the Wagner alternating-current generators and motors with the Bullock machines of the direct-current type are exhibited in various sizes. The joint exhibit is in charge of J. Belknap, of the Buffalo office.

JOHN A. ROEBLING'S SONS CO., of Trenton, N. J., has a most artistically arranged booth, the prominent feature of which is a 24-ft. model of the Brooklyn Bridge. This is the same model which attracted so much attention at the Paris Exhibition last year.

At the back of the exhibit is a model of one of the stone towers of the bridge which has a painted background showing the remainder of the bridge in New York City in perspective, and making an exceedingly striking setting for the space. The furniture of the booth is constructed from some of the company's cable reels, and although they are odd in appearance, make comfortable resting places for the company's friends who stop at the booth.

THE MORRIS ELECTRIC COMPANY, of New York, has a most interesting exhibit of a large line of well known specialties which it manufactures and carries. The booth is arranged to facilitate the Exposition of the various articles presented for examination, and enables a visitor in a short time to become thoroughly acquainted with many of the best lines of railway material. Almost every style of overhead line material is contained in the exhibit, much of it being from the Albert & J. M. Anderson Manufacturing Company, of Boston. The rail-bonds made by the Morris Electric Company, its splices and terminals, hydraulic splicing press and rail punch, as well as many of the other supplies and devices which have been described in these pages from time to time, are exhibited. The list of apparatus, etc., for which the Morris Electric Company is agent, and which is represented in the company's booth, includes Keystone feeders, Garton lightning arresters, multiplex headlights, Wood platform gates, Day's Kerite, wheel-truing brake-shoes, Elden circuit breaker, and the well-known Monarc arc lamps.

THE LEA ELECTRIC MANUFACTURING COMPANY has an exhibit devoted largely to arc lamps for lighting circuits of 110 and 220 volts, but two features are of especial interest to the electric railway manager. One of these is the enclosed arc lamp made to burn alone on 500-volt circuits; the other is the Northhall electric arc headlight. This headlight has been notably improved since its exhibition last fall at the street railway convention. It has a new attachment whereby the length of the arc can be varied by hand from the outside. When full length the arc takes 250 volts, and with the lowering device it can be reduced to a very short arc. The lamp takes 1½ amps. of current. It can either be burned singly across the 500-volt circuit or in series with incandescent lamps on the car. R. B. Hurst has charge of the exhibit.

THE MINIATURE RAILWAY COMPANY, of New York, is represented by several lines of miniature track and equipment in different parts of the Exposition grounds. This popular form of park amusement attracts its customary crowds, and the model engines are kept busy all day carrying train loads of merry-makers.

### The Exhibits at the Convention

The exhibit committee of the American Street Railway Association has completed the assignment of space at Madison Square Garden for the convention next October, and the plan shown on the opposite page shows the arrangement of exhibits decided upon. As will be seen, the space available is fully occupied, not only will the arena itself be devoted entirely to exhibits, but the large room near the Madison Avenue entrance, which is usually used for restaurant purposes, has also been given up to exhibits. This shows that the street railway manufacturers are fully alive to the importance of showing their latest productions at conventions of the American Street Railway Association, and are in hearty accord with the purposes of that body. The task of arranging an exhibit of this kind is enormous, and the exhibit committee must be congratulated on the success with which it has been accomplished. It has been the aim of the committee throughout to classify the exhibits as far as possible, and this purpose has been followed with most successful results.

The headquarters of the STREET RAILWAY JOURNAL are in the main arena just to the right of the main entrance, and where they can easily be found. All visitors will be welcomed here, and information in regard to the excursions or other features of the convention will gladly be given on inquiry.

The Consolidated Traction Company, of Pittsburgh, recently issued notices announcing the adoption of a new plan for increased pay, according to the length of service of the employees. Every man who has been in its employ for more than three years, without intermission, shall receive 1 cent additional per hour on his regular pay; and when an employee shall have completed his fifth year in the service of the company this shall be increased to 2 cents per hour. The rule went into effect July 1.

The advance will mean increased pay to the extent of from 10 cents to 30 cents per day to long-time motormen and conductors, who have been receiving from \$2 to \$2.40 per day. The announcement is purely voluntary on the part of the company, and came as a surprise to the men.

AMERICAN STREET RAILWAY ASSOCIATION  
 CONVENTION AND EXHIBITION  
 OCTOBER, 9, 10, 11, 1901.  
 MADISON SQUARE GARDEN  
 NEW YORK

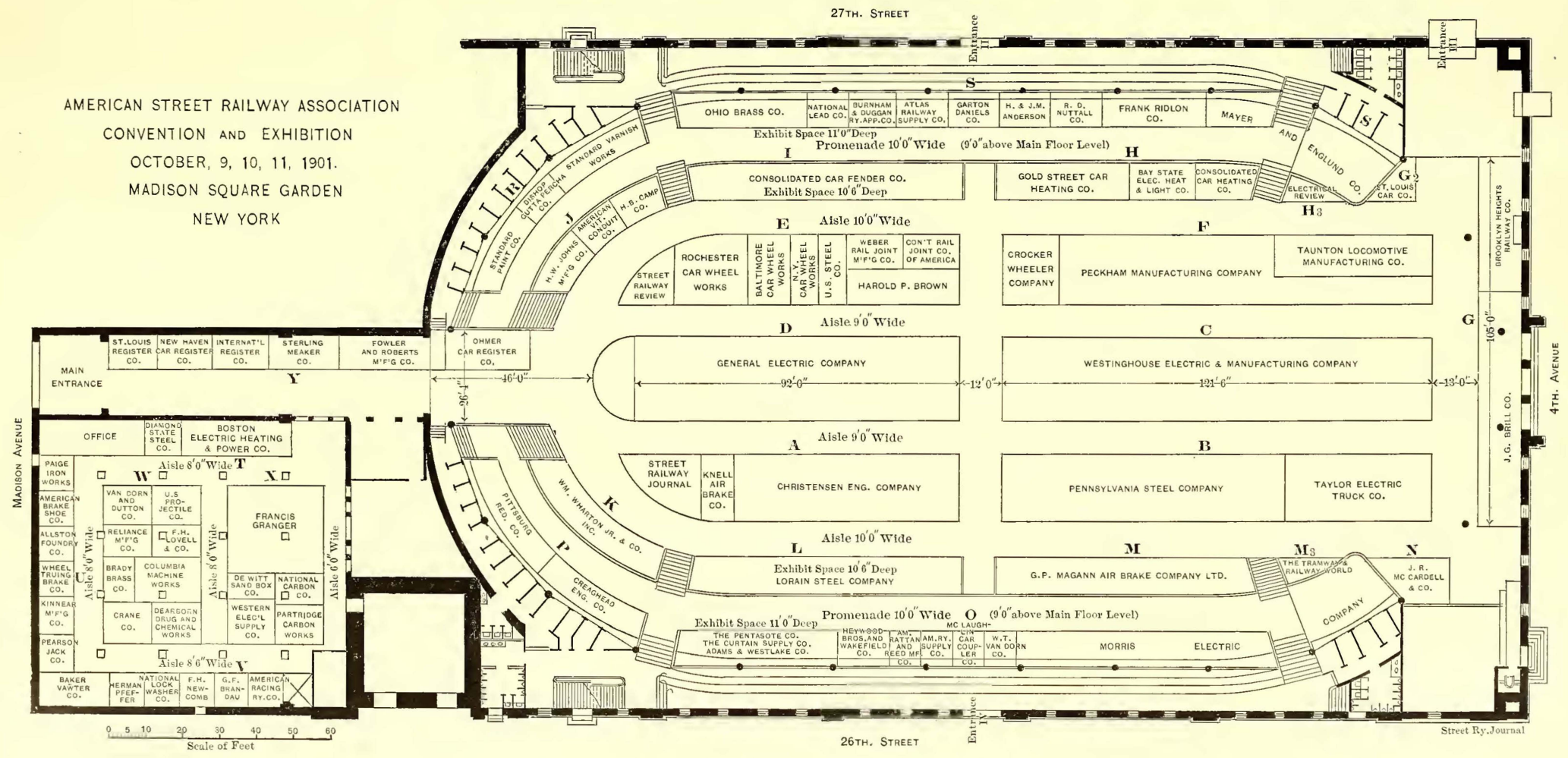


DIAGRAM OF EXHIBIT HALL, SHOWING LOCATION OF EXHIBITS

## Street Railway Legislation in Massachusetts

The following is a compilation made for the STREET RAILWAY JOURNAL of the acts passed by the Massachusetts Legislature during the 1901 session, affecting street railways:

### INCORPORATION OF COMPANIES

Cottage City & Edgartown Traction Company.  
Stony Brook Valley Street Railway Company to operate cars in Ayer, Groton, Westford and Chelmsford.  
Winchendon Street Railway Company, Winchendon.  
Oakham Street Railway Company, Oakham.  
Rutland Street Railway Company, Rutland.  
Milford & Uxbridge Street Railway Company to operate cars in the towns of Hopedale, Mendon and Uxbridge.  
Haverhill & Plaistow Street Railway Company.  
Mount Wachusett Street Railway Company for the right to build a line to the summit of the mountain.

### COMMON CARRIERS

Rutland Street Railway Company, the right to carry passengers, baggage, farm produce and small parcels of merchandise.  
Hampshire & Worcester Street Railway Company, the right to carry parcels, freight and baggage in Ware, and between Ware and Gilbertville, in the town of Hardwick; also to carry mail on its tracks; also to carry coal and fuel and merchandise for use in construction.  
Haverhill & Andover Street Railway Company, the right to carry baggage and small parcels.  
Lawrence & Reading Street Railway Company, the right to carry baggage and small parcels of merchandise.  
Worcester & Southbridge Street Railway Company, the right to carry fuel and supplies for its own use, and carry baggage, merchandise in small quantities, and farm produce, in Southbridge, Charlton and Oxford.  
Georgetown, Rowley & Ipswich Street Railway Company, the right to carry baggage and small parcels of merchandise.  
Worcester & Blackstone Valley Street Railway Company, the right to carry baggage and small parcels of goods, merchandise, and farm produce in Worcester, Millbury, Sutton, Grafton and Northbridge.  
Amesbury & Hampton Street Railway Company, the right to carry baggage and small parcels of merchandise.  
Milford & Uxbridge Street Railway Company, the right to carry passengers and their baggage, small parcels of goods and merchandise and mails.  
Haverhill & Plaistow Street Railway Company, the right to carry passengers and their baggage, small parcels of goods and merchandise and the United States mail.  
The Middleboro, Wareham & Buzzard's Bay Street Railway Company, to act as common carrier of baggage, small parcels and merchandise.  
New Bedford & Onset Street Railway Company, the right to carry mail, baggage and small parcels of merchandise.  
Lowell & Boston Street Railway Company, the right to act as carrier of mail, common carrier of baggage, merchandise, farm produce, in Woburn and Burlington.  
Natick & Cochituate Street Railway Company, the right to carry goods and merchandise in Wayland.  
The right to any street railway to act as common carrier of newspapers in any city or town in which it is authorized to operate its railway.  
Stony Brook Valley Street Railway Company, the right to carry mail, and act as common carrier of baggage and small parcels of merchandise.  
Northampton & Amherst Street Railway Company, the right to act as common carrier of baggage, merchandise and mail.  
Haverhill & Amesbury Street Railway Company, the right to act as common carrier of coal, market produce, provisions, ice, baggage and building materials, in Newburyport and Salisbury.  
Haverhill & Southern New Hampshire Street Railway Company, the right to act as common carrier of baggage and small parcels of merchandise.  
Citizens Electric Street Railway Company, the right to act as common carrier of coal, market produce, provisions, ice, baggage and building materials in Newburyport and Newbury.  
Winchendon Street Railway Company, the right to act as carrier of baggage and small parcels of goods and merchandise and mails over its tracks, also to carry freight in that part of Winchendon westerly of the N. D. White & Sons mills, Winchendon Springs, and easterly of the line of Millers River, near the E. M. Young place on the South Royalston road.  
Norwood, Canton & Sharon Street Railway Company, the right to carry baggage of passengers, small parcels of goods and mer-

chandise, mails, on any of its tracks, also to carry coal and fuel, materials and merchandise, necessary for its use in the construction, maintenance and operation of its railway.

Oakham Street Railway Company, the right to carry passengers and their baggage, farm produce and small parcels of goods and merchandise, mails, on any of its tracks.

