

flour will have been won, but it is evident that the game can be played the year around with any article under the sun that is to be pushed into notoriety. Indeed, the scheme has some aspects which would enable the street car, like the innocent fan motor, to aid indulgence in the gambling habit upon the part of those who have time to while away, and the "missing ad" may yet take its place with the "missing word" as a provocative to the excitement and gaiety of nations.

Street Car Education

Possibly the remark is not original with us that few people know how to ride in a street car, and we are perfectly willing to have someone enjoy the credit of getting off that truth if thereby its general acceptance is promoted. The trouble is that most passengers imagine that when they have paid their fare that is the end of their responsibility. In reality, their responsibility during the ride for which they have thus contracted has but begun. We are heartily glad to note this serious and essential transportation axiom enlarged upon in the *Pittsburgh Times*, which bravely and gravely devotes nearly a column to the caption of this editorial note. The author of the neat little sermon asserts—and who shall say him nay?—that there are lots of good folk who can neither get on a car properly nor off it, and who do not know how to conduct themselves while on the car. They hail it from the wrong side of the street or on the wrong side of the right side. They fall all over everybody when they get on, they knock everybody down when they get off. They never have the fare ready, and they never ask for a transfer until "transfer time" is over and past. In short, if there is anything they can do to madden the busy, tense conductor, or make the trip a misery to fellow passengers, it is done. We are not describing "ideal" or fictitious personages, but simply taking the heads of discourse of our unknown Pittsburgh friend and brother.

And then, "Move up in front." This Pittsburgh critic points out that such an adjuration should hardly be necessary, but we all know that the conductor does not say it for fun or from mere habit:

It is never necessary for the conductor to tell the educated rider to move forward, but, that the mass are utterly uneducated, so far as the trolley is concerned, is shown by the fact that they nearly all stand as near the door as possible, and subject themselves, as well as everybody else, to the maximum of inconvenience, and will not budge until they are pushed forward. You can see the difference between the educated and the uneducated at a glance by the very manner in which they sit down. The latter sit as if they expected the car to jump from under them at any moment, like a balky horse, and they stow themselves so unscientifically that their feet are liable to be trodden upon by those passing through the aisle, and though their position is uncomfortable they are apt to take up at least one-third more room than they are legitimately entitled to.

At first glance, we were inclined to think that the Pittsburgh journalist was writing merely about his neighbors and fellow townsmen, but, after all, his remarks seem to have the wider range of application and publicity that we are now giving to them. A trolley school of deportment, presided over by some competent person, is the next innovation in order.

Vice Diffusion by Trolley

We have seen many hard sayings and dark accusations leveled against the trolley, but the strangest complaint is surely that which was embodied in the remarks made at a recent meeting of the Central New York Farmers' Club in Utica, when the relations of the trolley to agriculture were discussed. One of the speakers, and he the president, said, "I fear that if the trolley extends much further it will prove an injury to the farming community, in some directions at least. The country is the nursery of virtue, the place where the children are brought up to strong manhood. Now, the trolley, as we had example in New Hartford, carries the vices of the city to the country and spreads its evils abroad to the detriment of the community. It is claimed that the trolley will increase the price of farm lands, but that will only be making it

more difficult for the young man to own a farm of his own. The trolley doubtless injures business in the small villages." All we can say is that if the virtue of the country is of such a hothouse kind that the fresh air let into a rural community by the trolley is going to injure it, then the sooner a tougher sort of virtue is produced the better. How about the virtue, culture, enterprise, new ideas and general toning up that the trolley has brought into many a group of isolated, backward farming homes? It would be interesting to know just what the vices taken into New Hartford by the trolley were, whether there actually were any, and whether they did not get into that center of purity and simplicity over some other tracks. Such talk about the superior virtue of the countryside that cannot stand the introduction of the trolley makes us not a little weary and disgusted.

Fortunately, American farmers are not in general creatures of bigotry and prejudice, and at this very meeting many of them spoke up at once for the trolley and had good words to say for it. John W. Wood said he thought the trolley the greatest revolutionizer of the age and is going to be a great benefit to the farmer. "As to the vices of the city intruding themselves upon the country," he said, "I think the virtues of the latter will offset their evil. The country will be benefited as well as the city, especially when freight cars are introduced. But you must get out of the rut of peddling in the city and have instead a market. A market such as they have in other cities is the proper thing. The trolley, from the standpoint of the farmer, cannot be made a success without a market place. I don't think the trolley will have a tendency to reduce the size of farms, and I for one am not in favor of small farms. We are not all adapted to the intense farming which the small farm calls for."

Another member urged with truth that the trolley so far from killing the life that there was on the farm, was bringing new life to it, while another remarked wittily that if the country had so much virtue to export, the trolley was there to ship it to the wicked city where it was so greatly needed. On the whole, the trolley came very well out of the fray, and when Central New York gets more of it we don't suppose its percentage of virtue will be the smallest fraction less than it is now.

The Finances of Interurban Electric Railways

One of the striking developments of electric railway traction during the last three or four years has been the construction of interurban electric railways. At first these were naturally extensions of city lines, which had been electrically equipped, and whose new motive power allowed them successfully to extend to adjoining suburbs and towns to which street transportation by the old horse-car system would have been too tedious and costly. From this modest beginning nearby towns were gradually connected, until now a special type of electric railway, radically different from its predecessor, the city road, is a common and popular form of electric railway engineering and investment. Indeed, so successful have the early projects of this nature been, that interurban electric railways are now being projected and constructed by the wholesale along the highways and through the fields of most of our prosperous States, and they are rivaling in extent and traffic many of the shorter steam railroad systems of the country. That a large part, if not most, of the interurban railways which have been constructed up to the present time are legitimate additions to the transportation facilities of the country, and that they are, and will be able, to sustain themselves and earn a good profit for their owners there is no question. The interurban electric railway possesses many intrinsic merits, and if judiciously installed, with due regard to possible gross earnings and inevitable expenses, and if constructed with a consideration of the future, as well as of the present, little difficulty will usually be found in securing the capital necessary for their completion.

It cannot be denied, however, that the very fact that the greater part of the interurban roads which have been built have shown an excellent profit has led to the impression, more or less

widely diffused, that all roads of this kind are Golcondas, which need only to be built to turn into the pockets of their promoters and stockholders' inexhaustible streams of wealth. Nothing is further from the truth, and while we have on many occasions pointed out the advantages which roads of this kind possess, if properly constructed, we deem it equally our duty to sound a note of warning that greater discretion must be used in the construction of these roads if builders expect to recoup their investments in them and return a reasonable profit to the stockholders. There is no doubt that many of the errors which were committed in the early days of steam railroading, and to a certain extent in electric railroading in this country, are being repeated in certain States at the present time in the case of interurban electric railways, as anyone can judge who has watched the number of papers of incorporation taken out at the capitals of nearly all of our larger States, or who has had occasion to inspect some of the many projects of this kind which are brought to the bankers of our largest cities for assistance in financing. So many of these cases have been brought to our attention that, in view of the fact that our legislatures in the various States will undoubtedly be very busy during the next two or three months in grinding out charters for new railway companies, and as spring is not far off, when many of such companies will naturally commence active construction, this may be an appropriate time to refer to some of the rocks which may cause shipwreck unless care is taken in advance to avoid them.

Perhaps the first fact to be borne in mind by the promoter and general investor in this class of railways is the important one that interurban railways to be successful must depend upon other conditions than simply that electric motive power is used. There is no use in running cars if there is no one to ride on them, or of extending roads through practically barren territory in the hope that population will follow the car. This can be done in some cases, but that a riding population can be assured by the construction of even the best interurban railway is something upon which reliance cannot be implicitly placed. It is also a fact which electrical engineers and promoters should realize as soon as possible that because a certain community can support a steam road it is by no means certain that they can support a parallel electric road, or an electric road instead of a steam road. Electricity has beaten steam in the fight for traffic in so many localities that some people seem to believe that an electric road can live where a steam road cannot, but nothing is further from the truth. Each has its own particular field, and that of the electric road is not that of a sparsely settled territory, where the distances traveled are long and the service infrequent. Undoubtedly an electric road running motor cars every hour in a territory of this kind would carry more people than a steam road running a train once or twice a day, but the steam road might be able to make that train pay operating expenses, while the electric cars would not, even if they stopped at every corner and landed passengers at the doorsteps of the houses where they wished to go.

A second consideration to be borne in mind in interurban electric railroading is that, as in city construction, it is poor economy to attempt to use light construction and poor material. We speak of this because, while the principles of good railway engineering are well defined, a considerable part of the interurban railways now being built are not being carried out by engineers or others with experience in electric railroading, but by promoters whose idea seems to be simply to construct a road which will run for two or three years, or for a long enough time to make a showing upon which the property can be sold. The result is a 50 or 60-lb. rail, often on no ballast, insufficient feeders, light cars and a cheap and uneconomical power station; in other words, a construction which will inevitably go to pieces within a half a score of years or less, but usually after the original owners have sold out, thus adding to the aggregate length of useless and undesirable electric track.

Still a third fact to be remembered by railway builders and investors, and this applies to city roads as well as to interurban

properties, is that the expense of the first three years of a railroad property affords no criterion of the true operating expenses. When a road starts everything is new; the car bodies, trucks and motors will probably during this time require very few repairs; the roadbed is, or should be, of good construction, and very little will be needed by it in the way of maintenance and upkeep; the power station is also presumably up to date in equipment, and the road as a whole will run for a considerable time with the expenditure of very little money in the way of maintenance. Unfortunately, however, this condition will not keep up indefinitely, as "moth and rust will corrupt," parts will wear and armatures and fields will burn out. It is safe to say that, considering not only the wear to which parts are subjected but also the improvements in apparatus which are certain to be made, twenty years is the maximum life of practically every part of an electric railway except its franchise, and the life of most parts is very much less than this period. A conservative allowance for depreciation of even a well-built and up-to-date plant would be at least 10 per cent of the gross receipts, and we know of some companies who charge off for current renewals and a depreciation fund as much as 20 per cent of their gross receipts.

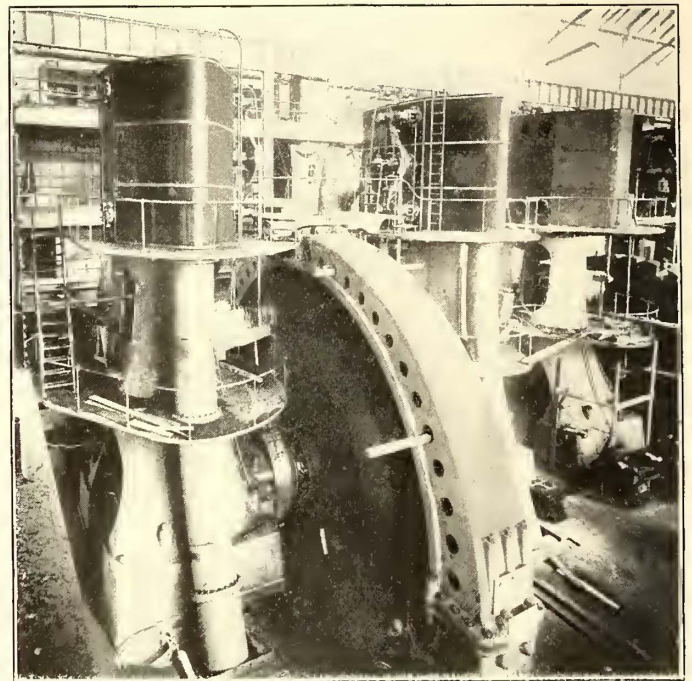
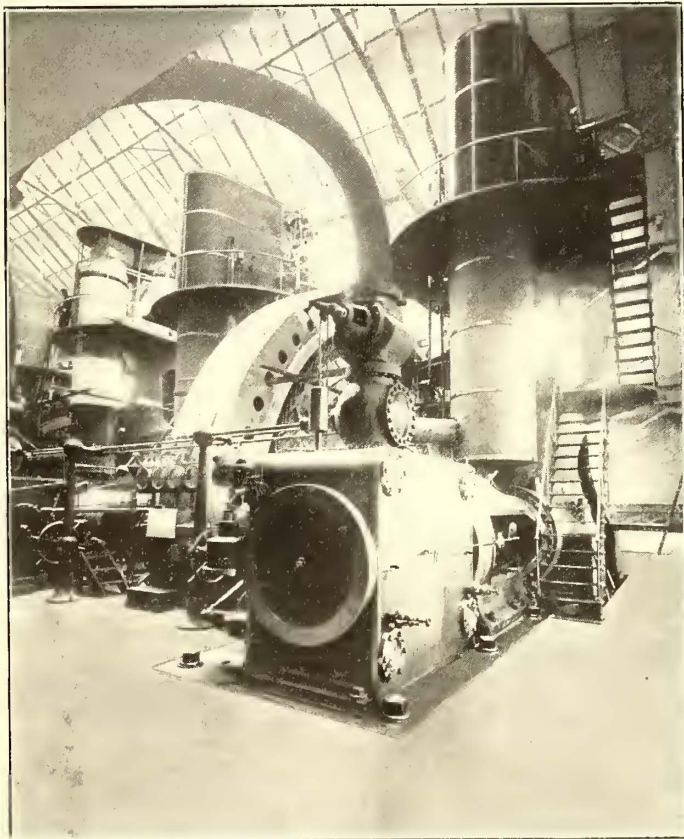
There are many other factors which go to make up the successful interurban electric railway, such as the possibility of hauling light freight and thus providing an additional source of income, careful economy and judicious management. All of these and many other points, which have been discussed many times in these pages, often account for the difference between a profit and a deficit. The duties and requirements of the manager of the interurban and city railway, which is working on a slight margin between operating expenses and gross receipts, are multifarious and call for the exercise of the greatest discretion and ability. These are, however, subjects which affect more the operation of the road after it has been built rather than the main principles which govern or should govern the construction of the road in the first place. We lay special stress on these points from the fact that not only do the interests of the road themselves suffer, but the general industry is affected adversely by the construction of a non-paying property, as so much capital as is required in its construction is tied up from investment in companies which would pay a return, and the fact that it is so tied up acts as a deterrent on the investment of other funds in electric railways.