### EXTENSION OF LINES

Brockton Street Railway Company, the right to extend its line into the towns of Swansea, Freetown and Berkeley.  
Pittsfield Electric Street Railway Company, the right to extend its lines in and through the towns of Lanesborough and Cheshire.  
Southbridge & Sturbridge Street Railway Company, the right to extend its railway to the towns of Brookfield, Brimfield and Wales.  
Natick & Cochituate Street Railway Company, the right to connect its tracks with the tracks of the Boston & Maine, in Wayland.  
Northampton & Amherst Street Railway Company, the right to extend its line in the towns of Hatfield, Whately and Deerfield.  
Plymouth County Railroad Company, the right to extend its road into the town of Duxbury to a point near the Gurnet, as a terminus. After a year, can construct its line beginning at the Marshfield line and extending to the Hummock in Duxbury.

### EXTENSION OF TIME

Boston Elevated Street Railway Company, extension of six months to complete elevated lines.  
Orange & Erving Street Railway Company, extension of two years in which to build line.  
Easton Street Railway Company, extension of eighteen months in which to build line.

### RIGHT TO SELL, LEASE OR PURCHASE PROPERTY AND FRANCHISES

New Bedford & Onset Street Railway Company, the right to purchase properties, franchises and locations of the East Wareham, Onset Bay & Point Independence Street Railway Company. (This has been accomplished.)

Brockton Street Railway Company, the right to lease street railways which intersect or connect with tracks which it is authorized to build.

Webster & Dudley Street Railway Company, the right to lease and operate railways that shall intersect or connect with the Webster & Dudley Street Railway.

Haverhill & Southern New Hampshire Street Railway Company, the right to lease its railway and property to the Hudson, Pelham & Salem Electric Railway Company.

Lawrence & Methuen Street Railway Company may lease its property to the Hudson, Pelham & Salem Street Railway Company.

Providence & Fall River Street Railway Company, the right to purchase or lease real estate as may be necessary and convenient for the operation of its railway.

### MISCELLANEOUS

An act granting the following street railway companies the right to use jointly for attaching and maintaining its overhead-wire system, any poles located in a street or highway of the city or town, subject to the approval of the owners and the Board of Aldermen or Selectmen, and subject to the same liabilities in relation to such poles as pertain to poles erected and maintained by the company for its own use as a part of its railway:

The Lynn & Boston Railroad Company.  
The Citizen's Electric Street Railway Company.  
The Haverhill & Amesbury Street Railway Company.  
The Lawrence & Methuen Street Railway Company.  
The Haverhill & Southern New Hampshire Street Railway Company.  
The Haverhill & Andover Street Railway Company.  
The Georgetown, Rowley & Ipswich Street Railway Company.  
The following companies have been given the right to generate, manufacture, use and transmit electricity in any city or town in which they are entitled to operate cars, and to erect and maintain poles, trolley, feed and stay-wires, and other devices for all the purposes necessary to the construction, maintenance and operation of its electric street railway. Also to buy or sell power from other street railway companies for the operation of its cars:  
The Lynn & Boston Railroad Company.  
The New Bedford & Onset Street Railway Company.  
The Linwood Street Railway Company.  
The Haverhill & Amesbury Street Railway Company.  
The Lawrence & Methuen Street Railway Company.  
The Haverhill & Southern New Hampshire Street Railway Company.  
The Georgetown, Rowley & Ipswich Street Railway Company.  
The Haverhill & Andover Street Railway Company.  
The Linwood Street Railway Company may operate its cars upon any tracks equipped for operation by electricity which are now constructed in the town of Northbridge between Whitins station



and the Providence & Worcester Railroad and the bridge of Whitinsville.

To authorize the New Bedford & Onset Street Railway Company to use in the operation of its road any approved system of motive power except steam, and may make such underground and surface alterations as may be deemed necessary or convenient to establish and maintain such motive power. The company may also generate, manufacture and use electricity, and may sell to, or purchase from, any other railway companies electricity for the operation of its road. The company may also build a bridge over the Weewantit River and Wareham River.

To authorize the Middleboro, Wareham & Buzzard's Bay Street Railway Company to build bridges and connect and operate its railway over Nemasket River\* in the town of Middleboro, over Tremont mill pond, over Agawan River and over Swift's River at Point Independence in the town of Wareham, and over Buttermilk Bay, between the towns of Wareham and Bourne.

The Middleboro, Wareham & Buzzard's Bay Street Railway Company may use in the operation of its railway any approved system or motive power except steam, and may make such underground and surface alterations of the streets and highways, and may erect and maintain such poles and wires on private land as may be deemed necessary to establish and maintain its motive power.

No railroad or street railway or extension of railroad or street railway shall be opened for public use until the Board of Railroad Commissioners has found it to be in a safe condition for operation.

The Linwood Street Railway Company may, for the operation of its railway by the overhead electric trolley system, generate and use electricity, or purchase electricity of any person or corporation.

The act requiring certain returns regarding steam boilers to be made by assessors to the tax commission is repealed.

The East Taunton Street Railway Company may become a party to the consolidated petitions of the Mayor and Aldermen of the city of Taunton for the abolition of certain grade crossings in Taunton, so far as such petitions relate to the abolition of the grade crossings of Richmond Street and Middleboro Avenue at Chace's crossings; and the Taunton Street Railway Company may construct and maintain its railway across the track of the Old Colony Railroad at Chace's crossing, the company to pay its proportionate share of the expense.

Report of Sec. 23, of Chap. 578, of the Acts of the year 1896: Hereafter all proceedings relating to regulation of fare upon street railways shall be had under the provisions of Chap. 112 of the Public Statutes.

To authorize the city of Springfield to designate some officer or officers to have exclusive authority to remove from the streets all wires, cables or conductors, poles and structures and to place the same in underground conduits. This act applies to a district within a radius of 2 miles from the city proper.

A city or town may regulate the speed of vehicles other than those drawn by horses or persons upon any of its streets or roads.

To authorize the town of Lincoln to lay out special town ways for the use of street railway companies, and to grant locations in such ways to street railway companies, and may require any company to which a location is granted to pay for the same such amounts and in such manner as the Railroad Commissions shall approve. Any street railway company having authority to operate a street railway in the town of Lincoln and having obtained a location may construct and maintain and operate its road over such special ways.

An act to require the Haverhill & Amesbury Street Railway Company to pay to the Treasury of Essex County its proportionate (10 per cent) share of the expense of rebuilding a bridge over the Merrimac River between the city of Newburyport and the town of Salisbury, and to agree to keep that part of the roadway upon the bridge between the track of the company and 18 ins. outside in repair and safe for public travel.

An act to appropriate the sum of \$25,000 from the treasury of the Commonwealth to the Wachusett Mountain reservation to be spent for the purpose of acquiring lands adjoining the present Wachusett Mountain State reservation as may be deemed necessary for the purpose of putting in safe and suitable condition the mountain roadway on the reservation. The Wachusett State Reservation Commissioners shall have authority to grant locations to street railway companies within the roads, parks and reservations under its control.

Any street railway company organized in the State of Massachusetts having obtained the approval of the Aldermen of the city in which private land is situated to the construction of its railway, may for the purpose of avoiding grades and curves in a public street, may petition the Board for the right to construct and maintain parts of its railway and extensions upon such private land outside the limits of such public way.

The name of the Brockton Street Railway shall be the Old Colony Street Railway, as authorized by the Commissioner of Corporations.

That the Board of Railroad Commissioners may summon witnesses in behalf of the State, administer oath and take testimony. The fee for such witnesses for attendance and travel shall be the same as for witnesses before the Superior Court.

Sec. 37 of Chap. 113 of the Public Statutes has been amended, so as to provide penalties of not more than \$500 or not more than three months' imprisonment for wilfully obstructing the tracks or delaying the passing of street railway cars.

That the Boston & Worcester Street Railway Company may purchase or lease real estate for the operation of its road in connection with locations that have been granted.

### Action Taken by the Massachusetts Board of Railroad Commissioners During 1901 Relative to Street Railways

#### CERTIFICATE OF COMPLIANCE WITH THE LAW PRELIMINARY TO INCORPORATION

- Jan. 4, Worcester & Southbridge Street Railway Company.
- Jan. 23, New Bedford & Onset Street Railway Company.
- Jan. 24, Lowell & Boston Street Railway Company.
- Feb. 1, Hampshire & Worcester Street Railway Company.
- Feb. 25, Providence & Fall River Street Railway Company.
- March 15, Reading, Wakefield & Lynnfield Street Railway Company.
- March 26, Concord, Maynard & Hudson Street Railway Company.
- April 26, Middleboro, Wareham & Buzzard's Bay Street Railway Company.
- May 18, Essex County Street Railway Company.
- June 5, Concord & Boston Street Railway Company.
- July 12, Worcester, Rochdale & Charlton Depot Street Railway Company.

#### ISSUE OF BONDS

- Jan. 18, Newton & Boston Street Railway Company, \$75,000.
- Jan. 25, Fitchburg & Leominster Street Railway Company, \$150,000.
- Feb. 4, Bristol County Street Railway Company, \$120,000.
- Feb. 5, Natick & Needham Street Railway Company, \$50,000.
- March 22, Lawrence & Reading Street Railway Company, \$107,000.
- May 2, Palmer & Monson Street Railway Company, petition dismissed.
- June 4, Concord & Boston Street Railway Company, mortgage bonds, \$100,000.
- July 9, Lexington & Boston Street Railway Company, \$100,000, twenty years at 4½ per cent.
- July 8, Marlboro & Westboro Street Railway Company, \$160,000, twenty years at 5 per cent.

#### ISSUE OF CAPITAL STOCK

- Jan. 2, Milford, Attleboro & Woonsocket Street Railway, \$50,000.\*
- Jan. 14, Brockton Street Railway Company, on account of purchase of Globe Street Railway Company, \$440,000.\*
- Jan. 24, Westboro & Worcester Street Railway Company, \$60,000.
- Jan. 24, Marlboro & Westboro Street Railway Company, \$100,000.
- Feb. 5, Beverly & Danvers Street Railway Company, \$24,000.\*
- Feb. 20, Worcester Consolidated Street Railway Company, on account of consolidation of Worcester & Marlboro, Leominster & Clinton and the Worcester & Suburban Street Railway, \$1,429,400.\*
- March 28, Lynn & Boston, on account of purchase of Beverly & Danvers, \$36,000.\*
- April 1, Northampton & Amherst Street Railway Company, \$100,000.\*
- April 15, Marlboro & Westboro Street Railway Company, on account of purchase of Westboro & Worcester, \$60,000.\*
- May 2, Lynn & Boston, on account of purchase of Lowell, Lawrence & Haverhill Street Railway, \$2,700,000, and the North Woburn Street Railway, \$100,000.\*
- June 18, Worcester Consolidated Street Railway Company, 14,206 shares at 116, \$1,647,896.\*
- June 20, Woburn & Boston Street Railway Company, \$75,000.
- June 24, Amesbury & Hampton Street Railway, \$50,000.\*
- June 27, Lexington & Boston Street Railway, \$100,000.\*

\* Increase.

## JOINT USE OF TRACKS

Jan. 22, Lexington & Boston and the Concord & Clinton Street Railway in Concord.

Feb. 6, Georgetown, Rowley & Ipswich Street Railway and the Citizen's Electric Street Railway in Newburyport.

Feb. 20, Milford, Attleboro & Woonsocket Street Railway and the Milford, Holliston & Framingham Street Railway in Milford.

May 6, Citizen's Electric Street Railway and the Haverhill & Amesbury Street Railway in Newburyport and Amesbury.

June 19, Old Colony Street Railway and the Blue Hill Street Railway in Stoughton.

June 25, Milford, Holliston & Framingham Street Railway and the South Middlesex Street Railway Company.

July 8, Worcester Consolidated and the Worcester & Blackstone Valley Street Railway in Millbury.

## CONSOLIDATIONS

Jan. 14, Purchase of the Globe Street Railway by the Brockton Street Railway.

Feb. 20, Purchase of the Worcester & Marlboro, the Leominster & Clinton and the Worcester & Suburban Street Railway Company by the Worcester Consolidated Street Railway.

March 28, Purchase of the Beverly & Danvers Street Railway by the Lynn & Boston Railroad.

April 15, Purchase of the Westboro & Worcester by the Marlboro & Westboro Street Railway.

May 2, Purchase of the Lowell, Lawrence & Haverhill Street Railway and the North Woburn Street Railway by the Lynn & Boston Railroad.

May 22, Purchase of the East Wareham, Onset Bay & Point Independence Street Railway by the New Bedford & Onset Bay Street Railway Company.

June 25, Purchase of the Natick & Needham Street Railway by the South Middlesex Street Railway.

## APPROVALS OF LOCATION

Jan. 3, Protests against locations granted the Revere & Winthrop Street Railway in Winthrop.

March 4, Protests filed against locations on Main, Beaver, Quince and Linden Streets, Waltham, to the Waltham Street Railway Company.

March 8, Approval of location on Main Street, Andover, to the Lawrence & Reading Street Railway.

April 4, Leave to withdraw petition for location in Hopedale for the Worcester & Milford Street Railway.