The New York Central Tunnel Disaster.

The terrible accident which occurred on the morning of Jan. 8 in the Park Avenue tunnel of the New York Central Railroad again demonstrates the unsuitableness of steam as a motive power for underground tunnels in city transportation service. As far as the evidence appears at the present time, the tunnel was fully protected by block signals which, however, could not be seen by the engineer of the rear train on account of the steam and smoke emitted by both locomotives in the tunnel. An official hearing will undoubtedly be had as to whether the engineer of the rear train was negligent, but whether this was so or not it is self-evident that in misty or snowy weather, and snow was falling at the time of the accident, the amount of steam and smoke ejected into the atmosphere by the locomotives makes it extremely difficult to follow any system of visual signals. The accident, then, simply emphasizes the crying necessity for a change in the motive power used in the tunnel from steam to electricity, and coming as it does on the heels of a Grand Jury inquiry and presentment, the condemnation of the tunnel by the Board of Health and the popular agitation on the subject last summer, it seems hardly possible that the change to electric power can long be delayed. The form that this will take is, of course, to be decided, or at all events announced, by the New York Central people in case they have decided upon the most desirable method. It seems almost impossible to imagine, however, that they have not done something definite in the way of plans for electrical equipment during the last six months, and we look for an early announcement that they have decided upon an early change from steam to electricity.

The Manhattan Elevated Railroad

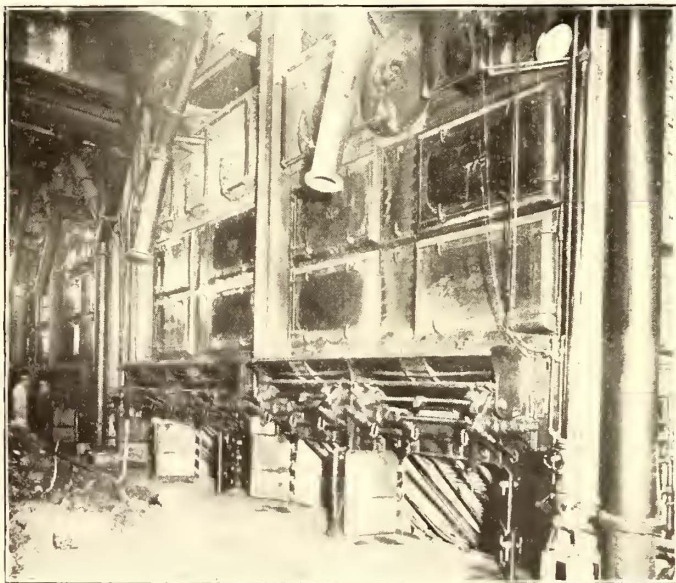
The electrical equipment of the elevated lines of New York City is rapidly approaching completion. On Dec. 30 the first train to be operated electrically over any considerable section of the road was run on the Second Avenue division. The power station had been



FRONT AND REAR VIEWS OF 8000-KW GENERATING UNIT

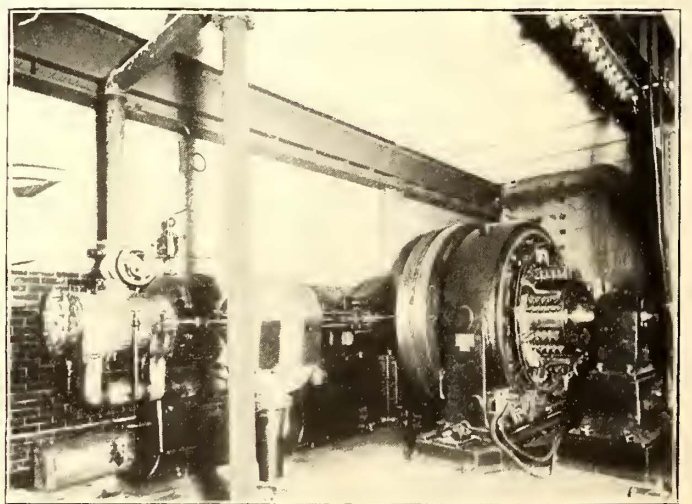
started some weeks before, and everything is now in readiness for the substitution of electricity for steam on the Second Avenue division, the first to be operated electrically. Enough motor cars have not yet arrived, however, to make this change all at once, and the electrical trains will probably be sandwiched in between those drawn by steam locomotives, until the entire line is equipped. Invitations

were issued for Thursday, Jan. 9, when the formal official trip was made, and the president, directors and a number of prominent engineers and financial men had a chance to inspect the



VIEW IN BOILER HOUSE

cal cylinders. Each unit consists of two distinct engines, direct-coupled to a 5000-kw Westinghouse 11,000-volt generator, placed between them. At 75 r. p. m., the normal speed, current at 25 cycles is produced. The cranks are placed at an angle of 135 deg., so that eight impulses are received by the shaft during each revolution, and this, together with the great weight of the revolving field, approximately 190 tons, renders an auxiliary fly-wheel unnecessary. Two views of one of these mammoth generating sets, by far the largest so far installed anywhere, are given, that taken from



ONE OF THE EXCITER UNITS

the back of the unit being made when the engine was running. The exciters consist of direct-connected generating sets. The engines are from the Harrisburg Foundry & Machine Company,

Harrisburg, Pa., and are of the tandem compound type, having a speed of 220 r.p.m. The dynamos were built by the Westinghouse Electric & Manufacturing Company, and are of 250 kw capacity. These exciting sets, of which there are four in all, are placed under the switchboard galleries. The e. m. f. of the ex-

headers are under the engine room floor, just south of the switchboard galleries. The connection between the headers and the high-pressure cylinders of the engines are made by arched 14-in. pipes, as shown in the view of the engine, herewith, the position being such that all the advantages of a short connection between cylinder



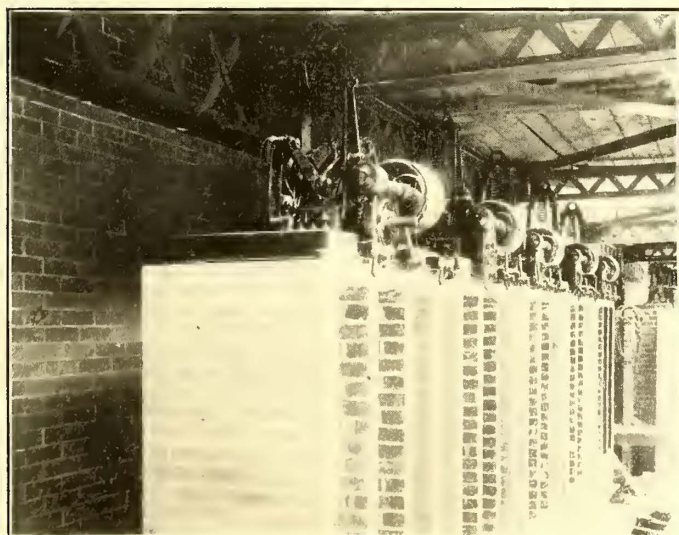
EXPERIMENTAL TRAIN ON THE MANHATTAN ELEVATED RAILWAY

citing current is 250 volts, and it is distributed to the alternators by a separate switchboard.

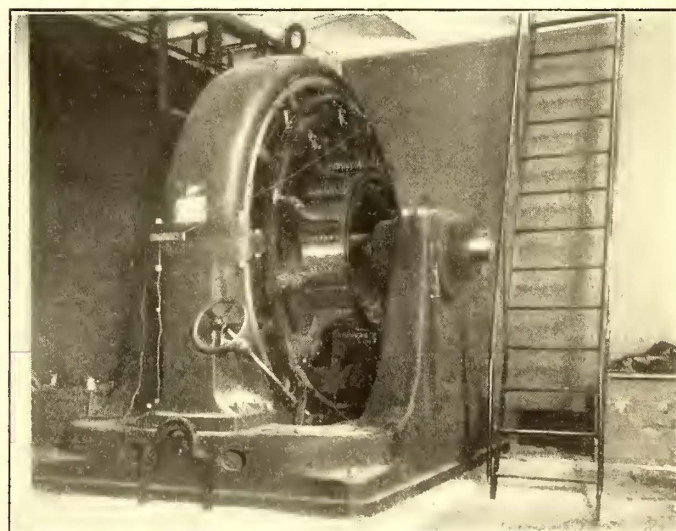
The steam piping of the entire plant was contracted for by the McLeod Company, of Chicago, and its installation is well advanced. A large number of the Babcock & Wilcox boilers, of which there are to be sixty-four, of 500 hp each, are already in operation, as seen from the accompanying view of the boiler room. These boilers are equipped with Roney mechanical stokers, which

and header are obtained. From the high-pressure cylinder a 16-in. pipe runs to the receiver, between the high and low-pressure cylinders. The rear view of the generating unit shows the exhaust pipes, which are joined together by a "Y" in the basement and lead directly to the Worthington jet condensers.