## APPROVALS OF PLANS

Jan 16, Modified plans of third rail, etc., of the Boston Elevated Railway Company.

March 12, Approval of third rail and fence in subway (Boston Elevated Railway Company).

May 31, Modified plans of electric station in Thompson Square, Charlestown (Boston Elevated Railway Company).

## GRADE CROSSINGS

Jan. 14, Phillipston Street Railway Company over the tracks of the Boston & Albany at Templeton.

March 30, Petition dismissed for grade crossing of the Lexington & Boston Street Railway Company at Woburn Street, Lexington.

June 25, Milford & Uxbridge Street Railway over the tracks of the Grafton & Upton Railroad in Hopedale.

April 26, East Taunton Street Railway over the tracks of the New York, New Haven & Hartford Railroad at Middleboro Avenue, Taunton, until Dec. 1, 1901.

May 2, Reading, Wakefield & Lynnfield Street Railway, crossing tracks of the Boston & Maine Railroad, in Wakefield, until Jan. 1, 1904.

May 24, New Bedford & Onset Bay Street Railway over tracks of the New York, New Haven & Hartford Railroad in Mattapoisett. (Dismissed.)

May 24, Lynn & Boston Railroad Company over the tracks of the Boston & Maine Railroad in Wilmington, until June 1, 1904.

## EXTENSIONS

March 4, Extension of the Hoosac Valley Street Railway into Cheshire and Clarksburg.

June 20, Extension of Middleton & Danvers Street Railway into Peabody, Andover and North Reading.

## CERTIFICATE FOR OPERATION

June 7, Boston Elevated Street Railway Company.

June 18, Woburn & Boston Street Railway.

June 28, Middleton & Danvers Street Railway. (Hawthorne to Howe Station.)

July 3, Templeton Street Railway Company. (Baldwinsville extension.)

July 8, Middleton & Danvers Street Railway.

July 9, Lowell & Boston Street Railway.

## MISCELLANEOUS

Jan. 12, Report to Legislature of the Massachusetts Electric Company.

June 18, Petition of Selectmen of Stoughton for reduction of fare on Old Colony Street Railway Company.

June 20, Concord, Maynard & Hudson Street Railway Company, taking land to avoid grade crossing.

June 26, Petition of Selectmen of Rockland for reduction of fares on Old Colony Street Railway. (Dismissed.)

June 28, The right to the Marlboro & Westboro Street Railway to acquire and maintain a pleasure resort near Lake Chauncey in Westboro.

July 10, Petition by the Selectmen of Andover for recommendation for relocation of tracks of Lowell, Lawrence & Haverhill Street Railway near the Boston & Maine station.

### Report of the Interstate Commerce Commission

The report of the Interstate Commerce Commission for the year ending June 30, 1900, has just been published.

The number of railways in the hands of receivers on June 30, 1900, was fifty-two, a net decrease of nineteen as compared with the corresponding date of the previous year. The number of railways placed in charge of receivers during the year was sixteen, and the number removed from their management was thirty-five. The operated mileage of the roads under receivers on June 30, 1900, was 4,177.91 miles.

## MILEAGE

On June 30, 1900, the total single-track railway mileage in the United States was 193,345.78 miles, an increase during the year of 4,051.12 miles being shown. This is a greater increase than that for any other year since 1893. Practically all of the railway mileage of the country is covered by reports made to the Commission, the amount not covered being 789.75 miles, or 0.41 per cent of the total single-track mileage. The aggregate length of railway mileage, including tracks of all kinds, was 259,788.07 miles. There were 37,663 locomotives in service, 34,713 passenger cars, 1,365,531 freight cars, and 50,594 cars used the direct service of the railways. It should be understood, however, that cars owned by private companies and firms and used by railways are not included in the returns made to the Commission. On an average twenty locomotives and 753 cars are used per 100 miles of line; that 58,488 passengers are carried, and 1,626,179 passenger miles accomplished per passenger locomotive; 51,013 tons of freight are carried and 6,556,731 ton miles accomplished per freight locomotive. All of these items show an increase when compared with corresponding figures for the year 1899.

## EMPLOYEES

The number of persons employed by the railways of the United States, as reported for June 30, 1900, was 1,017,653, or an average of 529 employees per 100 miles of line. As compared with the number employed on June 30, 1899, there was an increase of 88,729, or thirty-four per 100 miles of line. From the classification of these employees it appears that 42,837 were enginemen, 44,130 firemen, 29,957 conductors, and 74,274 other trainmen. There were 50,789 switchmen, flagmen and watchmen.

## CAPITALIZATION AND VALUATION OF RAILWAY PROPERTY

The amount of railway capital outstanding was \$11,471,034,960. This amount assigned to a mileage basis represents a capitalization of \$61,490 per mile of line. Of this amount \$5,845,579,593 existed in the form of stock, of which \$4,522,291,838 was common stock and \$1,323,287,755 preferred stock. The amount which existed in the form of funded debt was \$5,645,455,367. This amount was classified as mortgage bonds, \$4,900,626,823; miscellaneous obligations, \$464,983,341; income bonds, \$219,536,883, and equipment trust obligations, \$60,308,320. The amount of current liabilities not included in the foregoing capital statement was \$594,787,870, or \$3,183 per mile of line. The amount of capital stock paying no dividend was \$3,176,609,698, or 54.34 per cent of the total amount outstanding. The amount of funded debt, excluding equipment trust obligations, which paid no interest, was \$378,937,806. Of the stock paying dividends, 10.18 per cent of the total amount outstanding paid from 1 to 4 per cent, 14.56 per cent paid from 4 to 5 per cent, 6.93 per cent paid from 5 to 6 per cent, 4.29 per cent paid from 6 to 7 per cent, and 6.40 per cent paid from 7 to 8 per cent. The number of passengers carried during the year ending June 30, 1900, as shown by the annual reports of railways, was 576,865,230, showing an increase for the year of 53,688,722. The average revenue per passenger per mile for the year ending June 30, 1900, was 2.003 cents.

### Efficient Work of the Claim Department of the Union Traction Company of Philadelphia

Several bold and partially successful attempts have recently been made to defraud the Union Traction Company, of Philadelphia, by means of improper claims for damages. Two or three organized gangs of operators in this most annoying form of swindling have been run down by the claim department, and many hundreds of dollars saved by the prompt action of the Union Traction Company's agents and detectives. In the early spring of last year, over a year ago, while investigating a claim for damages received in an alleged accident on one of the lines of the company, the claim agents recognized a man to whom the company had but a short time previously paid a small amount in a similar case. This aroused the suspicions of the claim department, and a rigid investigation was immediately instituted, which resulted in the discovery of a carefully laid plan to defraud the company, and the identification and arrest of many swindlers. The usual mode of operation of these people is to fall off a car, receive some slight injury, real or imaginary, and then settle with the company for a small amount, signing a release for all future claims against the company. As it is much better in ordinary accident cases for the company to settle up the matter within a few days of the accident than to allow it to drag along through the courts, this form of swindling is nearly always successful. Some of the cases which have been successfully thwarted by the activity of the Union Traction Company's agents show great ingenuity in their conception, and a boldness of execution which in other lines might have brought much legitimate credit to the schemers.

One of the most daring of the swindlers was a man by the name of William J. Doran, with many addresses and accomplices, who successfully secured from the company, on four different occasions, \$60, \$25, \$5 and \$35 before he was finally run down. He was caught only after being recognized by some of the companies' agents who had previously investigated his cases, and who were detailed to inquire into his injuries the last time that he tried to rob the company. The gang of which he was the head made a practice of allowing themselves to fall off the car into the street when rounding a curve, enter a claim against the company, and when the agent would call they would signify a willingness to accept a small amount in settlement. As an illustration of how cleverly Doran could feign injuries, it is said that he was a professional contortionist, having traveled with Barnum's circus, and could so twist his limbs into queer shapes and keep them there while being examined, that he has been able to deceive many physicians. One time, when accompanied by his wife, it was agreed that she should fall from the car, and that he should be standing on the corner to witness the "accident." When the corner was reached, Mrs. Doran jumped from the car and was thrown into a pile of snow, in which she was completely buried. Doran, thinking she had fallen under the car and been killed, lost his nerve and ran home, leaving her to her fate. She was only slightly injured, however, and secured \$5 on her claim. The gang of which Doran was the head has now been completely broken up.

Another scoundrel who has given the Union Traction Company's detectives a great amount of trouble was first heard of when he secured a settlement of \$50 on a claim for injuries received after the usual performance of falling from one of the cars. He proved to be James H. Varalla, who was formerly employed as a conductor, and had worn the Union Traction Company's uniform. Emboldened by the success attending his first venture, he shortly afterward attempted a much more risky scheme. He dug a hole under one of the rails of the Old York Road line, and planted in it a plank, so arranged that when a car would strike it, it would be derailed. He then ran north about 200 yds., where he boarded a south-bound car, standing on the rear platform, and when the car struck the plank and was lifted from the track, he threw himself clear across the road. Four passengers in the car were seriously injured in the wreck, and Varalla hurried to the Samaritan Hospital, where he gave the name of Frank Berrell, and claimed that his arm was hurt. He later went to a boarding-house in Germantown and wrote to the Traction Company demanding \$2,000 damages for injuries which he had received. When the agents, however, visited him, notwithstanding an attempt he made to disguise his features, they recognized him as being a former claimant against the company, and he is now held by the authorities awaiting trial.

The fearlessness of the swindlers' operations and their acuteness in eluding the company's agents has made the positions of the claim agents of the Union Traction Company most difficult ones to fill. Nelson Sailer, the general claim agent, has been personally responsible for many of the excellent pieces of detective work which the department has recently engineered, and his

efforts in preventing petty thefts, as well as swindles on a larger scale, show his fitness for this service. It is a subject which is of great interest to all men who have the operation of street railways in charge, and the arrest and conviction of those interested in every fraudulent operation against a railway company may be looked upon as so much revenue gained by the company.

### London Letter

The Incorporated Municipal Electrical Association held its sixth annual convention at Glasgow from June 19 to June 22; the programme and some of the papers presented have already been published. The meeting was well attended, and successful from every point of view.

An association known as the National Electrical Contractors' Association has recently been formed. At the meeting held recently the following resolution was unanimously carried: "Having regard to the desirability of forming a national association for the purposes, *inter alia*, of protecting and consolidating the interests of electrical contractors in Great Britain and Ireland, it is hereby moved that the representatives of local associations and others present at this meeting hereby form themselves into an association, to be called the National Electrical Contractors' Association." Thomas Guthrie, C. A., 46 Queen Victoria Street, London, was elected secretary, to whom all communications should be addressed.

The Institute of Electrical Engineers is going as a body on a visit to Germany, and three different routes have been arranged for, so that the party will be divided into three groups, namely: (1) Those visiting Berlin only, (2) those visiting Berlin and Dresden, and (3) those visiting Berlin, Dresden, Nuremberg, Frankfurt etc. The members leave London on June 22, and are invited to visit the works of Messrs. Körting, at Hanover, and to a dinner given by the town of Hanover on the same evening. In Berlin they will visit the various central stations, and will inspect the enormous works of the Allgemeine Electricitäts-Gesellschaft, and Messrs. Siemens & Halske, and will also be entertained by these two companies to dinner, receptions, etc. Visits will also be made to the works of the Union Electricitäts-Gesellschaft, and the tool works of Messrs. Ludwig Loewe. In the other cities the same programme will be proceeded with, visits to the local central stations and to the works of the electrical manufacturing companies situated in these cities, as Messrs. Kammers' works at Dresden, Schuckert & Company's works at Nuremberg, and the Lahmeyer works at Frankfurt. Special provision is being made for the ladies, and the whole trip promises to be most enjoyable, as well as interesting and instructive.

The formal ceremony of opening the Manchester electric tramways was celebrated this month, when the Cheetham Hill route, the only route yet completed, was declared open by the Lord Provost. A full description of the system of Manchester's tramways will be found in another column of this issue. The whole of the overhead electric equipment on the Cheetham Hill route has been done by Macartney, McElroy & Company, and the cars have been built by G. F. Milnes & Company, of Hadley, Salop, and the Brush Electrical Engineering Company, of London, the electric equipments on the cars being by Dick, Kerr & Company, and the British Thomson-Houston Company. Great enthusiasm was displayed, and a photograph was taken of the first car in the procession, with the Lord Mayor officiating as motorman, backed up by the chairman and deputy chairman of the tramways committee, and the Mayor of Salford. The cars then proceeded to Cheetham Hill, and from there to the Queens Road, where the car house, a fine building that covers some four acres of ground, was declared open by the Lord Mayor, who was handed a gold key by Mr. Boyle. Mr. Boyle said that he and the tramways committee were delighted to know that such an event as the beginning of the work of the municipal tramways in Manchester should occur while the present Lord Mayor yet occupied that position. The Lord Mayor said that there could be no doubt that it was an honor and a privilege to be able to start the first car at the official opening of the electric tramways, which were in future to be worked under municipal management. He had also had the honor of opening that magnificent car house—a house said to be the finest in Europe. (Hear, hear.) The tramways committee were to be congratulated on the excellent way in which they had carried out their work. It was well known that the difficulties in the way of establishing municipal tramways in Manchester had been very great, and it was indeed at one time predicted that they could not be overcome. The tramways committee, however, set themselves to work, and after three years they were able to begin to gather the first fruits of their labors. Every part of the system—the track, the overhead equipment, and that building—showed

that great care had been exercised in the carrying out of the undertaking. The tramways committee had a great task before them, but from what had been seen that day everybody might feel certain that they would carry out their plans in a manner which would insure the establishment in this city of one of the finest tramway systems in the country. At the Town Hall luncheon was afterward served, the Lord Provost presiding, and various speeches were made by W. H. Vaudrey, Mr. Boyle, W. H. Wainwright, the Mayor of Salford and others. Mr. McElroy, the manager of the tramways, is to be congratulated on the completion of the first step toward the electrical equipment of Manchester tramways, which are as important as any in Great Britain, and will involve a mileage of over 100 miles of double track before being finished.

The St. Paul's authorities feel it necessary to oppose the projected tube running from Piccadilly to the city, the fear being that, owing to the fact that the soil under Ludgate Hill and immediate neighborhood is made up chiefly of very loose gravel and sand, any excavations which would tend to drain off the underground water would cause a crack in the tremendous bed of concrete upon which St. Paul's is built. Indeed, the authorities of the Cathedral do not hesitate to say that a collapse of the sacred edifice might result, and that in any case a "settlement" of the building would take place.

The new North London "tube," which will bring Finsbury Park within about ten minutes of Moorgate Street, is being pushed forward rapidly. The contractors expect to finish the tunneling by the end of the year. The tube will be  $2\frac{5}{8}$  miles long and 16 ft. in diameter—the largest in London. The Great Northern & City Railway, as the new line is called, will be the first tube in London to take full-size rolling stock.

At the annual general meeting of the Institution of Electrical Engineers, Professor John Perry, F. R. S., president, the secretary, W. G. McMillan, read the report of the council for the past year. It appeared from it that the council had elected as honorary member M. E. Mascart, the president of the International Electrical Congress of Paris in 1900 and a vice-president of the institution. The increase in the membership of the society continued satisfactory, and during the past twelve months there had been elected twenty-one members, eighty-nine associate members, five foreign members, 140 associate and 173 students, making a total of 428. On the occasion of the International Electrical Congress at Paris in 1900 a joint meeting was held between this institution and the American Institute of Electrical Engineers, in the Exhibition Building. The council received the members of the sister institute in London prior to the Paris meeting, and a handsome illuminated address had been received from the American Institute, conveying, in cordial terms, their thanks for "the many courtesies" which had been extended to them by this society.

Rapid progress is being made with the erection in the Longcarse district of the town of Alloa, Scotland, of the extensive works of the British Electric Plant Company, Ltd., the firm which has secured the contract for the electric installation for the burgh. The manager of the company has intimated to the Town Council that he expects to be able to supply the electric current by October or November, at latest. This company is also going to be a manufacturer of electric dynamos and motors, and is building shops large enough for a large output and of the most approved type for economical manufacture.

The preliminaries have now been arranged in regard to the general electricity supply in Jarrow by the County of Durham Company, and the work will proceed forthwith. Provision is at the same time being made for the electric tramways from two points near the western boundary of the borough—Albert Road and Western Road—into South Shields. Judging from the popular success of the Gateshead section of the section, there seems little doubt that the improved traffic facilities now to be afforded at the Jarrow and South Shields end will prove of great benefit, especially to the working classes.

A. C. S.

### Notes from Germany

[From Our Regular German Correspondent.]

Last March the capital of the Grosse Berliner Strassenbahn was increased so as to bring the total capitalization up to M.85,785,000. Up to 1884 the capital stock amounted to only M.17,000,000, but it has been increased four times since then. The total trackage of the company comprises 461.85 km, 42.42 km of which are still to be equipped electrically. As the accumulator service installed on an 18 km section proved inadequate, the overhead system has been introduced on the entire road, with the exceptions mentioned above and of five short sections on which the underground trolley is used. Despite reduction of fares, the profits have continually increased during recent years.

From 1896 to 1900 they were 8.16, 8.21, 8.62, 9.43 and 10.08 million marks. During that time the dividends amounted to 15, 16, 18, 10½ and 11 per cent on 21.38 million (1896-1898), 44.25 and 45.75 million marks. During 1901 a dividend will be declared on 68.625 million marks, and during 1902 on 85.75 million marks.

It is so unusual that reliable data are published in regard to railway return currents that those recently compiled by Engineer Krohn, of the Union Electricitäts Gesellschaft, and published in a recent issue of the E. T. Z., are of interest. Tests were made for this company in one of the largest cities in Germany in which the power station was located, not far from the terminal of the road. The rails are used exclusively for the return circuit. Running parallel to this track, for a distance of 1.5 km, are some water and gas pipes. On both disturbances were noticed a few years ago, at those points where the current had to leave the pipes, in order to reach the station which was located 200 m from the track. Branches from the gas and water pipes led into the station, and it was found that the current found its way through these branch pipes to the bare ground wires which connected with the negative bus. As the mean loss in these bare conductors was about 4 volts, it was decided to lay a 200-m cable from the rails to the station.

The engineer discovered that, for about a year, an artificial connection had existed between the rails and the pipe system at the point where the disturbance was noticed. This had the effect of reducing the trouble at that point, but the current flowing in the pipes was correspondingly increased because the resistance was considerably reduced. As a water pipe is not a continuous conductor, but consists of several sections joined together by a material which is a poor electrical conductor, the current must pass around each junction, causing a corrosion at those points.

To investigate how much current was returned in this manner through the pipe system, the engineer removed the above-mentioned connection between the rail and the pipe and placed an ammeter between them. The latter showed a mean of 30 amps. and occasionally jumps up to 75 amps., passing into the pipe. The connection was then removed entirely, and the current was measured, which then went through the pipe. For this purpose a measuring instrument was used, which consisted of two cables, each 300 m in length, one of which was 14 sq. mm and the other 4 sq. mm in section. These cables were mounted on a small hand wagon, and the current could be interrupted in each by means of a switch. Both cables were connected at one time with two points on the gas pipes and at another time with points on the water-pipe system 250 m apart. Ampere and voltmeters were also connected up with the cables. There were thus three parallel circuits for the return current, the pipe, the large and the small cable. By reading the meters when the current passed through both cables, and again when one of the cables was cut out, the current passing through the pipe could easily be calculated by well-known formulæ.

On account of the variations of the current, it was first necessary to determine the resistance of the pipe. The difference of potential was then read every five seconds, leaving the switch open. From these readings and the known resistance, a five-second current curve was constructed. The mean current strength in this part of the gas-pipe system was only 44 milliamperes. Comparing this with the 30 amps., referred to above, one may form an idea of the changed electrical condition of the return circuit when the connection between rail and pipe had been removed. These measurements were repeated on various days and hours of the day, so as to verify the results. At sections further away from the station it was found that the currents actually flowed away from the station. This result may be ascribed to two causes—either the resistance between rail and pipe was large or the drop of pressure in the rail was very small. To prove the latter, Mr. Krohn made several tests and found that the mean loss of pressure at a point furthest away from the station was 6 volts. The mean loss of pressure in the whole return circuit is, therefore, 3 volts, or

$$\frac{3 \times 100}{450} = 0.67 \text{ per cent}$$

In conclusion, Mr. Krohn discusses the question of effect of regulation to prevent damage to pipe lines. He does not advocate the regulations in use in England, namely, to reduce the difference of potential in the return to a maximum of 7 volts. This method he considers costly and not a certain preventive. It depends largely upon the nature of the soil in which the pipes are buried. It must, furthermore, be remembered that on some roads stray currents may exist without doing any damage. The only regulation which should be imposed is that, after the road is completed, there should be no current in any pipe larger than 1 amp. to each 3 cm of diameter. These are the conclusions reached by Mr. Krohn.

## New Type of Transfer Ticket Machine

William I. Ohmer, of Dayton, who has paid a great deal of attention to the register problem, and whose ticket-printing machines are used extensively abroad, will bring out shortly a new type of register and transfer-ticket printer, for which a most remarkable number of performances are claimed. The machine prints its own transfers, recording the time issued, consecutive number, number of car and conductor, company, place where the passenger boards the car and the line transferred to, and also records the number of tickets issued and the amount of cash received. If the cash fares are of different denominations, the rate of fare is also printed on the ticket and at the same time added and calculated mechanically with or without the issuing of ticket, as may be required. A bell rings with each operation, and an indicator, exposed to view, shows the kind of transaction. The form can be changed so that the tickets can not be counterfeited, and the statement on the ticket is such that it can be easily checked at the main office. The use of the machine obviates the necessity of purchasing in advance or keeping on hand a lot of printed transfer tickets, as well as many mistakes made by conductors. It also prevents trafficking in transfers. Machines may be used on any route by the same or different conductors, as the case may require, and the route changed without unlocking the machine. A record can also be taken from the machine without opening it, and it can be operated in the dark as well as in the daytime.

From the long list of things which this machine will do, one would naturally imagine that it must be as large as a Hoe cylinder press. On the contrary, it can be carried by the conductor in one hand and operated by the same hand. It is designed to be carried in the pocket or around the neck, and to be operated by one hand while the conductor is taking fares or holding on to a strap with the other.

## New Road in Richmond, Va.

Work has been commenced on the construction of the West Hampton Park Railway in Richmond, Va., for which a charter was granted last winter. The officers of the company are Langbourne M. Williams, president; John C. Robertson, vice-president and general manager; R. A. Lancaster, Jr., secretary and treasurer, and Reuben Shireffs, engineer. The road connects with the lines of the Richmond Traction Company, and the financial interests back of the project are largely the same as in the case of that company.

In addition to the 4 to 5 miles of tracks now being built, the company is laying out an extensive park at West Hampton. A large café and pavilion will be built here, and golf links are being laid out. The cars have already been ordered.

## Street Railway Patents

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

UNITED STATES RAILWAY PATENTS ISSUED JULY 16, 1901

678,377. Motor Gear Case for Electric Cars; W. Cox, Toronto, Canada. App. filed Dec. 5, 1900. A flexible casing. Consists of upper and lower frames of resilient material covered with canvas or the like.

678,531. Spring Chock or Buffer; O. Albert, Muskegon, Mich. App. filed March 6, 1901. A frame in the form of a bell-crank lever is pivotally mounted near the track in the path of the car wheels, one arm of the bell crank being adapted to receive the impact directly, and the other having a spring, opposing movement of the same.

678,574. Switch Operating Mechanism; J. R. Klippelt & H. W. Jeffers, Allegheny, Pa. App. filed March 21, 1901. Details of a switch operable from the car.

678,589. Spring Chock or Buffer; H. Sawyer & O. Albert, Muskegon, Mich. App. filed March 6, 1901. See patent No. 678,531.

678,601. Footboard and Guard Rail for Street Cars; F. W. Wasenich, Boerne, Tex. App. filed April 25, 1901. Comprises a guard rail made up of a number of sections, the sections being pivoted to the side of the car and adapted to be swung into and out of operative position by the movements of the hinged footboard.

678,685. Automatic Switch Thrower; J. R. Rathbone, St. Louis, Mo. App. filed Dec. 31, 1900. Structural details of a switch operable by a passing car.

678,761. Car Fender; L. P. Platt & F. Warga, Hastings, Pa. App. filed Oct. 18, 1900. Comprises a flat, horizontal, woven-wire screen, with a constantly rotating roller located ahead of, and tending to, direct obstacles on to the screen.

## PERSONAL MENTION

MR. GEORGE E. WEBB, formerly president of the Baltimore & Northern Railway Company, has been elected president of the United Railways & Electric Company, in the place of Mr. Nelson Perin, resigned.

MR. WILLIAM R. TWINING, chief engineer of the Union Traction Company, of Philadelphia, has an interesting article in a recent issue of the Philadelphia *Times* entitled, "A Modern Trolley Road and How It Is Operated."

MR. W. A. RAMSEY has retired as vice-president and general manager of the Colorado Springs Rapid Transit Railway Company, of Colorado Springs, Col., and Mr. W. S. Stratton, president of the company, is acting vice-president and general manager.

MR. HOWARD S. REYNOLDS has been appointed general manager of the Columbus Railroad Company, of Columbus, Ga. Mr. Reynolds has for the past seven years been employed with the Brockton Street Railway Company, of Brockton, Mass., and has recently been connected with railway work in Boston. The improvements to be made by the company necessitated the appointment of a competent official, the other officers being compelled to devote their entire attentions to the operation of the system.