The view of the rotary converter shows one of the two which have been installed in sub-station No. 7, located at Third Avenue and Ninety-Ninth Street. All of the seven sub-stations are built on



MOTOR-OPERATED OIL-BREAK SWITCHES



ONE OF THE 1500-KW ROTARY CONVERTERS

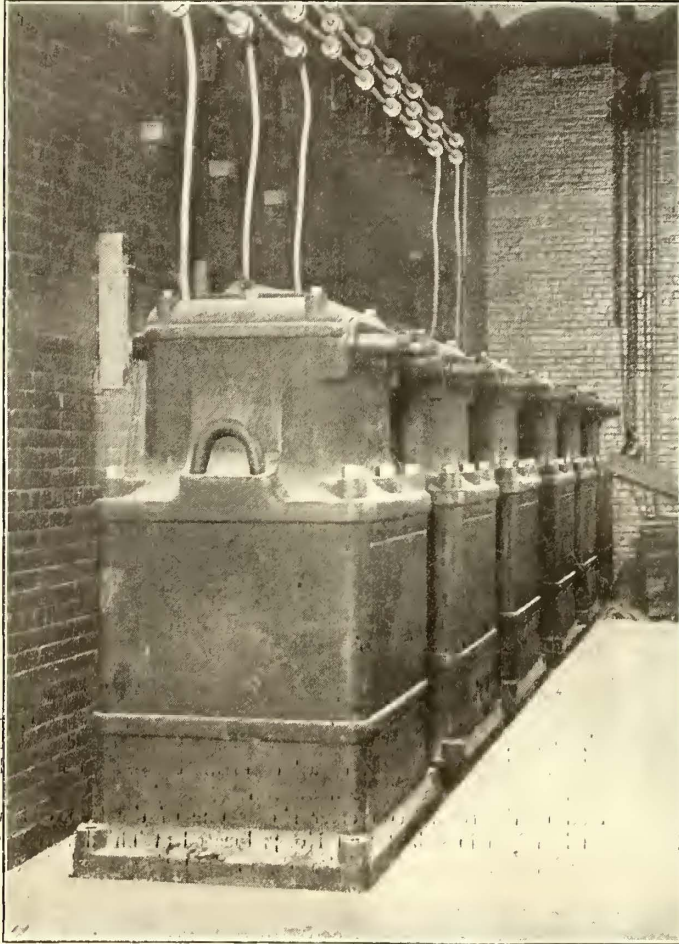
allow the plant to use any variety of coal. It has been estimated that were hand firing used, fully 270 men would be required in the boiler room alone, but that with the Roney stokers 90 men are sufficient. All the auxiliaries, such as feed water pumps, condensers, etc., are operated by electric motors, so that no exhaust steam is available for heating the feed water. The economizers, which were supplied by the Green Fuel Economizer Company, of Matteawan, N. Y., and contain 8102 tubes, will, however, be amply sufficient to raise the temperature of the feed water before it enters the boilers, to 300 degs., if not considerably higher. The main

similar lines, and contain apparatus of the same types, so that familiarity with one allows of the employees being transferred to any other. The rotary converters are rated at 1500 kw for continuous service, and will stand, for a period of several hours, a load of 2250 kw, or 3000 hp. They are of Westinghouse make, and are the largest rotaries ever built. They run at 250 r. p. m., and have a normal potential on the direct-current side of 625 volts. Current from the sub-stations is delivered directly to the third rail, no direct-current feeders being used on the elevated structure. Each rotary receives current at approximately 390 volts from a

bank of three 550-kw Westinghouse transformers. A view is given of the transformer equipment in one of the sub-stations.

Of the 300 cars which will ultimately form the rolling stock, 300 have been contracted for, and some already shipped. The Wason Manufacturing Company of Springfield, Mass., received the order for 250 cars, and the American Car & Foundry Company, of St. Louis, Mo., for the rest. Eight hundred trucks have also been ordered, divided equally between these two companies.

The train control is by the multiple unit system, made by the General Electric Company, of Schenectady, and Westinghouse air



TRANSFORMERS IN SUB-STATION

brakes will be placed on all cars. A special type of heater has been designed for this service by the Consolidated Car-Heating Company, of Albany, N. Y., which received the order for 21,600 heaters. Van Dorn couplers will be used. The cars will be run in five-car trains, with a motor car at each end and in the middle, and two "intermediates" as trailers.

The engineers and contractors for this gigantic enterprise are to be congratulated at the rapidity with which the work has been carried out. During the entire construction of the buildings and the installation of the apparatus, the greatest harmony has existed, and the original plans have been carried out almost to the letter. Had any lack of smoothness been present in the construction, or had the work been "held up" by the non-arrival of supplies or apparatus when they were needed, great expense would have undoubtedly resulted to the company, and the directors showed great wisdom in selecting for positions of responsibility only such men whose past experience fitted them for undertaking a power transmission scheme of this magnitude. The success which has attended the installation of the electrical equipment on the elevated roads of New York promises its reliable operation. The many novel features in the electrical equipment of the Manhattan Railway have made it the subject of much interest, and its future will be closely watched by both technical and financial men.

Not content with the improvements already made to its system, the Seattle Electric Company has recently devised plans for diverting from the cable to the electric lines much of its heavy traffic, thus doing away with many transfers. Permits for double-tracking one line, and constructing a number of connecting switches have recently been obtained.

Depot Transfer Business at Kankakee

The Kankakee (Ill.) Electric Railway Company has for some time carried on a passenger transfer business between the various railroad depots in that city, which is similar to the omnibus service for transferring passengers between depots in the large cities of the country. There are three important railroad depots in Kankakee. A person traveling from a point on one of these railroads can buy a through ticket to a point on any other railroad, passing through Kankakee, which will include the transfer via electric cars from one depot to the other, in Kankakee, and includes also transfer of baggage. The baggage transfer is done with wagons, as there is not sufficient business to justify running baggage cars. The price of the transfer coupon on the through railroad ticket is 25 cents. It would seem that in many small towns a similar business could be carried on by the street railways more economically than by omnibuses, provided the street railway routes touched all depots.

New Car Houses of the International Traction Company

The season which has just closed has been one of great activity for the Buffalo-Niagara Falls Traction Company, a great percentage of the Pan-American visitors having visited the Falls by way of the trolleys, which it was frequently necessary to run on a two-minute schedule. In order that the company might successfully cope with the multitude, it was early seen that additional provision must be made. The car lines terminated without a loop or "Y," at the foot of Falls Street, in Niagara Falls, so there was a crying need for better facilities for handling passengers, and for avoiding the bunching of cars, interfering with the car schedule, and a general "tie-up."

A place in which to house extra cars, preparatory to the return of the multitudes to Buffalo, was also needed; the nearest car house being fully a mile from the heart of the city. A very commodious car house has consequently been built on Riverway, facing the State Park, and extending back to Prospect Street, with an alley between. From this new terminal station Superintendent Edward McDonald will direct all business. The Buffalo cars turn off from Falls Street to Prospect, to Niagara, to Riverway, and complete the loop to Falls Street again. At night the cars enter the house at the Prospect Street entrance, there being ten tracks, two of which are the special work tracks and pits. Eight tracks pass through into the Riverway half of the building, across the alley from the Prospect Street entrance; this part is also under cover, but open for dray and hack traffic. The old car house property on Main Street has been abandoned, as have also the car houses at Tonawanda, for the storing of cars, those at Hertel Avenue, Buffalo, and the new Niagara Falls houses doing the work of caring for extras and sheltering the rolling stock over night. The car pits of the new house are steam heated, a large boiler being erected for the purpose. Where the steam pipes must of necessity run overhead, they are encased in regulation covering, to prevent condensation as far as possible. The buildings are well lighted throughout, with guards placed around each cluster of lamps to prevent accidental breakage from swinging trolley poles. There is a blacksmith shop, repair shop, fireproof oil and grease house, waiting rooms for passengers and employees, baggage and check room, reading room, and all necessary equipment of a thoroughly up-to-date car house.

The International Traction Company has also relaid a considerable amount of track this season at the Falls. The city paved over a mile of Buffalo Avenue, and the railway company rebuilt its double tracks on that avenue. Following out the new practice, the company put down a great deal of "T" rail, which is used entirely on a strip of land over which they have the right of way. Traffic was at times so great that even the new car house could not accommodate all the cars, and a crosstown line near the city limits was utilized as a siding.

To facilitate the removal of flat wheels, a section of track over the repair pit of the new car house is made removable, in order that the wheels may be lowered into the pit, after which they are rolled into a larger opening, where axle gear may be removed, or other repairs made; a crane being stationed at this point for the removal of wheels or motors from the pit. More extensive repairs are made in Buffalo, the armatures to be rewound being carried back and forth on a work car.

In a Florida town, with a population of 261, there is operated a street railway system of one and one-half miles. The road is operated by horses, and is now paying a 10 per cent dividend on the stock.

Financial Embarrassment of the Everett-Moore Syndicate

On Jan. 2 the financial affairs of the Everett-Moore syndicate, owning or controlling a number of urban and interurban electric railways in Ohio, Indiana and Michigan, and an extensive system of local and long-distance telephone lines in Ohio and Michigan, passed into the control of a committee composed of seven prominent bankers of Cleveland. This action was taken as the result of temporary financial embarrassment on the part of the syndicate, which has been affected for some time past by the stringency in the money market. The latest reports tend to show that the railway properties of the syndicate are prosperous, and the committee of bankers expresses the belief that the concern is entirely solvent, and that its embarrassment will be only temporary. The syndicate is said to control more than 1200 miles of electric lines, with many new extensions still in course of construction.

The committee referred to above has organized by electing H. R. Newcomb as chairman, and E. C. Tillotson as secretary, and has given out the following statement:

STATEMENT

"It became apparent some time ago to some of the members of the Everett-Moore syndicate, so-called, that on account of the tight money situation in the different centers where they were financing some of their enterprises, that although in their opinion they owned several million dollars' worth of property over and above their liabilities, that they would be unable, without temporary assistance, to meet their obligations which were about to become due, and the obligations of some of the corporations which were controlled by them. Many of these obligations arose from the fact that the syndicate were engaged in the construction of a number of enterprises which were not yet full completed, requiring large amounts of money to pay for labor and materials in the construction.

"These enterprises are lines of telephone and street railways situated throughout Ohio and some in Michigan. Among those which have been partly constructed, but are still not completely up to the plans of the syndicate, are such companies as the Cuyahoga Telephone Company, the United States Telephone Company, the Federal Telephone Company, the Stark County Telephone Company, the Columbiana County Telephone Company, the People's Telephone Company of Detroit, the Wood County Telephone Company, and a number of other companies in which the Federal Telephone Company is the controlling factor. The Reserve Construction Company has large liabilities and practically no assets.

"The syndicate were also recently disappointed in being unable to complete the negotiations for the raising of a large sum of money upon certain bonds and stocks belonging to them, which would have furnished them with ready funds, and which negotiations they had reason to believe, until ten days ago, would result favorably.

"Some of the members of the syndicate, when it became apparent to them that many of their liabilities which were coming due about Jan. 1 could not be met, called together some of their personal advisers to advise with them as to what was best to be done, among them H. R. Newcomb, Calvary Morris, E. G. Tillotson and John Sherwin.

"These gentlemen examined very fully into all of the affairs of those composing the syndicate, and were furnished with very full and complete information. Over a week was spent with the syndicate members going over their personal affairs, and the affairs of the various companies in which they were interested, and which they control. They are largely interested in and control the following street railroad properties:

"The Cleveland Electric Railway Company, the Detroit United Railway Company, the Toledo Railways & Light Company, the Northern Ohio Traction Company, the Cleveland, Painesville & Eastern Railroad Company, the Detroit & Toledo Shore Line Railroad Company, and the Lake Shore Electric Railway Company. All were found, hardly without exception, in good condition, perfectly solvent, and in no wise embarrassed.

"They found further from their investigations that in the telephone situation, while among its different elements it had many companies that had fully completed their equipment, and were on a paying basis, that there were others that needed material assistance. They also found that so far as the personal affairs of the members of the syndicate were concerned that their equities were in their opinion largely in excess of the liabilities, and that in their judgment all of the personal creditors could be paid without doubt from the assets, and several hundred thousand dollars put into the completing of the properties.

"They found that there were in Cleveland upward of thirty (30) banks that were their creditors, and that these banks held the choicest of the securities and most of the equities.

"The gentlemen who had examined into the condition of these

affairs thought it wise to call together representatives of the Cleveland banks to discuss the situation with them. The result was that three or four meetings of representatives of nearly all of the banks have been held within the past three or four days, and the whole matter thoroughly gone over and discussed. At some of these meetings the Everett-Moore syndicate was represented by their representatives, and were attended by some of the members of the syndicate itself. They expressed the utmost confidence in the development of their various enterprises, and of their large earning power when developed.

"Everybody at the meeting realized the great work that has been accomplished in the past few years throughout Ohio and Michigan by the activity and energy of the men composing the Everett-Moore syndicate, and believe thoroughly that just as far as their enterprises appear, they are deserving.

"Messrs. Everett and Moore stated that they were perfectly willing to turn all of their matters and properties over to a committee that should be appointed to handle them in connection with themselves to preserve the most equities, with the belief that when their properties were developed and creditors paid there would be a substantial amount to return to them.

"To this end, and with a view of obtaining the attention of the gentlemen most experienced in such affairs, and in whom the Cleveland parties had entire confidence, and in the belief that all creditors living away from Cleveland would have the same confidence, the following gentlemen were chosen as a committee: H. R. Newcomb, Myron T. Herrick, J. J. Sullivan, Calvary Morris, Kaufman Hays and E. G. Tillotson. This committee was given power to fill any vacancies, or add to their number. As soon as the committee organized they added Mr. W. G. Mather as a seventh member of the committee. These gentlemen were selected, not especially on account of any interest directly involved, but because of their well-known ability and integrity. At the time the committee was organized Colonel Herrick stated publicly that he could not give the matter much time, and as soon as things were in shape he would retire from the committee, but that he was heartily in sympathy with what was being done, and to that end would stay, at least until the committee got fairly under way.