MR. G. J. A. PAUL, who has been assistant to Mr. F. M. Zimmerman, general manager of the Aurora Street Railway Company and the Aurora, Wheaton & Chicago Railway, has resigned to become manager of the Streator Railways. Mr. Paul came to Aurora from Kentucky two years ago, and during that time he has done most effective work. Mr. Paul was well liked by the employees of the company, and he was presented with a handsome diamond-studded charm when he retired from the company.

MR. HARRY E. DALTON has been appointed general superintendent of the entire system of the Northern Ohio Traction Company. He came to Akron in 1892 and secured a position as conductor on one of the local lines. Two years later he became a conductor on the Northern Ohio Traction Company. He became construction boss, train dispatcher, division superintendent, and then assistant to L. E. Beilstein, who has recently been made general manager of the Toledo lines.

MR. W. B. ROMMEL, chief constructing engineer and general manager of the Lisbon (Portugal) Tramways, according to advices just received by local parties, will leave Europe for the United States within the next week or ten days. It is expected that he will place some further substantial contracts for equipment, etc. Nearly \$1,000,000 has been already placed, directly or indirectly, with American manufacturers for material, etc., for the Lisbon traction system, which will be the first electric road in that part of the world. The system is controlled by the Portuguese Development Company, of Bishopgate Street within, London, E. C., which concern has been largely financed by the well-known financial house of Wernher, Beit & Co.

MR. NORMAN MACBETH, of the British cotton mill machinery concern of MacBeth Brothers & Company, Limited, whose headquarters are at Bolton, Lancashire, with branch establishments in Calcutta and Bombay, has been in the United States for the past few weeks, and sailed for Europe after making arrangements with the Stilwell-Bierce & Smith-Vaile Company, of Dayton, Ohio, the Atlas Engineering Works, of Indianapolis, Ind., etc., to handle their specialties in the British Indian market. The MacBeth concern has hitherto confined its attention to British manufactured machinery. It will now, however, trade in American equipment exclusively. Shortly after Mr. MacBeth's return to India, it is understood, he will forward some fair-sized orders for electrical machinery, fans, etc., to local firms.

MR. HARRY J. CLARK recently resigned his position as chief engineer of the Syracuse Rapid Transit Company, and has accepted that of engineer for the Oneida Construction Company, and will open an office in this city. He will have charge of the construction of the proposed trolley to connect Syracuse and Utica and Oneida and Sylvan Beach by trolley, and has already made an overland trip along the proposed routes, in company with Westinghouse Company representatives. Mr. Clark is a graduate of Cornell University in the mechanical engineering course, and has been connected with the Syracuse street railway system, as engineer, since October, 1895. He has had supervision of most of the construction work done since that time, is well known in the city and popular with the men, and thus enters his new position with the best qualifications.

## FINANCIAL INTELLIGENCE

### THE MARKETS

#### The Money Market

WALL STREET, July 24, 1901.

Another heavy gain in cash and further decrease in loans have combined to bring the surplus reserve of the local banks well up to the average of the season. Instead of the uncertainty which prevailed in banking circles a fortnight ago, there is a more assured feeling that the crop-moving requirements of the autumn will not lead to any acute stringency in the money market. The high rates prevailing up to ten days ago at this center attracted an unusually large flow of currency from the interior, and this was one of the main relieving agencies. With the fall in rates to a comparatively easy level, however, the inward movement stops, and there are some indications as this article is written of the movement beginning in the opposite direction. It will be another month before withdrawals by the country banks of the West and South reach a considerable amount, but, in the meantime, whatever the banks may be able to add to their surplus resources will have to come from excess treasury payments and further loan contraction. During the last week the relations of credit and debit with the Treasury have been reversed, as compared with what they were a week ago. As a result, the local banks are gaining instead of losing in their operations with that institution. Whether or not this will be a permanent condition is by no means clear. The reduction in the internal revenue schedules which went into effect on July 1 has, of course, materially diminished the collections of Government revenue at New York, but whether the reduction has been great enough to produce a continuous surplus of Treasury disbursements over receipts is very doubtful. The most important means of preventing any serious tension in the market lies in the chances of there being a further heavy reduction in loans. The \$22,000,000 decrease in the account during the last two weeks has come principally out of the stock market. It is altogether probable that had this liquidation of credits not occurred now, it would have been forced later on, so that the Stock Exchange has virtually been discounting, and at the same time avoiding, a crisis of money conditions in the fall. Bankers and other authorities do not expect any further relaxation until after the first of the year. Time money is quoted, therefore, very stiffly at 5 per cent for all periods from sixty days to six months. The call money market is relatively easier, reflecting the present temporary abundance of lendable capital as compared with the demand.

#### The Stock Market

The movement of the stock market during the week has depended almost entirely on the developments in the corn-crop condition. There is much less apprehension regarding the steel strike, and the stocks of the company have made a very decided recovery. There are frequent rumors that the difficulties will soon be settled, but whether or not there is any ground for them, it is generally appreciated that the labor forces can not hold out for any length of time with such financial resources as they now have on hand. The speculative interest is inclined to look forward with much apprehension to the annual westward movement of currency already beginning, but, as has already been pointed out, in the article on the money market, the Stock Exchange has contributed by way of liquidation of credits all the relief that it will probably be called upon to give to the money market. With the steel troubles and the money situation becoming less influential as depressing factors, the position of the growing corn crop is the main thing that now holds the stock market in check. There is no doubt that a large section of the crop comprising more than one-half the possible yield in certain localities has been irremediably destroyed. For the rest of the belt the situation is critical, and if the present drought and excessive heat are not relieved in the course of the next week or ten days, the country will undoubtedly experience one of the worse crop failures it has ever known. On the other hand, if the much-needed moisture arrives in time, a large portion of the crop which is now in danger will be saved. The probabilities are that both the grain market and the stock market have discounted the worse features of the situation, and that with any decided improvement in the weather, a sharp reversal of the speculative movement would occur.

The liquidation since the first of the month has been very thorough, and commission houses report that they are carrying only a very light line of speculative stocks. Meanwhile, the drop from 20 to 30 points in the standard railroad shares since a month ago has brought them to a level, which is attracting steady investment support. Railroad earnings continue excellent. Business reports are, on the whole, very good, considering the corn damage and the

steel strike, and for these reasons those who buy stocks outright are not inclined to regard the present prices as being too high.

The local traction stocks have been resisting the general downward tendency of the market much more successfully than have the railroad and the majority of the industrial shares. Manhattan in particular shows the effect of being closely held, and whenever the market has turned even temporarily during the last week the stock has rallied very easily. There is no news about this or any of the other traction properties, but the fact that they are not affected by any of the general depressing factors in the speculative dealings has attracted to them very good speculative support. The story is renewed that the control of the North American Company is being sought by certain banking interests of this city which desire to put the liberal charter of the company to uses which it does not fill at present. Buying of these interests is said to be the reason for the well sustained advance of the stock.

#### Chicago

There has been very little change in the Chicago traction market during the week. Dealings have been very light, and such tendency as they have disclosed has been in the main toward higher prices. Metropolitan preferred rallied 2 points and the common 1, on light trading, in sympathy with the stronger tone of the general market. Northwestern Elevated, Lake Street and South Side are unchanged. It is officially stated that all of the elevated lines in the city are showing gratifying gains over the July traffic a year ago, notwithstanding the extremely hot weather, which usually curtails business. President Carter, of the South Side, says that property owners are very much in favor of the proposed third track, and that the consents to construct the same will be readily obtained. The work of securing signatures is being carried on slowly. There is no particular hurry to get them all in, because nothing can be done before the City Council meets again in September. There are said to be renewed negotiations for the north end of the St. Paul's Evanston line, both by the Northwestern Elevated and the Chicago & Milwaukee Electric. It is understood that if the Northwestern is successful, it will grade the tracks above the streets north of Wilson Avenue, the same as is being done by the steam roads, instead of building on elevated structures.

There is a good demand for Metropolitan Elevated extension 4 per cent bonds at a slight reduction from par. These securities are becoming popular among investors, owing to the fact that they are a first mortgage on all the extensions, and a second mortgage on the main line of the Metropolitan.

#### Philadelphia

The principal traction issues in the Philadelphia market have remained about stationary during the past week. Union Traction lines scarcely varied more than a quarter per cent in the daily fluctuations and dealings in it; by comparison with previous weeks, have been very light. At the monthly directors' meeting it was emphatically denied that the company was negotiating for the purchase of the new franchises recently granted by the City Council. Speculative circles, notwithstanding this, believe that there is something in the report, and they attribute to it the firmness of the stock in the market. It is possible, however, that the inspiration for the recent buying of the shares may have been found more largely in the knowledge that as soon as work is actually begun on the new roads the Union Traction people will take out an injunction, and, by fighting it in the courts, succeed in tying the hands of their prospective rivals for an indefinite length of time. A steady demand for Philadelphia Traction has absorbed all offerings during the week at current figures. The 4 per cent bonds of Electric People's Traction have also been well bought, and the price has been lifted fractionally. Nothing of any importance has occurred in the market for the other traction securities. Odd lots of Consolidated of Pittsburgh preferred at 59, American Railways at 40 and Rochester Passenger at 25 were reported as sold. The 4 per cent bonds of the Indianapolis company were bid up on a single transaction to 82, which represents the recent high level.

#### Iron and Steel

The strike of the employees of the United States Steel Corporation has been confined so far to comparatively few of the mills, and has not extended to those who have signed the scale, or to the non-union mills, and, as the largest producers of rails are included in those which are still in operation, the current disturbance in the labor market has not yet affected them. All the rail mills are extremely busy, however, and are reported to have many

orders on their books, so that it is pretty certain that prices will be maintained for some time, at any event. Quotations are unchanged for the week at \$16 for Bessemer pig, \$24 for steel billets and \$28 for steel rails.

**Metals**

Copper is quoted at 17 cents for Lake Superior and 16 $\frac{5}{8}$  cents for electrolytic and casting; the fall in tin continues, and spot tin is now nominally quoted at 27 $\frac{1}{2}$  cents, with no buyers. Lead is quiet at 4 $\frac{3}{8}$  cents and spelter at 3.90 cents to 3.95 cents.

**Stock Quotations**

The following table shows present bid quotations for the leading traction stocks, and the active bonds, as compared with a week ago; also the high and low since Jan. 1, 1900:

	Jan. 1, 1900		1901	
	High	Low	July 16	July 23
American Railways Co.....	48 $\frac{3}{4}$	27	38	40
Boston Elevated .....	192	b95	184	185
Brooklyn R. T.....	88 $\frac{7}{8}$	47 $\frac{1}{8}$	76 $\frac{1}{4}$	77 $\frac{3}{4}$
Chicago City .....	285	206	205	206
Chicago Union Tr. (common).....	..	..	16	17
Chicago Union Tr. (preferred).....	..	..	58	58
Columbus (common).....	42	20	42	42
Columbus (preferred) .....	160	80	100	100
Consolidated Traction of N. J.....	69 $\frac{1}{2}$	57	67	66
Consolidated Traction of N. J. 5s.....	110	..	109 $\frac{1}{2}$	109 $\frac{1}{2}$
Consolidated Trae. of Pittsburgh (common).....	30 $\frac{1}{4}$	20 $\frac{1}{4}$	21	..
Indianapolis Street Railway .....	41	15	38	35
Lake Street Elevated .....	16 $\frac{1}{4}$	6 $\frac{1}{2}$	12 $\frac{1}{2}$	12 $\frac{1}{2}$
Manhattan Ry. ....	131 $\frac{3}{4}$	84	117	118 $\frac{3}{4}$
Massachusetts Elec. Cos. (common).....	43 $\frac{1}{4}$	15	39	38 $\frac{3}{4}$
Massachusetts Elec. Cos. (preferred).....	96	70	92	93
Metropolitan Elevated, Chicago (common).....	37 $\frac{1}{2}$	24 $\frac{1}{2}$	34	35
Metropolitan Elevated, Chicago (preferred).....	93 $\frac{1}{4}$	76	88	90
Metropolitan Street .....	182	143 $\frac{3}{4}$	166 $\frac{1}{2}$	167 $\frac{1}{2}$
Nassau Electric 4s .....	97 $\frac{1}{2}$	..	97 $\frac{1}{2}$	97 $\frac{1}{2}$
New Orleans (common).....	32 $\frac{1}{2}$	18 $\frac{1}{4}$	24	26
New Orleans (preferred).....	108	90	100	102
North American .....	*106	*74	100	99
North Jersey .....	36	21	23	23 $\frac{1}{2}$
Northwestern Elevated, Chicago (common).....	52	..	42	45
Northwestern Elevated, Chicago (preferred).....	97 $\frac{1}{2}$	..	90 $\frac{1}{2}$	93
Rochester .....	31 $\frac{1}{2}$	12	27	27
St. Louis Transit Co. (common).....	35	16 $\frac{1}{2}$	25 $\frac{1}{2}$	26 $\frac{1}{2}$
South Side Elevated (Chicago).....	119	93	110	108
Syracuse (common) .....	20	10 $\frac{1}{2}$	20	20
Syracuse (preferred) .....	a80	25	60	60
Third Av. ....	135 $\frac{1}{8}$	45 $\frac{1}{4}$	120	120
Twin City, Minneapolis (common).....	95 $\frac{1}{4}$	58 $\frac{1}{2}$	92 $\frac{3}{4}$	94
United Railways, St. Louis (preferred).....	82	..	78 $\frac{1}{2}$	79
United Railways, St. Louis, 4s.....	91 $\frac{1}{2}$	..	88 $\frac{1}{2}$	89
Union Traction (Philadelphia).....	40 $\frac{1}{2}$	24 $\frac{1}{4}$	26 $\frac{1}{2}$	27 $\frac{1}{2}$
United Traction (Providence).....	110	107	109	109
Worcester Traction (common).....	34 $\frac{1}{2}$	25	34 $\frac{1}{2}$	..
Worcester Traction (preferred).....	106	89	105	105

a Asked. b Bid. \* Quotation of new stock.

**BIRMINGHAM, ALA.**—The stockholders of the Birmingham Railway, Light & Power Company formally ratified, July 18, the new \$6,000,000 mortgage. The Old Colony Trust Company, of Boston, is mortgage trustee.

**NEVADA CITY, CAL.**—The Nevada County Traction Company has filed a mortgage for \$100,000 in favor of the Mercantile Trust Company, of Los Angeles, as trustee. The company now has under construction an electric railway to connect Nevada City and the towns in Grass Valley. The officers of the company are: John Martin, president, secretary and purchasing agent; R. W. Hotaling, vice-president; E. F. Grow, treasurer.

**DENVER, COL.**—The Denver City Railway Company has declared the usual quarterly dividend of 1 per cent, payable Aug. 16 to stock of record Aug. 6.

**CHICAGO, ILL.**—The Chicago & Desplaines Valley Electric Railway has executed a mortgage to the Illinois Trust & Savings Bank as trustee to secure an issue of \$1,000,000 5 per cent thirty-year bonds. It is understood that the bonds secured by the new mortgage will be deposited as collateral to the bonds of the Chicago & Joliet Electric Railway. The Chicago & Desplaines Valley Electric Railway is controlled by the American Railways Company, of Philadelphia.

**CHICAGO, ILL.**—The *Tribune* says: "An increase of \$3,000,000 will be placed upon the personal property assessment of the Union and Consolidated Traction companies by the Board of Review. Another increase of \$3,000,000 will be made in the assessment of the Chicago City Railway Company. These are two items in a \$30,000,000 increase in personal property valuations over last year. The increase on the City Railway assessment will be placed on a present assessment of \$5,000,000, raising it to \$8,000,000. For the purposes of the reviewers the Union Traction Company and the Consolidated Traction Company have been considered together, and the increase of \$3,000,000 will swell the assessment to \$11,500,000."

**CHICAGO, ILL.**—A despatch to the *New York Times*, dated July 22, says: "The Chicago Union Traction Company will hold its annual meeting to-morrow. Last year the company placed \$4,000 to the surplus account after paying \$150,000 in dividends. This year the dividends have been passed. There will be none until the franchise question is settled. Shareholders will be informed that the completion of the Northwestern Elevated Road and the opening of all stations on its line has taken many thousands of passengers from surface lines; that the Consolidated Traction Company purchased from C. T. Yerkes has added to their losses, and that the surplus has been drawn upon to make good the fixed charges of the company. All this they expect, and should the showing be more favorable than is outlined here they will be glad of it. So far as known there will be no changes in the official roster of the company."

**CHICAGO, ILL.**—The annual report of the Chicago Union Traction Company, as made public at the annual meeting of the company, held July 23, shows:

	Year ending June 30	1901	1900
Gross receipts .....		\$7,289,139	\$7,477,298
Operating expenses .....		3,942,194	3,761,797
Net earnings .....		\$3,346,945	\$3,715,601
Other income .....		869,670	868,350
Total .....		\$4,216,615	\$4,583,951
Fixed charges .....		4,058,040	3,979,876
Balance .....		\$158,575	\$604,075
Preferred dividend .....		150,000	600,000
Surplus .....		\$8,575	\$4,075

**LOUISVILLE, KY.**—The Louisville, Anchorage & Pewee Valley Electric Railway Company has completed arrangements, so it is said, with Eastern and Western capitalists to issue \$18,000,000 of forty-year, 5 per cent gold bonds for the purpose of providing funds for the payment of the construction of its extensive system of suburban lines now under construction.

**HAGERSTOWN, MD.**—The Hagerstown Railway Company, or parties interested in it, has acquired a majority of the stock of the Myersville & Catoctin Electric Railway Company. When the extension from Hagerstown to Myersville is completed there will be a through electric railway from Frederick to Hagerstown, making the distance between the two cities little over half what it is by the two steam roads which now connect the cities.

**MINNEAPOLIS, MINN.**—The directors of the Twin City Rapid Transit Company have placed the common stock on a 4 per cent dividend basis, having declared a semi-annual dividend of 2 per cent on the common stock out of the earnings for the six months ending June 30, 1901. After the payment of the dividend there was left a surplus of \$34,475 for the six months ended June 30, which compares with a surplus of \$30,436 after 1 $\frac{1}{2}$  per cent was paid on the common stock for the corresponding period in 1900. It is estimated that the earnings for the year ending Dec. 31, 1901, will show something like 6 per cent earned on the common stock.

**BROOKLYN, N. Y.**—The Coney Island & Brooklyn Railroad Company has declared a quarterly dividend of 2 $\frac{1}{2}$  per cent, payable Aug. 1.

**ROCHESTER, N. Y.**—The Buffalo, Niagara Falls & Rochester Railway Company has filed a mortgage for \$3,500,000. The money will be used for the construction of its proposed road to connect Buffalo, Rochester & Niagara Falls Electric Railway.

**PORT JERVIS, N. Y.**—The Consolidated Port Jervis Electric Street Railroad, Port Jervis Electric Light & Power Company and Port Jervis Gas Company have purchased the property of the Deer Park Electric Light Company, which has a three-year contract for lighting the streets of this village. The title of the new combination is the Port Jervis Electric Light, Power & Gas Company. Ralph H. Beach, New York, representative of the General Electric Company, is president of the company; Charles R. Horn, of New York, secretary and treasurer, and E. S. Weaver, of Catsauqua, Pa., general manager.

**BROOKLYN, N. Y.**—Opinions vary as to the showing made by the Brooklyn Rapid Transit for the year ending June 30, 1901, and the official report is anxiously awaited. The *Wall Street Journal* recently said: The following figures are believed to approximate the results of the annual report of Brooklyn Rapid Transit for the year ended June 30, 1901:

Gross earnings from operation.....	\$11,717,191
Operating expenses .....	7,381,830
Net earnings .....	\$4,335,661
Gross charges, approximately.....	4,000,000
Surplus from traffic.....	\$335,661
Other income, estimated.....	450,000
Net income.....	\$785,661

**CLEVELAND, OHIO.**—The announcement was made here July 23 that the Cleveland City Railway Company had passed into the control of the Everett-Moore syndicate, and that formal announcement of the purchase of the property would be made within a few days. It is said that the deal was effected through the purchase of a majority of the stock at a price said to have been above par.

**TIFFIN, OHIO.**—The Electric Railway & Power Company has made application to the County Commissioners of Sandusky County for a franchise on the Tiffin and Fremont State road from the south line of Sandusky County to the south line of Fremont, on Buckland Avenue. The franchise states that work shall begin at once and the line shall be in operation by Oct. 1, 1902. The tracks are to be laid on the east side of the road, and the west rail must

be at least 15 ft. from the center. The grant asked for is for a period of twenty-five years.

COLUMBUS, OHIO.—The Columbus Railway Company has declared the regular quarterly dividend of 1¼ per cent on its preferred stock, payable Aug. 1.

CLEVELAND, OHIO.—M. J. Mandelbaum & Company have completed the purchase of the property of the Hamilton & Lindenwald Electric Transit Company, consisting of 9 miles of lines in Hamilton and connecting with Lindenwald. This gives the Southern Ohio Traction Company, which is controlled by the same interests, a line through Hamilton. The company has been reorganized by the election of new officers as follows: W. C. Shepard, president; H. C. Lang, secretary and treasurer; F. J. J. Sloat, general manager. The above, with A. E. Feith, of Cleveland, constitute the board of directors. The new owners will spend \$50,000 in improvements at once. The present power house will be abandoned and the road will be operated in connection with the Southern Ohio Traction Company. It is stated that the amount paid for the property was \$225,000.

CLEVELAND, OHIO.—Detroit papers during the past few days printed the statement that the lines of the Saginaw Suburban Railway Company and the Detroit, Rochester, Romeo & Lake Orion Railway have passed into the hands of the Everett-Moore syndicate, thus making a through line from Detroit to Bay City. Representatives of Messrs. Everett and Moore say the report is incorrect.

CINCINNATI, OHIO.—President James C. Ernst, of the Cincinnati, Newport & Covington lines, emphatically denies the report that negotiations have been renewed for the sale of the road to the Cincinnati Traction Company.

HARRISBURG, PA.—At the annual meeting of the stockholders of the Harrisburg Traction Company, held July 16, the capital stock of the company was increased from \$2,000,000 to \$2,500,000, for the purpose of making extensions and improvements. The old board of directors was re-elected, and President Edward Bailey and Secretary W. J. Calder will be re-elected when the directors meet. The annual report of the company gave the following figures: Gross operating receipts, \$357,709.40; operating expenses, \$163,124.15; net earnings, \$194,585.25; fixed charges, \$64,042.83; surplus earnings, \$130,542.42. The company carried 8,795,315 passengers during the year without a fatal accident.

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

	1901	1900
June		
Gross earnings from operation.....	\$182,384	\$154,262
Operating expenses and taxes.....	137,811	126,938
Net earnings from operation.....	\$44,573	\$27,324
Other income .....	5,993	3,796
Total earnings and other income.....	\$50,566	\$31,120
Deductions from income, including rentals of leased gas lines, etc. ....	10,815	8,964
Total income .....	\$39,750	\$22,156
Interest on funded debt and dividends on preferred stock .....	34,375	33,854
Net income of company—surplus .....	\$5,375	.....
Deficit .....	.....	\$11,697
Six months ending June 30	1901	1900
Gross receipts from operation.....	\$1,718,859	\$1,440,463
Operating expenses and taxes.....	799,948	604,632
Net earnings from operation.....	\$918,911	\$835,830
Other income .....	260,365	226,475
Total earnings and other income.....	\$1,179,277	\$1,062,305
Deductions from income, including rentals on leased gas lines, etc. ....	206,597	196,597
Total income .....	\$972,679	\$865,707
Interest on funded debt and dividends on preferred stock .....	206,208	203,083
Net income of company—surplus.....	\$766,470	\$662,624

PHILADELPHIA, PA.—There has recently been talk of a resumption of the negotiations for the consolidation of the Electric Company of America and the American Railways Company, but by the higher authorities the general belief is that the matter will not be taken up in any form.

PHILADELPHIA, PA.—The Philadelphia News Bureau says: "The fiscal year of the Railways Company General ended June 30, being the first under the new management. No statement has yet been given out for the twelve months' period, but we are informed that earnings were something over 6 per cent. The directors held a meeting this week, at which the future of the company was discussed. While the amount of the earnings would permit the payment of a dividend, the decision was against such action at this time. The stock (\$5 full paid), which had been dormant for some time previous to last week, has since then been traded in to some extent, and the price moved up from 2 to 2½ this week. The official figures for the first six months showed the aggregate net income of all the properties owned to be \$49,950, and at that rate the year's exhibit should show nearly \$100,000, an amount over 6½ per cent on the \$1,500,000 Railways Company General stock. However, the net income of the companies owned and operated does not represent the amount applicable to the Railways Company General stock as the income of the latter is made up of dividends and interest on stocks and bonds in its treasury. The income from the bonds held amounts to \$66,250.

The par value of the stocks owned is \$1,055,750, and it would require only 2 per cent in dividends on these stocks to bring in enough with the \$66,250 interest to make over 5½ per cent on the Railways Company General \$1,500,000 stock. But the several properties are being improved, and extensions being made to some of the systems, which are to be paid for out of the earnings of the respective sub-companies before dividends are declared by the companies."