"At the meeting held at which Messrs. Everett and Moore were present, more than five-sixths of all of the Cleveland indebtedness was represented. The parties attending the meeting expressed themselves unanimously in recommending to their institutions that they should extend the indebtedness of the Everett-Moore Syndicate and its allied interests for a period of not exceeding eighteen months, conditioned upon the committee named having entire charge of all of the affairs connected with the syndicate and their various interests.

"Papers have been drawn looking toward such extension, and the empowering of the committee to act, and they have been executed by the members of the Everett-Moore syndicate, and are now being executed by the Cleveland banks as rapidly as possible. All other creditors are to be asked to unite with the Cleveland creditors in granting the extension. It evidently is the feeling of the Cleveland parties who have looked furthest into the matters that at least all of the enterprises of the Everett-Moore Syndicate should be completed and put into shape as soon as possible. If it should turn out upon thorough investigation by the committee that there are any of them upon which work should be stopped, it will be stopped until such time as matters can be arranged for them to again proceed.

"The committee immediately employed Messrs. Haskins and Sells, of New York, expert accountants, and they are now at work for the purpose of examining and reporting upon the condition of all of the various companies.

"The committee will be willing at all times to give information to any parties interested that it can give, and will be from time to time gaining more and more information. The committee invite correspondence by any creditor, or invite any creditor interested to call and see them, and go over the situation, in full belief that by acting together mutually the interest of every creditor of the syndicate and the communities in which their various enterprises are located will be best served.

"The committee organized by electing H. R. Newcomb its chairman, and E. G. Tillotson its secretary. The committee has opened an office at Room No. 16, Saving & Trust Company building, where someone will be in attendance to see anyone personally interested who may call, and any correspondence addressed to Mr. Newcomb at that address will receive prompt attention."

The indebtedness is well distributed, not only among the Cleveland bankers, but among banks of Northern Ohio and Southern Michigan, and it is not believed that any of them are hit hard, or that any further embarrassment will follow. Chairman Newcomb, of the committee, has stated it the intention to preserve to the syndicate all of its properties. By extending credit 18 months the banks

aim to satisfy the demands of outside bondholders and other creditors.

It is understood that very little of the syndicate's loans were secured from Eastern banks. An effort was made at the time of the organization of the Lake Shore Electric Railway Company a short time ago to float a considerable loan in New York, but it was not successful, owing, it is said, to the small profit which the company offered to the bankers. It is also said that the refusal of the heads of the Everett-Moore syndicate to yield to the demands of the American Bell Telephone Company is said to be responsible for the difficulty in which the syndicate has found itself.

In its traction propositions it has been the practice of the syndicate to finance its propositions before these were completed, but unfortunately, in the building of the independent telephone systems, this policy was not followed out as carefully. By reason of the fact that telephone properties yield quick returns, it was thought that the debts would be taken care of very largely out of the earnings.

Recently the Federal Telephone Company undertook to dispose of large blocks of its securities with Eastern bankers, as had been successfully accomplished with traction securities. It was found, however, that there was an underlying opposition among Eastern financiers, the true meaning of which finally became apparent a short time ago, when the American Bell Company made a proposition, amounting almost to a demand, that the Federal Company sell out its interests.

With a determination to carry out its agreements with the independent companies and the public in general, the syndicate refused to accept any proposition which would tend to cripple the independent situation. The result of the refusal was the declaration of warfare by the Bell company, and the refusal of Eastern bond buyers to take the independent securities.

Newspaper men no longer have free access to Chairman Newcomb of the bankers' committee in charge of Everett-Moore affairs. The doors of the committee room are barred to all comers, and a clerk stationed at the door inquires as to the nature of the caller's business. This move is undoubtedly made necessary because of the large number of creditors who are sending representatives to inquire regarding their accounts. Monday President Jere Hutchins, of the Detroit United Railway, was in conference with attorneys and the committee. He declined to state the result of his conference.

There is a report that Mayor Maybury, of Detroit, is at work on a plan to take the property of the Detroit People's Telephone Company out of the hands of the syndicate and complete it as municipal property. The syndicate has already spent \$400,000 on the Detroit telephone proposition, and no encumbrances have been placed on the work thus far completed. It is understood that the committee is not in favor of disposing of any of the syndicate properties, as it is believed that if matters are delayed for a short time the syndicate will be able to carry out all of its plans and come off with flying colors.

Boston Elevated Stockholders' Annual Meeting

At the annual meeting of the Boston Elevated Railway Company, held Jan. 6 in Boston, all the directors were re-elected by a stock vote of 65,149 shares. The board stands as follows for the ensuing year: Frederick Ayer, James Phelps, Jr., Wm. A. Bancroft, James M. Prendergast, John J. Bright, N. W. Rice, Samuel Carr, William S. Spaulding, T. Jefferson Coolidge, Jr., Walter S. Swan, Wm. A. Gaston and Robert Winsor.

The operation of the elevated and surface lines resulted in the carrying of 213,703,983 revenue passengers in the year ending Sept. 30, 1901. The transfer traffic is estimated at 65,000,000. The increase in traffic revenue during the months in which the elevated trains were in operation as compared with the increase in the corresponding months of 1900 was 8.57 per cent, as against 3.54 per cent. The average increase for the corresponding months of the three previous years was 4.47 per cent.

The gross earnings from operation during the year were \$10,792,993.09, the operating expenses being \$7,336,597.31, or about 68 per cent. The rental of the Boston Subway was \$213,205.18. Dividends on Boston Elevated Stock were \$575,000, and the surplus for the year \$61,539.07.

The passenger traffic increased 5.96 per cent, or by 12,579,273 over the previous year. The total number of subway passengers was 25,373,167 as reflected by ticket sales, divided among the various stations as follows: Bolyston Street, 1,514,821; Mason Street, 2,544,224; Park Street, 10,142,605; Scollay Square, 7,645,614; Adams Square, 1,271,263; Haymarket Square, 2,254,640. Total in previous year ending Sept. 30, 1900, was 23,247,753. Gain over previous year, 2,125,414, or 9.14 per cent; average number of subway passengers per day, 69,516; average number of subway pas-

sengers per day in previous year was 63,692, a gain in 1901 of 5824 or 9.14 per cent.

TRAFFIC STATISTICS

Round Trips

Run by elevated trains June 10 to Sept. 30.....	51,360
Run by electric passenger cars in year.....	3,826,839
Run by horse passenger cars in year.....	5,488
Run by United States mail cars.....	15,781

Total 3,899,518

Revenue Miles

Run by elevated passenger cars.....	1,516,175
Run by electric passenger cars.....	42,104,688
Run by horse passenger cars.....	10,521
Run by United States mail cars.....	193,495

Total 43,824,879

Receipts.

From revenue passengers.....	\$10,562,533.45
From United States mail cars.....	21,600.08

Total receipts for car operation..... \$10,584,133.53

Average receipts per revenue passenger 4.943 cents.

Equipment.

The total trackage for surface and elevated cars is 408,339 miles, made up as follows:

	Miles.	
	Surface	Elevated
Length of second track.....	157,883	6,468
Length of main line.....	191,018	6,644
Length of sidings, curves in car houses, cross-overs, etc.	7,886	1,022
Length of car house and yard tracks.....	36,009	1,409

Total 392,796 15,543

Total length of track in reservations is..... 25.14 miles

Total length of track built with heavy girder rail... 339.16 miles

Total length of track built in subway is..... 5.11 miles

Electric Line Equipment

Miles of track complete electric overhead system.....	386.243
Miles of track partially equipped (underground wiring)..	350
Miles of overhead electric feeder lines.....	504.277
Miles of underground conduit.....	21.677
Miles of underground conduit duct.....	214.527
Miles of underground feeder lines.....	105.209
Miles of underground return lines.....	87.942
Miles of submarine cables.....	3.824

The car equipment on Sept. 30, 1901, included 100 box elevated cars, 227 horse cars, 1563 closed electric surface cars, of which 1182 were 25 ft. body; 1542 open electric cars, 12 mail and 2 service cars. The company owns 4487 electric motors, 287 snow plows, 285 horses, 551 snow sleds and 543 miscellaneous vehicles.

Of the 100,000 shares of stock, 78,564 are held in Massachusetts, 19,825 in other States, and 1611 in the Provinces of Canada. There are 1817 stockholders in Massachusetts, 321 in other States and 12 in Canada.

The general balance sheet shows total liabilities and assets of \$15,486,574.16. Nearly \$8,000,000 of the assets are charged to construction and real estate. The capital stock is \$10,000,000 and the closing bid on the Boston Exchange Jan. 6 was 166. The transportation expenses for the year were \$5,051,699.58; maintenance of equipment, \$709,335.46; maintenance of roadway and buildings, \$877,516.24. General expenses were \$698,046.03; advertising in cars brought \$63,726.60; rentals of real estate, \$67,506.92; tolls for use of tracks by other companies were \$52,576.37.

The annual meeting of the board of directors will probably be held this week.

Electricity vs. Steam in Eastern Massachusetts

To meet the competition of parallel electric roads, the Boston & Albany division of the New York Central & Hudson River Railroad has put on ten trains per day in each direction between South Framingham and Milford, Mass., and reduced the fare to 10 cents. The original service was four trains each way daily and a fare of 27 cents. This is believed to be the initiative in what promises to be a fierce war between the Boston & Albany and parallel electric railways. The present electric car fare between South Framingham and Milford is 15 cents via the Milford, Holliston & Framingham Street Railway Company's road. This fare will probably be retained for the present, in view of the doubtful suc-

cess of such a reduction in fares by the steam road, although it is proposed to carry passengers from Milford to Worcester at lower rates than the Boston & Albany can give.

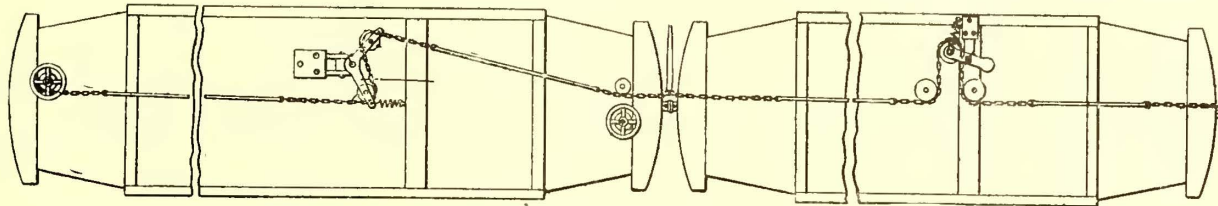
It is unofficially stated that since the Boston & Albany increased its service on the Milford branch the earnings of the electric road have fallen off about one-third, but this is probably exaggerated. The electric company is striving to reduce the cost of operation to a point where the steam road will be unable to compete with it on a paying basis, and it can probably hold out as long as the New York Central can operate its branch profitably. The elec-

690,110. Trolley Retractor; A. J. Johnson, Cleveland, Ohio. App. filed Oct. 12, 1901. Details.

690,202. Sand Box; H. M. Stiles, Newark, N. J. App. filed Dec. 19, 1899. The sand box is mounted on the dashboard of the car and controlled by a handle in front of the motorman.

690,255. Electric Shifting Device for Railways; H. S. Esch, New York, N. Y. App. filed April 26, 1901. Details of an electromagnetic switch-throwing device.

690,313. Trolley Pole Attachment; G. F. Nelson, Washington, D. C. App. filed May 16, 1901. A construction whereby the trolley



PATENT NO. 689,908

tric equipment of the Newton Circuit Loop is now under consideration by the New York Central management, and there is little question that the Newton Circuit Line so equipped will bring severe competition to bear on the smaller lines which run between the cities and towns covered. Some of them may be forced to sell out to the railroad company. The policy of securing parallel and outlying electric lines along a railroad is proving quite popular among the steam roads of New England, the results attained in New Hampshire along the Boston & Maine Railroad having been reported as excellent.

The building of the Boston & Worcester electric line, contracts for which are now under way, will complicate the situation. This is the most important of all the through electric lines along the route of the Boston & Albany. High-speed, short interval trains, with a 50-cent fare between Boston and Worcester, will produce perhaps lower rates on the Boston & Albany where the service is suburban.