Tables of Recent Traction Earnings

NAME	LATEST GROSS EARNINGS			LATEST NET EARNINGS	
	Week or Month	1901	1900	1901	1900
American Rys. Co.....	June	\$79,736	\$73,299	\$.....	\$.....
Binghamton Ry. Co.....	June	21,154	17,201	11,434	7,960
Brooklyn R. T. Co.....	May	1,075,576	1,086,840	360,415	428,742
Chicago & Mil.El.Ry.Co.	June	17,253	13,849	11,057	9,385
Cincinnati, Newport & Covington Ry. Co.....	June	72,201	73,965	42,452	42,700
Cleveland El. Ry. Co....	June	72,201	173,820	91,298	80,964
Cleveland, Painesville & Eastern.....	Apr.	10,184	8,966	4,249	3,163
Consolidated Tr. (Pittsburgh) .....	Apr.	238,706	234,247	111,954	119,566
Denver City Tramway....	June	134,738	114,868	59,843	49,941
Detroit United Ry.....	June	250,668	220,584	116,764	98,109
Duluth Superior Tr....	May	37,205	.....	.....	.....
Herkimer, Mohawk, Ilion & Frankfort Ry. Co...	May	4,508	4,146	1,935	908
International Tr.....	May	283,403	203,389	120,993	87,923
London St. Ry.....	May	10,003	7,345	3,185	674
Montreal Street Ry.....	June	180,371	168,224	.....	.....
Northern Ohio Traction..	June	58,191	47,566	26,069	16,494
Olean St. Ry. Co.....	Apr.	3,749	3,505	1,741	1,100
Pittsburgh Consol. Tr...	June	265,824	247,989	147,337	133,518
Richmond Traction Co..	June	23,277	19,016	8,234	9,877
Rochester Ry. Co.....	May	80,401	75,749	32,030	26,011
Scranton Ry. Co.....	June	59,928	52,873	30,266	21,823
Southern Ohio Trac. Co.	June	29,905	25,818	14,741	11,747
Syracuse R. T. Ry. Co..	May	51,958	46,645	22,976	21,144
Twin City Rapid Transit.	May	251,946	224,927	137,605	119,694
United Tr. Co. (Albany).	June	125,831	119,148	27,306	25,127
United Tr.Co.(Pittsburgh)	Mar.	157,792	148,009	70,741	65,511

NAME	Period Ending	GROSS FROM JULY 1 TO LATEST DATE		NET FROM JULY 1 TO LATEST DATE	
		1901	1900	1901	1900
American Rys. Co..	June 30	\$844,297	\$778,042	\$.....	\$.....
Binghamton St. Ry.	June 30	190,910	176,210	86,835	77,151
Brooklyn R. T. Co.	May 31	1,092,017	1,064,689	3,682,280	3,311,243
Chicago & Milwaukee El. Ry. Co...	June 30	152,959	117,966	84,632	66,558
Cincinnati, Newport & Covington Ry. Co.....	a June 30	384,638	369,938	223,546	220,145
Cleveland El.Ry.Co	June 30	2,149,999	1,649,304	980,890	637,321
Cleveland, Painesville & Eastern ..	Apr.30	119,666	102,359	61,454	50,781
Denver City Tramway .....	June 30	1,395,179	1,262,915	647,964	497,233
Detroit United Ry..	a June 30	1,263,546	1,150,728	569,035	493,249
Herkimer, Mohawk, Ilion & Frankfort Ry. Co.....	May 31	48,895	47,026	20,247	21,063
International Tr...	May 31	2,698,332	2,331,632	1,303,216	1,085,748
London St. Ry. ...	May 31	115,834	60,194	45,192	df. 6,673
Montreal Street Ry. *	June 30	1,349,214	1,256,116	.....	.....
Northern Ohio Tr..	a Apr.30	162,251	.....	58,217	.....
Olean St. Ry. Co....	Apr.30	43,019	39,322	21,735	18,475
Pittsb'gh Cons. Tr..	b June 30	768,913	731,948	403,567	379,447
Richmond Trac.Co.	c June 30	152,051	143,217	58,379	65,630
Rochester Ry.....	May 31	89,156	835,543	337,248	328,021
Scranton Ry. Co...	May 31	554,095	548,044	233,677	249,802
Southern Ohio Tr.	a June 30	142,956	126,640	55,937	56,018
Syracuse R. T. Ry.Co	May 31	564,347	504,191	254,458	211,962
Twin City R. T. Co.	May 31	1,178,258	1,086,395	614,594	548,433
United Tr. Co. (Albany).....	June 30	1,340,356	.....	186,131	.....
United Tr.Co.(Pittsburgh).....	Mar 31	1,434,145	1,321,158	634,423	604,154

\* Nine months. † Caused by strike of employees. a From Jan. 1.  
 b Three months. c Nine months.



## NEWS OF THE WEEK

## CONSTRUCTION NOTES

MOBILE, ALA.—The Mobile Light & Railroad Company has decided to make some important changes at Monroe Park. The grounds are to be re-modeled and a spacious dancing pavilion is to be erected.

BIRMINGHAM, ALA.—The Birmingham Railway, Light & Power Company is reported to have contracted with the St. Louis Car Company for \$130,000 worth of rolling stock, the same to be delivered by October 1.

BIRMINGHAM, ALA.—The Birmingham Railway, Light & Power Company has completed plans for the erection of a new and modern car house to replace the one burned several months ago. The house will be located at the corner of Avenue F and Twenty-Second Street, and the plans call for a structure of brick, cement and steel. Its size will be 250 ft. front and 190 ft. length. The capacity of the building will be about one hundred cars.

BIRMINGHAM, ALA.—The Birmingham Railway, Light & Power Company will commence, according to Mr. Jemison, the president, to equip the 6 miles of steam line between Birmingham and Bessemer with electricity within thirty days. When this is done a schedule of forty-five minutes between the two points, 12 miles, will be established. The \$1,000,000 set aside for improvements has also begun to be used. Twenty cars of new 60-lb. rail are being laid, and the entire system will be put in first-class order.

LOS ANGELES, CAL.—There is much speculation here in regard to the move of the owners of the San Gabriel Valley Transit Company in placing that road, which had virtually been abandoned, in operation again. Rumor says that the line is to be equipped with electricity; that it is to act as an outlet for the interurban electric railways, and, again, that the owners now fully appreciate for the first time the value of the franchise they hold. The grant of the company says that the franchise is to be declared void if the line is not operated regularly, but the franchise has never legally been declared void. The San Gabriel Valley Rapid Transit Railway was built in 1888 by local capitalists, prominent among whom were W. G. Kerckoff, F. Q. Story and the late E. F. Spence. The line originally was narrow gage, and extended to Arcadia and Monrovia. The builders, finding the narrow gage impracticable, changed the property to standard gage before they sold out. The Southern Pacific, the owner, still utilizes that part of the Rapid Transit lying between Shorb and Monrovia.

BRIDGEPORT, CONN.—The Connecticut Railway & Lighting Company has made application to Judge Roraback of the Superior Court for permission to extend its lines to Watertown. The proposed extension of the Connecticut Railway & Lighting Company will parallel the tracks of the Watertown branch of the New York, New Haven & Hartford Railroad, and the company must secure the consent of a Superior Court judge before the extension can be made. At the present time the New York, New Haven & Hartford Railroad runs ten trains a day each way, and a lively session is expected July 23, when the application is heard.

SOUTHINGTON, CONN.—The Connecticut Railway & Lighting Company has abandoned the proposed line to Waterbury from Queen Street. The route over which the company will build is from Waterbury to Cheshire, where it will branch off, one line going to Mt. Carmel, to connect with the New Haven cars, and the other to Milldale, to connect with the lines of the Meriden, Southington & Compounce Tramway Company.

HARTFORD, CONN.—The Hartford & Springfield Street Railway Company has been organized to construct an electric railway to connect Hartford and Springfield. The new road will be 25 miles in length, and will enter Springfield over the tracks of the Springfield Street Railway Company, and enter Hartford over the tracks of the Hartford Street Railway Company, advantageous arrangements having been made to effect such entrance. The capitalization of the new company will be \$375,000 5 per cent, twenty-year bonds and \$375,000 stock. All the securities have been placed. Messrs. Tucker, Anthony & Company are largely interested.

ATLANTA, GA.—The Atlanta Railway & Power Company has taken out a building permit for the erection of its new car house on Edgewood Avenue, near Piedmont. The building will be a one-story brick structure, and will cost \$14,000.

ATLANTA, GA.—At a recent meeting of the board of directors of the Interstate Fair Association, a grant was given the Atlanta Rapid Transit Company to construct a line through Exposition Park, from the Piedmont Avenue entrance up through the park back of the auditorium and around the northern portion of the race track to the coliseum. The new line running into the park will offer additional facilities to and from the city, and will make the park more accessible than ever before.

MOLINE, ILL.—The Moline, East Moline & Watertown Street Railway Company, which proposes to construct an electric railway to connect Moline, East Moline and Watertown, has perfected its organization, and elected the following officers: C. H. Deere, of Moline, president; Upshaw P. Hord, of Aurora, vice-president; Frederick W. Rank, of Moline, secretary; Lyle D. Taylor, of Chicago, treasurer; C. H. Deere, L. D. Taylor, F. W. Rank, U. P. Hord, Frank Y. Keator, directors.

DANVILLE, IND.—Plans for constructing the interurban electric railway from Danville to Indianapolis are progressing rapidly. A company, headed by Henry Leasuu, of Cincinnati, has been incorporated under the name of the Indianapolis, Danville & Western Traction Company. Contracts for private right of way are being signed, and work is to commence soon.

KNIGHTSTOWN, IND.—A. D. Ogburn and L. P. Newby are interested in a plan to construct an electric railway from Knightstown to New Castle, to connect with the proposed electric railway from Indianapolis to Richmond. It is reported that the promoters contemplate employing the storage battery system.

MARION, IND.—The City Council has granted the Cincinnati, Richmond & Muncie Railway Company a franchise for the construction and operation of an electric railway through Muncie. When the proposition to vote a subsidy toward this line was defeated last spring, the company announced that it would go around Marion. The company has, however, reconsidered its action, and Marion will be one of the principal points on the line.

PERU, IND.—Preliminary steps have been taken by business men of this city toward the building of an electric railway to Gilead and other small towns in the northern part of the county.

DUNKIRK, IND.—The vote to grant a subsidy to the Ohio & Indiana Traction Company, in Penn, Knox and Richland townships has been passed, thus practically assuring the road to Dunkirk.

VALPARAISO, IND.—Parker & Company, Indianapolis bankers, have secured control of an electric railway franchise, voted here to Grant Mitchener, of Indianapolis, last fall, and have announced that they will build the road through the county and establish a summer resort on Lake Michigan Beach, near Chesterton.

WATERLOO, IA.—It has finally been decided to construct an electric railway between Waterloo and Denver, a small inland town. The line will be about 13 miles in length, and will touch a rich farming section now without railroad connections. Samuel Kern, of Charles City, has the contract for grading. The route has been surveyed, and everything is in readiness for immediate construction. Of the 13 miles of road, 10 miles will lie in one straight line due north and south, and the grades will be comparatively light. The track will be laid with 60-lb. rails, on heavy ties, with 2 ft. of gravel ballast. The estimated cost of construction and equipment is \$190,000. The line will be operated in connection with the Waterloo & Cedar Falls Rapid Transit Company's line. The company intends to institute a regular two-hour service between the two cities, and for this service it is having built a number of combination passenger, baggage and express cars.

DES MOINES, IA.—The Des Moines City Railway Company is rushing the work of constructing the extension of the Walker Street line to Grandview Park. The grading has been nearly all completed, and the laying of the rails is progressing rapidly. The company expects to have the line completed and ready for operation by Aug. 15.

DES MOINES, IA.—Nearly all of the right of way for the electric railway between Des Moines and Nevada, Ia., which is being constructed by the Des Moines, Eldora & Northern Railway Company, has been contracted for. The work of grading will commence at once. It is the desire of the company to complete this portion of the line as soon as possible.

NEW ORLEANS, LA.—The plans for the construction of the proposed electric railway between New Orleans and Lake Pouchatrain are rapidly being perfected, and the promoters have organized a company to build the line. The capital stock of the company is \$350,000. A. H. Prentzel is president of the company, and George S. Kausler, vice-president.

AUGUSTA, MAINE.—At the annual meeting of the Augusta, Hallowell & Gardiner Street Railway Company, the following directors were elected: John F. Hill, J. Manchester Haines, George E. Macomber, Thomas J. Lynch, George A. Cony and Henry G. Staples, of Augusta, and Fred S. Thorne, of Gardiner. J. Manchester Haines was elected president of the company, and George E. Macomber, treasurer.