The Newton Circuit Loop of the Boston & Albany Railroad is one of the most promising lines for electric equipment to be found in the East. The present steam service is excellent, but there is little doubt that the adoption of electric motive power will work a revolution in the suburban traffic. The line is double track throughout and its total length from Boston to Boston, via Riverside, is 22.9 miles. The main line of the Boston & Albany is composed of four tracks as far west as Lake Crossing, 16.05 miles out. Tracks 1 and 2 are used exclusively by through express and freight trains, west and east bound respectively, while 3 and 4 are given up to local suburban traffic. The circuit tracks leave the main line at Riverside, 10.71 miles west of Boston and join it again at Brookline Junction, about one mile west of Huntington Avenue Station. There are twenty-one stations, exclusive of the South Terminal in the circuit run, making the average distance between stations 1.09 miles. The line runs through the finest residence district near Boston, the commutation traffic being heavy and sustained.

pole will fall the moment the wheel leaves the wire, the shock of the fall being cushioned.

690,256. Automatic Track Switch for Electric Railways; H. S. Esch, New York, N. Y. App. filed April 26, 1901. In order to automatically throw a track switch the trolley wire is provided with a short insulated length, the invention residing in the construction whereby this insulated length is obtained without discontinuing the wire.

690,321. Truck; K. Rushton, Philadelphia, Pa. App. filed Sept. 12, 1901. Side-plates of an even width throughout, and end-plates secured thereto, a cross frame secured to the side-plates, the whole forming a rigid truck-frame, the side plates being recessed, pedestal castings secured to the outside of the frame at the recesses, boxes in the pedestal frames, and springs mounted above the pedestal frames and bearing upon the boxes.

690,330. Bogie for Railway Rolling Stock; I. A. Timmis, London, Eng. App. filed Sept. 21, 1901. The car body and bogie are connected together by a center-pin and means are provided for giving a lead to the front wheels of the bogie ahead of the pivotal point, to thereby prevent vibration of the bogie.

690,336. Railway Frog Structure; W. Wharton, Jr., & V. Angerer, Philadelphia, Pa. App. filed Oct. 10, 1901. To obtain a substantial frog, the hard metal portion which forms the point and the side bearings overhang the wing rails.

UNITED STATES PATENTS ISSUED DEC. 24, 1901

689,402. Railway Switch; H. R. Luther, Newton Center, Mass. App. filed March 19, 1901. The pivotal end of the tongue is protected by a covering plate having grooves for the flanges of the car wheels, in order to prevent the forward wheel from slightly moving the switch when it strikes the pivotal end, and cause the truck to "straddle" the switch.

689,448. Railroad Tie; J. E. York, Brooklyn, N. Y. App. filed March 25, 1901. The tie is a piece of an old rail, suitable clips being used to secure the track rails in place upon it.

Street Railway Patents

[This department is conducted by W. A. Rosenbaum, patent attorney, Room No. 1203-7 Nassau, Beekman Building, New York.]

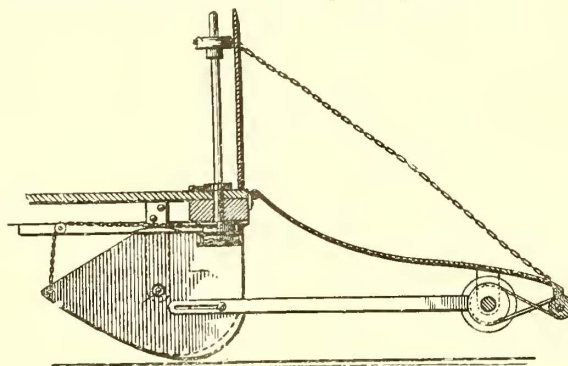
UNITED STATES PATENTS ISSUED DEC. 31, 1901

689,908. Brake for Vehicles; W. G. Price, Kingston, N. Y. App. filed Jan. 11, 1901. Heavy springs normally tend to apply the brake, but the brakes are held off by the brake chain, thus, in case of separation of the train, the brakes are automatically applied.

689,947. Advertising Device; E. M. Bentley, Lawrence, N. Y. App. filed Jan. 19, 1897. A circuit-closing attachment is fixed to the trolley wire and so arranged that whenever a car passes, the circuit to an advertising device along the roadway is operated to display the advertisement.

690,079. Fare Register; G. F. Rooke, Peoria, Ill. App. filed Feb. 26, 1900. The device comprises two registering mechanisms and a spring actuated mechanism controlled by the passage of a coin and adapted to operate one of the registering mechanisms when released by the coin, and to operate the other mechanism while being reset.

690,099. Railway Brake Beam; G. W. Chipley, Chicago, Ill. App. filed Aug. 15, 1900. The brake beam is hung on a longitudinal axis, so as to be self-adjusting when the pressure is applied.



PATENT NO. 689,647

689,482. Brake-Shoe; J. D. Gallagher, Glenridge, N. J. App. filed June 13, 1901. A cast-iron brake-shoe having a back of steel channel.

689,494. Railroad Crossing; J. S. Jenckes, Jr., Terre Haute, Ind. App. filed March 29, 1901. An arrangement of the crossing rails in connection with a system of levers whereby the rails can be shifted in the same manner that a switch is shifted to make the rails of either track continuous over the crossing.

689,496. Brake-Shoe; H. Jones, Bloomfield, N. J. App. filed June

20, 1901. The brake-shoe has a wrought metal back, a wrought metal insert and a cast-iron body portion, locking the parts together and interposed between the back and the insert.

689,537. Fastening Ring for Flat-Bottomed Rails; C. Chenu & L. Gautreau, Paris, France. App. filed April 12, 1901. An undercut ring, eccentric in shape, is fastened to the face of the tie by a screw, and is adapted to be rotated to overreach the flange of the rail.

689,611. Body Bolster; A. H. Hagemeyer, St. Louis, Mo. App. filed May 4, 1901. A body bolster, having end ledges to receive the outside sills of the car body, L-shaped plates fitting under the ledges and truss-rods, passing through the plates and over ears or projections on the sides of the bolster.

689,629. Folding Car Step; M. Weber, St. Louis, Mo. App. filed May 10, 1901. Details of construction.

689,647. Car Brake; L. DeIntinis, St. Louis, Mo. App. filed July 20, 1901. Brake blocks adapted to engage the rails are geared to the fender so that when the latter is lowered to the roadbed the brake is at the same time applied.

689,705. Car Fender; L. Castin, New Kensington, Pa. App. filed Oct. 18, 1901. Means for securing removable air cushions to the face of the fender.

Improvements at the Stephenson Works

Notwithstanding the great amount of work which is now filling the shops of the John Stephenson Company, Elizabeth, the management has found time to make an addition to the buildings which will prove of great benefit to officers and employees alike. A large restaurant is being constructed a short distance from the engine house, and it will be opened in a week or two for the benefit of the company. The location of the Stephenson works is some distance from any adequate dining-room facilities, and the opening of a restaurant on the grounds will be most acceptable. Half of the building is to be used as a large lunch room for the men. The remaining half is divided into two portions, one to be used as a private dining-room by the officers of the company and the other as a kitchen.

ENGINEERING SOCIETIES

NEW ENGLAND STREET RAILWAY CLUB.—The second annual meeting and banquet of the club will be held at Hotel Brunswick, Boston, Mass., on Thursday, Jan. 23. The entertainment committee has worked hard to make this a notable event in the history of the club, and as it is the occasion for the annual election of officers a large attendance is urged. Many prominent street railway officials and public men have been invited, and a reception is to be held between 5 and 6 p. m., preceding the banquet.

AMERICAN INSTITUTE OF THE CITY OF NEW YORK.—The Polytechnic Association, a section of the Institute, meets on Thursday evenings for the purpose of exhibiting and describing inventions, specimens of manufactures or materials and miscellaneous practical mechanical, technical and scientific questions, and for the reading of papers on previously appointed subjects. Some of the subjects selected are as follows: Jan. 16, Explosive Engines; Jan. 23, Springs; Jan. 30, Street Corner Signs; Feb. 13, Submarine Vessels. The meetings are held in the hall of the Institute, 19 West Forty-Fourth Street, New York City, and all interested are invited to attend.

PERSONAL MENTION

MR. E. E. HAMILTON has resigned as secretary and treasurer of the New Castle Traction Company, of New Castle, Pa., to become connected with a prominent Pittsburgh company.

MR. HARRY A. DALTON has resigned as general superintendent of the Northern Ohio Traction Company, of Akron, Ohio, to engage in other work. Mr. Dalton has been connected with the company for five years, entering the employ of the company as a motorman.

MR. J. F. HEYWARD has resigned as vice-president of the Roanoke Railway & Electric Company, of Roanoke, Va., and Mr. J. W. Hancock, at present secretary of the company, has been appointed to succeed Mr. Heyward. Mr. J. B. Fishburne, who is now president of the company, will hereafter act as secretary of the company.

MR. F. H. NEWCOMB has been appointed assistant postmaster in Brooklyn. Mr. Newcomb is well known in street railway circles through his large business in uniform hats and caps, but he has for a number of years been interested in postoffice affairs, having been instrumental in greatly improving the postal conditions in his neighborhood, where he has managed a sub-station, opened as a result of his efforts.

MR. W. A. HELLER has resigned, as superintendent of the Muskegon Traction & Lighting Company, of Muskegon, Mich., to accept a position at Cumberland, Md. Mr. Heller, on severing his connection with the company, was presented with a handsome watch charm as a token of the esteem in which he was held by the employees.

MR. C. A. DENMAN, formerly general manager of the Toledo & Maumee Valley Railway, which has just been sold by the Detwiler-Griffin syndicate, has been appointed to a similar position with the Toledo & Lima Traction Company, a road being built by the same interests. Mr. Denman is one of the pioneer street railway men of Toledo.

MR. CHARLES E. BARNES, of Malden, Mass., a promoter and owner of street railways, and president of two companies running between Danvers, Newburyport and other towns and cities, died Jan. 4 of heart disease. Mr. Barnes was prominent in Grand Army circles, and at the time of his death was Assistant Quartermaster General of the Department of Massachusetts. He built the Haverhill & Georgetown, the Georgetown, Rowley & Ipswich, the Plymouth, Warren & Kingston, the Brookfield & Spencer, the Leominster & Clinton, and other electric lines in Massachusetts and throughout New England.

MR. T. E. MITTEN, who, as recently announced, has been elected general manager of the International Traction Company, of Buffalo and Niagara Falls, nee Burt Van Horn, resigned, has had an extended connection with electric railway develop-



T. E. MITTEN

ment, following an experience of about eight years in steam railroad service. He has been connected with the International Traction Company since March 13, 1901, when he accepted the position of general superintendent of the company. The work connected with this position called for the exercise of great ability, owing to the large amount of extra traffic thrown on the lines through the Pan-American Exposition. Prior to going to Buffalo Mr. Mitten was, for four years, general superintendent of the Milwaukee Electric Railway & Light Company. Upon the occasion of his leaving that company the employees united in presenting him a punch bowl, loving cup, and album containing the signatures of all of the employees on the system, with a resolution expressing their appreciation of his sterling qualities.

MR. W. KELSEY SCHOEPF, who retired Jan. 1 as general manager of the Consolidated Traction Company, of Pittsburgh, Pa., was accorded a reception by the employees of that company on Dec. 31. The employees in a body, headed by a band, left the Oakland car house of the company at 12 a. m. and made their way to the Hotel Schenley. Mr. Schoepf, escorted by a special committee of the employees, made his entrance to the reception hall at 2:30 a. m., with the band playing "Hail to the Chief." It is hardly necessary to say that Mr. Schoepf was overcome with emotion, and the reception accorded him certainly was, as it has been put, "a function which will go down in the history of Pittsburgh as the greatest testimonial of worth ever paid to a superior about to leave the city." Every department of the company was represented, even the female employees being much in evidence. It was genuine sincerity. Mr. Schoepf was presented with a handsome "grandfather's clock" by the employees as a token of their appreciation, and also a handsome autograph album, to which every employee of the company contributed. In addition to these tokens, Mr. Schoepf was the next day visited by a committee of the Consolidated Traction Company Employees' Relief Association, and presented with a handsomely engrossed set of resolutions adopted by that association, and then Mr. Joshua Rhodes, president of the Consolidated Traction Company, presented Mr. Schoepf with a solid silver loving cup, on which were the date and the name of the donor and recipient. Mr. Schoepf, in the future as president of the Cincinnati Traction Company, will devote his entire attention to the affairs of that company. For some time, as is well known, Mr. Schoepf has been dividing his time between Pittsburgh and Cincinnati, and some time ago it was announced that he would sever his connections with the Consolidated Traction Company as soon as the final arrangements for the consolidation of that company with the Philadelphia Company were perfected.

LEGAL NOTES

LIABILITY FOR NEGLIGENCE.

ALABAMA.—Carriers—Duties to Passengers—Assault by Conductor—Damages.

1. Common carriers owe the duty to passengers not only to carry them safely and expeditiously between the termini of the route expressed in the contract, but also to conserve, by every reasonable means, their convenience, comfort and peace throughout the journey, and protect them from insult, indignities and personal violence; and in the discharge of this duty it is immaterial whence the disturbance of the passenger's peace, comfort or personal safety is threatened—whether from another passenger, a stranger, or from an employee or servant of the common carrier.

2. A common carrier is liable to anyone sustaining the relation of passenger to it for an injury resulting from any act of its servants or employees, whether wilful and malicious or not, and even though such act is done in the course or within the scope of the servant's or agent's employment; the rule that the master is not liable for injury resulting from the wilful and malicious acts of his agent, not done within the scope of his employment, not being applicable when the injury is inflicted upon a passenger by the carrier's agent or servant.

3. If the conductor of a train assaults a passenger otherwise than under a necessity to defend himself or a passenger from battery, or in rightfully ejecting the passenger, who, by his conduct to other passengers or otherwise, has forfeited his right to carriage, the carrier is liable; and no conductor can assault a passenger in retaliation for an assault committed upon him, or for abusive words, or in revenge or punishment under any circumstances, without rendering the carrier liable for damages.

4. In an action by a passenger against a common carrier to recover damages for an assault made by the conductor upon one of the defendant's cars, where there is evidence tending to show that the plaintiff, who is disabled at the time of the assault, was badly beaten by the conductor, a verdict and judgment fixing the plaintiff's damages at \$2,500 cannot be said to be excessive.—*Birmingham Ry. & Electric Co. vs. Baird*, 30 Southern Reports, 456.

ALABAMA.—Injury to Employee—Failure to Warn.

One employed by a railroad company as a superintendent or foreman cannot be charged with negligence, while in the discharge of his duties of superintendence, in failing to warn an engineer, who was under his direction and control, of the location of posts along the line of railroad, when the circumstances of the situation would justify the reasonable conclusion that the engineer was aware of the presence of the said posts, or when the possibility of injury resulting to the engineer while upon his engine from the proximity of the posts to the track is so remote that it would not occur to a man of ordinary care and prudence to warn him of the location of said posts.—*North Birmingham St. R. Co. vs. Wright*, 30 S. Rep., 360.

CALIFORNIA.—Carriers—Injury to Passenger—Damages.

1. In an action by a passenger for injuries, a recovery may be had for loss which the plaintiff may have suffered because of inability to attend to his business after the accident.

2. Where the evidence in an action for injuries to a passenger showed that the plaintiff was seventy-five years old, and up to the time of the injury had been active and in good health, and engaged in business of his own, which was somewhat extensive and diversified, and that he had held positions of trust in several financial and other corporations, which capacity to transact business was seriously impaired, an instruction as to compensation for the value of his time during the period of disability and for the impairment of his ability to make money was justified, and was properly given, though there was no evidence that he was actually earning anything at the time of the injury.

3. Under such evidence a verdict of \$2,000 was not excessive.—*Storrs vs. Los Angeles Traction Co.*, 66 Pac. Rep., 72.

CALIFORNIA.—Injury to Traveler on Highway—Evidence—Cross-Examination—Instructions.

1. Plaintiff was injured while attempting to drive across defendant's double tracks at a highway crossing. A car on each track was approaching, and plaintiff's view of the one on the further track was obstructed by the one on the nearer track, but the motorman of such car could have seen the plaintiff's horse when he drove on the track. Plaintiff was driving slowly, observing things as a prudent man naturally would, and when on the further track was struck by the car, which was running at a prohibited rate of speed. Held, that the case was properly submitted to the jury on the question of plaintiff's contributory negligence, and on that of the cause of the accident being inevitable casualty.

2. Where, in an action against a street railway company for in-

juries to a traveler at a crossing caused by an interurban car, defendant's witnesses testified to the rate of speed of the car, it was proper cross-examination to ask the witnesses to state the length of the run for the car, and the schedule time for such run.

3. It is not error for the court to refuse to give requested instructions, where their substance was contained in the instructions given.

4. It is not error for the court to modify and give requested instructions, where the same as proposed do not contain an exact exposition of the law.—*Cook vs. Los Angeles & P. Electric Ry. Co.* (L. A. 891), 66 Pac. Rep., 306.

CONNECTICUT.—Action for Indemnity—Judgments—Personal Injuries—Parties—Notice—Sufficiency—Pleading—Proof—Variance—Questions for Jury—Recovery—Amount—Attorney's Fees—Evidence—Motion to Strike Out—Maps—Admissions by Defendant Witnesses—Impeachment of Own Witness.

1. A judgment was rendered against a town for injuries caused by reason of a highway railing having been taken down, and action was brought by the town against a traction company, alleged to have torn down such railing, to recover indemnity. Held, it was competent for such town to allege, and to prove by evidence outside the record in the other suit, that the negligent act of the company in taking down the railing and not restoring it constituted the defect which was proved to have caused the injuries, and that that was the defect which was described in the other complaint as the failure of the town to maintain a railing at the place described, though the liability of the traction company was not an issue in the original suit.

2. Where, in an action by a town against a traction company to recover indemnity for the payment of a judgment against such town for personal injuries caused by reason of a railing guarding a highway having been torn down, the town showed that the company caused such defect, and that the latter had been notified of the pendency of the former suit, and requested to defend it, and that one of its attorneys actually attended the trial, took notes, and gave advice, the judgment of the former action precluded the company from making any defense which it could have made in the former suit had it been made a formal party.

3. A notice to a traction company by a town against which an action had been brought for personal injuries, informing it of the character and pendency of the action, of the reason why such company was claimed to be ultimately liable, and requesting it to take part in the defense, is not insufficient on the ground that it did not surrender the entire defense to the company.

4. Where a traction company tore down a railing along a highway, whereby a party was injured, the fact that the town in which such highway was situated did not compel the company to rebuild the same, by reason whereof it was rendered liable to the party injured, does not deprive such town of its remedy over against the company for indemnity.

5. In an action by the town the court charged that plaintiff could not recover if, through its negligence, the railing was down before the time when it was claimed to have been removed by the defendant, and remarked that the date when the railing was taken down was of no importance. Held, that such remark was not erroneous, but referred to the fact that the complaint alleged it was taken down July 10, while the evidence showed it was removed late in June.

6. Evidence as to the sums paid by the town to its attorneys for services in the trials of the former action, and that the several proceedings in the defense were taken by such town either with the advice or approval of the traction company's counsel, or in good faith, and on reasonable grounds, is admissible to show that the expense incurred in defending such former suit was reasonably necessary.

7. The questions as to whether the sums paid by the town to its attorneys were reasonable, whether the various proceedings were acquiesced in by the traction company, and whether the appeals were taken on reasonable grounds were for the jury.

8. On proof that the injuries were the result of the traction company's fault, and that it was notified to appear and defend the other action, the town was entitled to recover costs and expenses incurred in the other action, shown to have been reasonably necessary, as part of the natural and direct consequences of the company's wrongful act.

9. Evidence that an attorney employed by the traction company to merely look after its interests during the pendency of the suit against the town said to the town's attorney, after final judgment, in response to an inquiry as to what should be done, "Pay it, and then I will talk to you later about it," was inadmissible, since such

statement was beyond such attorney's authority under his employment.

10. A motion to strike out the testimony of a witness will not be granted where a portion thereof is admissible.

11. Where, in an action by a town against a traction company to recover indemnity for the payment of a judgment against the town for personal injuries caused by a railing guarding a highway having been torn away, a map of the place of the accident, made several years after the accident, is put in evidence, evidence that there had been no material change in the place since the accident up to the time the map was made, and to explain such map, was admissible.

12. The town relied entirely on its claim that the railing being down was the cause of the accident was conclusively established by the former judgment as proof of such fact. Defendant offered evidence that the railing, when up, was insufficient, as showing that its being down was not the cause of the accident. Held, inadmissible, since the question in issue was not as to what defect caused the accident, but whether the fact had been adjudged in the former action as claimed, and whether the company had received notice of the suit; and also since such insufficiency, when up, did not tend to prove that the fact that it was down was not the cause of the accident.

13. Where there was nothing to show the manner in which the party injured fell, evidence as to whether the railing was sufficient to prevent a full-grown man from going over the rail and down the embankment if he should by accident stagger against it was inadmissible.

14. The town offered evidence that on the morning after the accident, on the company's being told of the accident, and that its employees had taken down the railing, the company's superintendent promised to put it up, and that it was put up that day at the direction of the company's general manager, as an admission that the company's workmen had torn down the railing as alleged. Held inadmissible, since such action may have been to prevent the possibility of other accidents.

15. Though a witness for the town testified that the railing was down before the time when the company was alleged to have torn it away, it was permissible for the town to prove that the fact was otherwise, but not to attack such witness' character for veracity either by argument of counsel or by evidence.—(Town of Waterbury vs. Waterbury Traction Co., 50 Atlantic Reporter, 3.)

ILLINOIS.—Electric Power House—Permanent Injury—Damages—Improper Construction—Negligence—Instructions—Special Interrogatories.

1. Where the declaration alleged that the market value of plaintiff's realty had been diminished by the erection of defendant's electric power house, the injury complained of was necessarily permanent, so that another count, filed more than five years after the erection of the power house, and alleging that the value of the premises had been "permanently" impaired, did not state a different cause of action barred by limitation.

2. Where plaintiff's property was injured by the erection and operation of defendant's electric power house, she was entitled to prove and recover permanent damages, though there was no allegation that the construction or operation was negligent, or an exercise of the power of eminent domain.

3. Where there was no allegation of negligence, an instruction that plaintiff could not recover for damages caused by the careless operation of the power house, and arising after commencement of the action, was properly refused, as not within the issues.

4. A special question as to whether plaintiff had been damaged, and, if so, in what respect and to what amount was an attempt to have the jury state the means by which they arrived at their verdict, and was improperly submitted.

5. Where there was no allegation of negligence, special interrogatories as to whether the damage arose from defective construction or careless operation should not have been submitted, as not based on the issues.—(Chicago North Shore St. Ry. Co. vs. Payne, 61 N. E. Rep., 467.)

INDIANA.—Actions for Injuries or Death—Negligence—Pleading—Statutes—Constitutionality—Uniformity of Operation—Special Laws.

1. Act Feb. 17, 1899, providing that in actions for damages on account of the alleged negligence of any person, copartnership or corporation, for causing personal injuries or the death of any person, it shall not be necessary for the plaintiff to allege or prove the want of contributory negligence on his part or the part of the party for whose injury or death the action is brought, is uniform in its operation, though applying only to actions for personal injuries or death, and not in conflict with Const. art. 4, secs. 22, 23, prohibiting the passage of local or special laws regulating the practice in courts of justice.

2. The exclusion of pending actions from the operation of such

statute does not render it a violation of Const. art. 4, secs. 22, 23, as a special act.—(Indianapolis St. Ry. Co. vs. Robinson, 61 N. E. Rep., 197.)

KENTUCKY.—Foot Passenger—Injuries—Evidence—Public Use of Track—Discovery of Peril—Contributory Negligence—Question for Jury—Admissibility.

1. Where plaintiff was struck by a car, the court properly refused to permit him to testify that he had gone on the track to avoid an unruly horse that was about to run over him on the highway, as he had been on the track for some time before he was struck, and was manifestly there for his own convenience.

2. Evidence as to the use of the track by the public as a pass-way was not admissible, as the track, though an extension of a street railroad, was not in the highway, and such use gave the public no right thereto.

3. The declaration of the motorman at the place of the collision, a few minutes after it occurred, to the effect that he had seen plaintiff for 150 yards, and that he made no effort to apply the brakes until the collision was about to occur, though plaintiff had given no heed to repeated signals of the car's approach, was admissible as a part of the res gestæ; the declaration being a verbal fact growing out of the transaction, and a part thereof.