WESTMINSTER, MD.—The Baltimore, Westminster & Gettysburg Electric Railway Company has secured franchises in New Oxford, East Berlin and Abbotstown. The right of way from Gettysburg to the Maryland line has been secured, except about 200 ft. on the pike at Littlestown.

HAGERSTOWN, MD.—The Hagerstown & Boonsboro Railway Company has incorporated to build an electric railway to Boonsboro from Funkstown, 9½ miles. The capital stock of the company is \$120,000, and the incorporators are: Christian W. Lynch, William Jennings, J. Clarence Lane, Henry H. Keedy, Jr., and J. Irvin Bitner.

SPRINGFIELD, MASS.—Frederick T. Ley & Company, of Springfield, who did the preliminary work for the Berkshire Railway Company, has been awarded the contract for the construction of that company's lines from Cheshire to Great Barrington, a distance of 42 miles. The contract price is said to be \$600,000.

WESTBORO, MASS.—The Westboro & Hopkinton Street Railway was granted a charter July 22. This line will form a link in present chain of electric roads between Boston and Worcester, and considerably shortens the distance. A continuous line under single ownership is also thus established for about 27 miles, between Needham and Westboro. The route thus formed, while more direct than existing lines, is still somewhat longer than that planned by the Boston & Worcester Street Railway Company, which has now secured franchises over two-thirds of its total run, and hopes to be running in a year or so.

STOW, MASS.—The Concord, Maynard & Hudson Street Railway Company has received a location in Stow. The road will be rapidly pushed to completion.

WESTFIELD, MASS.—The Westfield Valley Electric Railway Association has been formed in the interests of a new electric railway up the Westfield River Valley. The officers of the association are: H. J. Stratton, of Holyoke, president; R. J. Morrissey, of Westfield, A. L. Quance, of Russell, H. E. Stanton, of Huntington, E. W. Boise, of Blandford, J. C. Cooper, of Chester, and C. F. Burr, of Worthington, vice-presidents; J. H. Dickinson, of Huntington, secretary and treasurer; F. C. Patterson, of Huntington, E. D. Parks, of Russel, J. E. Cooney, of Blandford, F. B. Mason, of Chester, John E. Witherell, of South Worthington, Albert Rothery, of Westfield, executive committee. The Westfield Board of Trade heartily indorse the efforts being made for the construction of the electric railway.

**NORTH ANDOVER, MASS.**—The Railroad Commissioners have dismissed the petition of the Selectmen of North Andover for a relocation of the Lowell, Lawrence & Haverhill Street Railway in North Andover, near the Boston & Maine.

**AMESBURY, MASS.**—Soule & Dillingham, of Boston, have begun work on the extension of the Amesbury & Hampton Street Railway Company from the Seabrook main road line through South Seabrook to the beach, and running to the beach and across Hampton River, making connections with the electric railway in Lovell.

**LEICESTER, MASS.**—The Auburn Street Railway Company has withdrawn its application for a franchise through Leicester, in favor of the Rochdale & Charlton Depot Street Railway Company.

**MILFORD, MASS.**—The Milford, Woonsocket & Attleboro Street Railway Company will use the North Attleboro branch of the New York, New Haven & Hartford Railroad, in order to enter Attleboro from Plainville. This branch will be soon abandoned by the New Haven road. The Milford, Woonsocket & Attleboro Street Railway Company will operate electric cars on this branch, which will give a direct line from Attleboro to Woonsocket.

**WORCESTER, MASS.**—The Worcester Consolidated Street Railway Company will enlarge its power station on Sutton Lane, Worcester. Another engine and generator and new boilers aggregating 1800 hp will be added. The power station at Leominster will be maintained permanently, and probably additional water power will be acquired to add to its capacity. It is said that the company contemplates shutting down the power stations at Berlin and Fitchburg. It is not decided what will be done with the station at Northboro, but it is likely to be abandoned. The Sutton Lane station will become the main plant, and practically all the power will, in the future, be supplied from that plant.

**STANDISH, MICH.**—S. E. Hayes, of Standish, is interested in a plan to construct an electric railway from Standish through Turner, Maple Ridge and other northern towns.

**MINNEAPOLIS, MINN.**—President Lowry and General Manager Held, of the Twin City Rapid Transit Company, recently inspected the district about White Bear Lake, and as a result of this inspection, it has been decided to next year extend the White Bear-Stillwater line from Mahlowedi, on White Bear Lake, to White Bear, a distance of 5 miles.

**KANSAS CITY, MO.**—The Metropolitan Street Railway Company is constructing a mile of double track on its suburban line to Independence, Mo.

**PATERSON, N. J.**—Arrangements are being made to extend the lines of the Jersey City, Hoboken & Paterson Street Railway Company from Paterson to North Paterson, with the ultimate intention of extending the lines to Ridgewood, Bergen County. Consents of property owners are now being obtained.

**ELIZABETH, N. J.**—The Springfield Township Committee has granted a year's extension of time from July 1 last to the Elizabeth, Plainfield & Central Jersey Street Railway Company, which is the successor of the Elizabeth & Westfield Company, in which to construct an electric railway line from Westfield to Springfield. The original franchise at Springfield was obtained in July, 1899, one year being given in which to complete the construction of the line.

**UTICA, N. Y.**—Surveys are now being made for the extension of the Utica Belt Line Street Railroad from Hartford to Clinton, and the construction of the line will be begun so that it can be completed this year. The route, for the most part, is a private one.

**ALBANY, N. Y.**—Stone & Webster, of Boston, have received a proposition from the promoters of the Albany & Schoharie Valley Electric Railway, but they have not gone over the ground, and do not at present know whether they shall be able to do so or not.

**BROOKLYN, N. Y.**—The Brooklyn Rapid Transit Railroad Company has purchased the property necessary for the construction of the incline from Jamaica Avenue to the terminus of the Brooklyn Elevated Railroad at Crescent Street, in East New York. The construction of an incline at this point is hailed with delight by the residents of Jamaica and East New York, as it will give them increased facilities.

**ROCHESTER, N. Y.**—The Monroe County Electric Belt Line Company was incorporated July 18, with a capital of \$250,000, to construct an electric railway 20 miles long in and through the towns of Brighton, Penfield, Herinton and Pittsford, and in the villages of Brighton, Penfield, Fairport, Despatch and Pittsford. The directors of the company are: George W. Aldridge, Merton E. Lewis, Percy L. McPhail, Ira M. Luddington, of Rochester; Andrew H. Bacon, of Penfield; William A. Parce and D. C. Becker, of Fairport; W. H. Rowerdink, of Brighton, and Fred W. Guernsey, of Pittsford. The company has practically perfected its plans for the construction of the line, and the filing of articles of incorporation is in accord with the purpose of the company as recently outlined in the *STREET RAILWAY JOURNAL*.

**ROCHESTER, N. Y.**—The Loraine Steel Company, which has the contract for welding the tracks of the Rochester Railway, has begun that work.

**LITTLE FALLS, N. Y.**—The Mohawk Valley Traction Company was incorporated July 23, with a capital of \$80,000, to construct an electric railway in Little Falls, and thence to and through the village of Herkimer. The directors of the company are: Senator James D. Feeter, Timothy Dasey, J. Judson Gilbert, Fred G. Teall, and M. G. Bronner, of Little Falls; Henry Churchill, Irving B. Davendorf and Henry G. Munger, of Herkimer, and James D. Smith, of New York City.

**LIMA, OHIO.**—McBeth Park, which was reported in the *STREET RAILWAY JOURNAL* as having been opened by the Western Ohio Railway Company, is owned by the Lima Electric Railway & Light Company, and Western Ohio Railway Company, jointly, and the Lima Electric Railway & Light Company is running all of the cars to the park. The Western Ohio Railway has not as yet run any cars to the park.

**NEWCOMERSTOWN, OHIO.**—The Urichville-Newcomerstown Electric Railway, which is to be built by the White Improvement Company, is now perfecting its organization, and will shortly be incorporated. The length of the road to Newcomerstown will be 18 miles, with a possible future extension of 16 miles to Coshocton. The road will be practically level most of the way. All preliminaries have been completed, but the amount and character of the equipment has not finally been determined. The road will enter Newcomerstown by way of the "Grand Boulevard," a thoroughfare extending for several miles eastward of the town, with a width of 100 ft. The Boulevard will be lined with native American elms and sugar maples for its entire length, and the whole line is laid through some of the most charming scenery in the United States. It is expected the new line will eventually become a link in a system extending from Cleveland to Cincinnati.

**CLEVELAND, OHIO.**—The Findlay & Southern Railway, which is promoted by R. Rosenstock & Company, of this city, has unearthed a novel situation in Hardin County. It is claimed that the Big Four Railroad (steam) is operating between Kenton and Forest on a right of way to which it has no legal claim. It is said the route was originally owned by the old Mad River Railway, the first road in Ohio. It was built through forest land, and it is claimed that no right of way was even asked for. The new company claims to have secured the right of way, and states that it will ask the steam road to vacate.

**ALLIANCE, OHIO.**—Construction work has been started on the Stark Railway Company's extension from this place to Sebring. The line is being built on private right of way. Eastern people have purchased a large tract of land on the line near this city, and will establish a summer resort.

**CLEVELAND, OHIO.**—The Hillsboro & Ohio River Traction Company has been incorporated by Henry M. Huggins, of Cincinnati; Thomas H. Hogsett and Charles Orr, of Cleveland; Monroe Warner, James E. McDermot and O. Z. Blair, of Hillsboro. Capital stock, \$10,000. Messrs. Hogsett and Orr are interested in the Little Miami Traction Company, and the Xenia & Wilmington Traction Company, and it is proposed to extend the latter road to Hillsboro, where it will connect with the line just incorporated, thus forming a through road from Springfield to the Ohio River at Aberdeen. The new line will open up a fine farming country, which has been comparatively isolated.

**LIMA, OHIO.**—The Allen County Commissioners have granted a franchise to the Lima, Lewiston & Bellefontaine Railway Company, which proposes to build from Lima to Lewiston and Bellefontaine.

**COLUMBUS, OHIO.**—Work of grading is being pushed on the line of the Columbus, New Albany & Johnstown Railway, and large quantities of ties and rails are being distributed.

**CLEVELAND, OHIO.**—The Electric Depot Company, which was formed by representatives of the various interurban companies centering here, has closed a deal for the purchase of a site, facing 132 ft. on Bolivar Street, and 115 ft. on Eagle Street, the depth of the lot being 387 ft. The price paid was \$81,100. Tracks will run from Erie Street on both Eagle Street and Bolivar Street, and an ordinance is being prepared asking for franchises which will make it possible to build a loop through the station. Plans for the building are being prepared, and work will start at once.

**FREMONT, OHIO.**—The Kerlin Brothers Company, promoters of the Tiffin & Port Clinton Railway, have closed a deal for the purchase of the right of way held by the Lakeside, Napoleon & Western Railway Company, the line owned by the Fremont Street Railway Company and the power house and short line owned by the Creager Electric Light Company. The consideration for the properties is said to have been \$35,000. This simplifies the rivalry which has existed for some months for a line from Fremont to Port Clinton, reducing the number from three to two.

**FINDLAY, OHIO.**—The Findlay & Southern Railway Company, which is promoted by J. Rosenstock, of Cleveland, has applied for a franchise to enter the center of the city, right of way for the entire route from Columbus to Findlay having been secured. The road will be built on an entirely private right of way, and speed sufficient to compete with steam roads is aimed at.

**CINCINNATI, OHIO.**—Through the instrumentality of the Fall Festival Association, which entertains thousands of visitors during the latter half of September each year, special excursions will be run by the Cincinnati Traction Company over picturesque routes of the city and suburbs. The cars will be of a palatial pattern, and will be equipped with ice water, light refreshments and special attendants. The start will be made from Fountain Square, and no stops will be made until the return, except to let off passengers.

**CINCINNATI, OHIO.**—A franchise has been granted jointly to the Cincinnati, Milford & Goshen Street Railway Company, and the Cincinnati & Columbus Traction Company over the Milford bridge, which crosses the Little Miami River at the junction of Hamilton and Clermont Counties. The Goshen road will run from Cincinnati along the east bank of the Little Miami to Goshen, the Columbus road will reach the bridge from the east.

**TOLEDO, OHIO.**—It is probable that the Toledo, Fostoria & Findlay Railway Company will build a spur line to Prairie Depot from its main line to Toledo.

**DAYTON, OHIO.**—The Dayton & Troy Electric Railway Company, which has about completed its line to Troy, has applied for a franchise in certain city streets to enable it to reach the tracks of the People's Railway Company, thus securing access to the center of the city. The company also desires franchises for several curves in the city, to form a city loop and for curves to enable it to enter an interurban station, should one be built.

**CLEVELAND, OHIO.**—The Northern Ohio Traction Company has made application to the County Commissioners for permission to double track the Akron, Bedford & Cleveland line from Cleveland to Bedford.