4. The question whether the facts were sufficient to appraise the motorman, in time for him to stop the car, by the exercise of ordinary care, before the collision took place, that plaintiff did not intend to leave the track, was for the jury, as was also the question of contributory negligence, and it was therefore error to give a peremptory instruction to find for defendant. (Floyd vs. Paducah Railway & Light Co., 64 S. W. Rep. 654.)

Master and Servant—Malicious Assault by Conductor on Passenger—Punitive Damages.

It was proper to authorize a jury to award punitive damages against a street railroad corporation for a malicious assault by a conductor, in the course of his employment, upon a passenger.—(Lexington Ry. Co. vs. Cozine, 64 S. W. Rep., 848.)

MASSACHUSETTS.—Accident at Crossing—Contributory Negligence—Obstructed View—Care in Approaching Crossing.

Plaintiff was driving with a horse and wagon toward defendant street railway company's tracks, and when about 80 ft. from them looked in both directions for a car, but saw none. From this point he had a clear view of the track for 300 or 350 ft., but after leaving it and nearing the track his view was obstructed by trees, so that he could not see an approaching car until his horse was actually on the track and the vehicle within from 2 to 4 ft. of it, in which position his horse was struck by a car and he was injured. Held, that plaintiff was not negligent, as a matter of law, in driving over the space where his view was obscured at the rate of 4 to 5 miles per hour, or in not getting down from his wagon and going forward in advance of his horse, to see if a car was coming, before driving on to the crossing.—(Kelly vs. Wakefield & S. St. Ry. Co., 61 N. E. Rep., 139.)

Trial—Interrogatories to Adverse Party—Corporations—Officers.

1. Where a party failed to accept to an instruction, he cannot complain of the refusal to grant a new trial because of such instruction. The matter is discretionary with the court.

2. Under Pub. St. c. 167, sec. 53, relating to interrogatories for the discovery of facts necessary to the suit or defense, and providing that where a corporation is a party the president or other officers may be examined, the corporation cannot shield itself behind an avowal of personal ignorance on the part of such officer, where he can reasonably ascertain the facts sought by a proper interrogatory.

3. It was error to refuse to order the president of defendant corporation to answer interrogatories relating to facts material to plaintiff's case, and concerning the conduct of the corporation at the time of the accident or just before.

4. It was proper to refuse to compel an answer to an interrogatory as to "what caused the collision," as a party cannot be required to state his views or disclose his defense.

5. A party is not entitled to answer to interrogatories as to what particular possible witnesses would testify.—(Robbins vs. Brockton St. Ry. Co., 61 N. E. Rep., 265.)

Injuries to Person on Street—Direction of Verdict.

Plaintiff, a schoolboy about six years old, was run over by a street car as it was turning into the street on which the schoolhouse stood. Plaintiff had been playing tag, but testified that he was on his way home at the time of the accident. There was evidence, though contradicted, that the car did not sound a gong, and was going from 2½ to 5 miles per hour; that before plaintiff was finally thrown from the car he was on the steps, in comparative safety, in full view of the motorman, and calling to him to stop, but that the motorman increased the speed of the car, threw plaintiff off, and so caused the injury. Held error to direct a verdict for de-

defendant.—(Aiken vs. Holyoke St. Ry. Co., 61 N. E. Rep., 557.)

MICHIGAN.—Injury to Traveler—Contributory Negligence.

Plaintiff was injured by collision while attempting to drive across defendant's street car track. The accident occurred on a clear morning, and plaintiff, who was familiar in a general way with the manner of running street cars, when within about 60 ft. of the track looked eastwardly, from which direction he knew the car would come, but his vision was obstructed by trees and a house so that he could only see about 9 rods down the track. He then looked to the west, and continued to so look until struck by the car approaching from the east. His horse, which was gentle, and not afraid of street cars, was being driven on a walk, and the distance from the track to the curb, from whence an unobstructed view to the eastward could be had, was 25 ft., at which point the horse's nose was 15 ft. from the track, and the horse could have been easily stopped. Held, that the plaintiff was guilty of contributory negligence in failing to again look to the east.—(Merritt vs. Foote, 87 N. W. Rep., 262.)

Injuries to Passenger—Contributory Negligence.

A person riding on the bumper of a street car after being warned by the conductor of his dangerous position is guilty of contributory negligence, as a matter of law, so as to prevent recovery for injuries occasioned by being struck from the rear by another car.—(Nieboer vs. Detroit Electric Railway, 87 N. W. Rep., 626.)

MISSISSIPPI.—Duty to Stop at Crossing—Unreasonable Rules—Disregard of Public Duty—Punitive Damages.

1. A street railroad company owes a duty to the public to stop at its regular crossings, on a seasonable signal, to receive those desiring passage.

2. A rule of a street railroad company, that where its cars stop beyond the crossing they should not be backed to receive a person who has properly signaled, is unreasonable, when applied to a passenger on a rainy night, with a muddy road, the car 40 ft. beyond the crossing, and the passenger having seven blocks to walk unless he got passage.

3. In an action against a street railroad company whose employee fails to stop a car on proper signal from a person at a crossing, and afterwards jeers at, insults, and ridicules such person, who has become a passenger on the return trip, the jury are authorized, in assessing the damages, to allow, not only just compensation for the injury, but to inflict a proper punishment for the company's disregard of public duty.—(Jackson Electric Ry., Light & Power Co. vs. Lowry, 30 S. Rep., 634.)

NEW YORK.—Passenger—Personal Injury—Intoxicated Condition—Evidence.

An action by passenger against a street railroad company was defended on the ground that plaintiff received her injuries while intoxicated, and on account thereof. It appeared that she was arraigned in court the next morning on the charge of intoxication, and the record showed a plea of guilty. She denied having pleaded guilty. The officer who escorted her to the court testified that she asked him to plead for her, which he did; but he was not permitted to testify as to the plea he made, nor to admissions made to him by plaintiff as to her condition the night before. Held, that the exclusion of the officer's testimony was error.—(Link vs. Brooklyn Heights R. Co., 72 N. Y. Suppl., 76.)

Carrier—Injury to Passenger—Defendant's Negligence—Admission of Counsel—Effect—Same—Excessive Verdict—Evidence—Same—Setting Aside Verdict—Discretion of Court.

1. Where, in an action against a carrier for injuries to a passenger, defendant's counsel admits its negligence, and to the court's inquiry as to whether he conceded that such negligence was "the sole cause of plaintiff's injuries," and that the only issue was the amount of damages, answers, "If any, sir," the defendant is not precluded from contending that no part whatever of plaintiff's condition was the result of the accident.

2. In an action against a carrier for injuries to a passenger, a pregnant woman, it appeared that plaintiff's premature confinement directly resulted from the accident, and that at the time of the trial she was paralyzed on her right side, and was unable to control the sphincter muscle. There was a conflict in the expert evidence, both as to the cause and permanency of the injuries. Held, that a verdict for \$28,500 was properly set aside as excessive.

3. A trial court has the same discretion to set aside a verdict for personal injuries as excessive, where defendant's negligence is conceded, and the only issue submitted to the jury is the extent of the injuries, as where the verdict is based on a determination of the issue of negligence.—(Fawdrey vs. Brooklyn Heights R. Co., 72 N. Y. Suppl., 284.)

Collision with Street Car—Reasonable Care—Appeal—Conflicting Evidence—Verdict.

1. Plaintiff, a policeman, was in charge of a patrol wagon driven by another policeman in answer to a call, the horses going at a brisk trot, and the bell ringing. The street on which they were driving

was down grade. When reaching the curb line of a certain intersecting street, the driver saw a street car approaching between 30 and 100 ft. away, whereupon he whipped the horses, and attempted to cross the track ahead of the car, but the car struck the hind wheel of the wagon and plaintiff was thrown out and injured. Held, that the driver exercised the degree of care which a reasonably prudent man would have used under such circumstances.

2. A verdict on conflicting evidence will not be disturbed on appeal.—(Decker vs. Brooklyn Heights R. Co., 72 N. Y. Suppl., 229.)

Carriers—Street Car Company—Passenger—Cause of Injury—Evidence—Question for Jury—Same—Electric Shock—Personal Assault—Mental Consequences—Liability—Same—Negligence—Evidence—Question for Jury—Same—Special Damages—Allegation—Amendment at Trial—Same—Married Woman—Sole Trader—Absence of Allegation—Presentation in Lower Court.

1. Plaintiff, a passenger on a street car, claimed to have been injured by an electric shock from the door sill while escaping from the car, the electric machinery of which was deranged. She was previously in perfect health, and had no previous disease which would account for her subsequent symptoms. The appearance of flames under the car was preceded by a loud report. The flames extended backward beneath the car for its entire length. Plaintiff testified to sensations indicating a shock of electricity. Experts testified that an electric shock would have caused plaintiff's injuries, and one physician testified that, while a blow on the back might also have caused them, he found on examination no evidence of such blow, and that under the circumstances he could not tell how plaintiff's condition arose unless it came from an electric shock. Held, that the evidence was sufficient to go to the jury on the question as to whether plaintiff's injury arose from a shock of electricity.

2. An electric shock received by a passenger on a trolley car is a direct physical and personal assault, for the mental consequences of which the company, if negligent, may be held liable.

3. In an action by a passenger against a street car company for injury from an electric shock, it appeared that flames broke from the controller box and extended beneath the car for its entire length, being preceded by a loud report. Plaintiff, in escaping from the car, stepped on the door sill and received a shock. It was proved that the phenomenon could not have existed if the electrical appliances of the car were in proper shape. After the accident the car was used the same day on four other trips without further harm. There was no evidence of any subsequent inspection, and no direct evidence that the car was out of order. Held, that defendant's negligence was a question for the jury.

4. In a complaint against a street car company for injuries, plaintiff, a married woman, alleged that she could not in future properly attend to her household duties "and business." On the trial, the court permitted an amendment by adding, after the word "business," "of dressmaking, and the loss of income therefrom by reason," etc. Held, that the amendment was proper; the original allegation being sufficient to apprise defendant of a claim for special damages by reason of incapacity to attend to business.

5. Where, in an action by a married woman for personal injuries, an element of damages claimed was incapacity for carrying on plaintiff's business, the absence of an allegation that she was carrying on business on her own account cannot be taken advantage of on appeal; plaintiff having been allowed to prove her occupation without objection in the court below, and no instruction having been asked excluding a loss of earnings from her recovery.—(Buckbee vs. Third Ave. R. Co., 72 N. Y. Suppl., 217.)

NEW YORK.—Street Railroad Company—Right of Way—Ownership—Complaint for Injuries—Amendment—Conformity to Proof—Presumption on Appeal—Same—Highway—Private Ownership—Public Way—Duty to Traveler.

1. Under Code Civ. Proc. Sec. 23, empowering the trial court to conform the pleadings to the facts proved where the amendment does not substantially change the claim or defense, the fact that plaintiff, suing a street railroad company for injuries, alleges that the stage of which plaintiff was an occupant, was upon a public highway over which defendant's tracks were laid, while on the trial defendant proves ownership in fee of the premises where the accident occurred, is immaterial, as, for the purpose of sustaining the judgment, the complaint will on appeal be deemed to have been amended in harmony with the proofs.

2. Defendant street car company purchased land leading to a summer resort, over which it laid its tracks, and which it opened for use as a public highway, though without formal dedication. Plaintiff, a passenger in a stage coach, was injured by defendant's car colliding with that vehicle. Defendant contended that its invitation to the public extended only to the use of the roadway at the side of its tracks, and that, being on its tracks, plaintiff was a trespasser. The tracks were not fenced off, or otherwise separated

from the roadway. Held, that defendant was liable, though its negligence causing the accident was not wanton, willful, or intentional, the contention of the defendant being against public policy.—(Liekens vs. Staten Island M. R. Co., 72 N. Y. Suppl., 162.)

NEW YORK.—Injury to person Near Track.

In an action by a husband against a street railroad company for injuries to his wife, the evidence showed that the posts of an elevated road in the street compelled the wife to stand within two feet of defendant's tracks in order to see the cars approaching her street crossing, and that the fender of a car coming very rapidly and without ringing a bell, caught her by the clothes and threw her down, injuring her. Held, error to dismiss the complaint at the close of plaintiff's evidence on the ground of her contributory negligence.—(G'Sell vs. Metropolitan St. R. Co., 71 N. Y. Suppl., 1020.)

NEW YORK.—Attorney and Client—Substitution—Same—Compensation.

1. Where a mother engages an attorney to prosecute her claim for damages for injuries to an infant son for a contingent fee, thereafter, in an action by the son, for whom the mother has been appointed guardian ad litem, for such injuries, plaintiff is entitled to have another attorney substituted.

2. Where a mother engages an attorney to prosecute her claim for damages for injuries to an infant son for a contingent fee, and thereafter, in an action by the son, for whom she has been appointed guardian ad litem, for the injuries, another attorney is substituted, such former attorney is entitled to have a provision inserted in the order of substitution, that, in the event of recovery, no portion shall be paid out without notice to him, so that he may have the value of any compensation due him fixed.—(Bryant vs. Brooklyn Heights R. Co., 72 N. Y. Suppl., 308.)

NEW YORK.—Negligence of Master—Complaint—Same—Dangerous Place to Work—Same—Same—Assumption of Risk.

1. In an action for personal injuries against an elevated railroad company by a conductor of one of its work trains, the complaint alleged that defendant was negligent in maintaining a narrow platform along the sides of its tracks without a guard rail, along which defendant was compelled to pass in prosecution of his employment, and from which he fell into the street, and that defendant "carelessly and negligently permitted the platform to remain in an unsafe and perilous condition." Held, that this was insufficient as an allegation of negligence, no statute requiring guard rails on such structures, and it not appearing but that the plaintiff knew, or could by intelligent inspection have discovered, the risk.

2. In an action against an elevated railroad company by a conductor of a work train for injuries sustained by falling from a narrow, unguarded platform along the tracks into the street, plaintiff's evidence that "he walked along the platform, and stepped on something and slipped," in connection with all the other evidence in the case, showing that the platform was dry and free from ice and snow, is insufficient to show negligence in defendant in permitting the platform to become slippery.

3. A platform 2½ feet wide, without a guard rail, along the tracks of an elevated railroad company, over which its employes are compelled to pass, constitutes a reasonably safe place in which to work, so as to preclude a recovery for injuries by an employe who falls from such platform to the street below.

4. In an action against an elevated railroad company by an employe for injuries, it appeared that plaintiff had been in the employ of the company for 10 years, during which he had been lampman, brakeman, and conductor. He testified that he had observed narrow, unguarded walks along the sides of the tracks similar to that from which he fell, and had passed along such a walk in switching a train, but that at the time of the accident he had not observed the width of the walk in question, nor that it was unguarded. Other evidence showed that he had previously traversed similar walks, and also the one from which he had fell. Held, that plaintiff assumed the risk.—(Nugent vs. Brooklyn Union El. R. Co., 72 N. Y. Suppl., 67.)

PENNSYLVANIA.—Negligence—Personal Injuries—Children—Care Required.

A street railway company owes the duty of preventing children of such tender years that negligence cannot be imputed to them from being on the platform of a moving car, and, if such a child gets there without permission, failure to remove it from its position of danger as soon as it is discovered, is negligence.—(Levin vs. Second Ave. Traction Co., Pittsburg, 50 At. Rep., 225.)

PENNSYLVANIA.—Jurisdiction of Federal Courts—Residence of Parties—Local Suits—Process—Suits of Local Nature—Nonresident Defendants.

1. In a suit in a federal court to foreclose a mortgage on property situated within the district, the jurisdiction of the court is not

defeated by the fact that one of the defendants is not a resident of the district.

2. In a suit of a local nature in a federal court to enforce a lien on property, a nonresident defendant cannot be brought in by service of original process upon him in the district of his residence, as provided in Rev. St. Sec. 741, such section having been superseded by section 8, Act. March 3, 1875 (18 Stat. 472); but he must be brought in by an order made in accordance with the provisions of the latter section.—(Seybert vs. Shamokin & Mt. C. Electric Ry. Co. et al., 110 Fed. Rep., 10.)

PENNSYLVANIA.—Instructions—Injury to Passenger.

An instruction, in an action for injury claimed to have been received by plaintiff being jolted off a street car, that it was a question for the jury whether it was a careless thing for plaintiff to get down on the step of the car, can not be complained of because stating that, if they believed that "that carelessness" contributed to his being jolted off, he could not recover.—(Foster vs. Union Traction Co., 49 Atl. Rep., 270.)

TENNESSEE.—Collision—Negligence—Driving on Track—Care of Motorman—Instructions.

1. In an action against a street railway company for injuries owing to a collision between plaintiff's wagon and a car, the court instructed that if there was no obstruction to prevent the motorman from seeing plaintiff, and he drove on the track far enough ahead of the car to have enabled any ordinarily careful person to have stopped his car to avoid a collision if on the lookout, and having his car under control, it was negligence on the part of the motorman to have collided with plaintiff's wagon. Held, that the instruction should have been qualified by a statement to the effect that a motorman has a right to assume that one on the track, and apparently able of taking care of himself, will leave it before the car reaches him, and that he may indulge the presumption until the danger of collision is imminent.

2. Inconsistent and contradictory statements in a charge do not neutralize or validate each other.—(Citizens' St. R. Co. vs. Shepherd, 64 S. W. Rep., 710.)

TENNESSEE.—Master and Servant—Death—Electric Wires—New Trial—Motion—Appeal—Expiration of Term—Question for Jury—Statements in Jury Room—Instructions—Degree of Care.

1. Acts 1899, p. 55, c. 40 (Shannon's Code, Sec. 6057), provides that whenever any case is pending and on trial by court or jury, and undetermined at the time the existing term expires by reason of the advent of the succeeding term, the term shall be extended and continued into the succeeding term for all the purposes of trying, disposing of, and returning a verdict and rendering judgment in such pending case, as if the new terms had not arrived. Held, that a motion for a new trial partially considered, and not determined at the beginning of a new term, was within the intentment of the act, justifying an appeal taken after expiration of the trial term.

2. Whether a magnetic bell and test set furnished to a lineman by a telephone company were useful only in discovering electrical disturbances on the line, and were not designed to test the insulators and defects therein, or their location, was a question for the jury in an action for the lineman's death.

3. Statements made by jurors in their deliberations that a specified compromise had been offered to plaintiff, and that on a former mistrial of the case ten jurors had favored awarding \$8,000 damages, one a smaller amount, and another nothing, are sufficient to vitiate a verdict, though the jurors testify that they were not influenced thereby.

4. Where statements of evidence were improperly made by a juror during the deliberations of the jury, and the verdict thereby vitiated, the trial court cannot determine whether the evidence adduced at the trial was sufficient to have supported the verdict, independent of such statements.

5. A charge in an action for a lineman's death, caused by a live wire, that, if deceased had no knowledge or information that the span wires of a street railroad company were not properly insulated and reasonably safe, then he had a right to presume that they were properly and safely insulated, unless the want of insulation or defects therein were plainly obvious, is erroneous, in that it relieves the employe of the duty to exercise active precaution in a hazardous occupation.

6. A lineman was sent to ascertain the extent and nature of trouble with telephonic wires, caused by a charge of electricity transmitted from the wires of an electric street railway company. Of his own volition he ascended the railway company's pole, and was killed by contact with a charged wire. The same work could have been done by ascending the telephone company's pole 30 feet distant, where he would have avoided contact with the wires of the railway company. Held, that an instruction on the theory of sudden exigency or emergency of the business was properly refused.—(Jackson & S. St. R. et al vs. Simmons, 64 Sw. Rep., 705.)

FINANCIAL INTELLIGENCE

THE MARKETS

The Money Market

WALL STREET, JAN. 8, 1902.

The monetary situation, which at the last writing was surrounded by considerable uncertainty, to say the least, has since then undergone a complete change, and instead of doubt as to the future course of the loan market, there is now a feeling of confidence. The ending of the past year did not, as had been anticipated by many financiers, result in any actual stringency, and while at intervals borrowers on call had to pay rather "fancy" rates in order to obtain accommodations, the average rate exacted was only a little above the legal limit, whereas the highest point reached was 20 per cent, a figure that has frequently been surpassed on such occasions as the turning of the year. With the inauguration of the heavy January interest and dividend disbursements, and the rapid return since the beginning of 1902 of currency from the interior, all fear has been dispelled, and this has been made perfectly apparent during the past few days in the disposition on the part of the banks and other money lenders to put out funds quite freely, both on call and on time contracts, at and below 6 per cent. Last Saturday's bank statement, while on the surface disappointing, was not in reality a true reflex of the actual condition of the Clearing House institutions, and no doubt the next exhibit will show them to be in a considerably stronger position than did the figures published on the day in question. In the first place, it is known that the actual gain in cash was greatly in excess of that reported; moreover, it was below the usual increase for the opening week of the year. Besides, the week's increase in loans far exceeded that of any corresponding period in recent years, and, as it progressed, was practically all contributed by the banks in the financial district, the uptown institutions generally reporting a reduction in the loan account. The only seemingly logical deduction to be drawn from a consideration of the forgoing facts is that the banks are really better off in the matter of surplus reserve than the published figures would indicate, and that technical conditions alone made them appear weaker in this respect than they actually are. However, the outlook promises well for a continuance of the easier conditions that have lately developed in the money market, and while it is possible that we may be called upon to pay off a quantity of European obligations during the current month, there is no apparent reason to anticipate any high rates for money for a considerable time to come, particularly should the movement of currency from the interior be maintained on its present large scale.

The Stock Market

With the closing of the old year and the opening up of the new, and no serious disturbance in the money market, there has come over the entire stock market situation a feeling of greater confidence than has been in evidence for a considerable time past. Thus far there has been no material increase in public interest, but it seems to be a reasonable conclusion that with a continued manipulation of confidence on the part of professional Wall Street, it will not be long before the leaders of speculation will secure a large following, and that a decided enhancement in values will ensue. The practical clearing up of the copper episode has removed one of the most formidable menaces to a successful bullish movement that the market has had to contend against, and the retirement of the \$75,000,000 of Northern Pacific preferred stock has likewise effaced one of the chief deterrents to an advance in prices for securities. The only apparent barrier that is now in sight is the possibility of a renewal of gold exports to Europe, but under existing conditions in the foreign exchange market there seems little cause for anticipating anything more than a few desultory shipments of the yellow metal. The downfall of the Crude Rubber Company was without influence, as it by no means reflected general conditions in the industrial situation, and was regarded by the knowing ones as inevitable. The statement of the United States Steel Corporation, while regarded as unfavorable by speculative Wall Street, which had looked for a larger surplus for the nine months than the \$19,414,497 reported, must be considered a good showing, particularly in view of the many unfavorable factors which the corporation had to contend against during that period. Thus general speculative conditions appear to be on a sound footing, and the outlook promises a continuance of the upward movement in values that has already set in.

The local traction stocks have not kept pace with the recent improvement in the general run of stocks, and at times have exhibited decided reacting tendencies. This may be explained by selling

on the part of the pools in these properties, although in the case of Manhattan disappointment at the delay in inaugurating the electric motive service has been in a measure responsible for the selling. At this writing intimations come from usually thoroughly reliable sources that the report of the Brooklyn Rapid Transit Company for November will make an unfavorable showing, and this, no doubt, accounts for the actions of this stock in the market.

Philadelphia

The market for traction stocks in Philadelphia during the last week has not been particularly active, and very few changes are to be recorded. Soon after Christmas, Union Traction advanced nearly a point, to 33 $\frac{7}{8}$, on the report that the company had acquired the recent rapid-transit franchises; but most of this gain was lost when the officials of the company refused to confirm the story. With this exception, the price of stock has fluctuated between 32 and 33 on comparatively small purchases, and closed Jan. 7 at 32 $\frac{3}{4}$. American Railways has changed hands in fractional lots, the price being 44 and 45, Philadelphia Company between 45 $\frac{7}{8}$ and 46 $\frac{3}{4}$, and American Railways between 44 and 44 $\frac{3}{4}$.

Chicago

Union Traction has shown a fractional improvement during the last week and the final sales on Jan. 7 were at 10 $\frac{1}{2}$ for the common. Chicago City has remained practically stationary. The greatest activity has been in the securities of the Metropolitan Elevated, which show a marked advance in common from 39 $\frac{1}{4}$ on Dec. 23, to 42 $\frac{3}{4}$ on Jan. 7, both record figures. Northwest Elevated common has risen a point. Two hundred shares of South Side Elevated sold on Monday at 107 $\frac{1}{2}$, and 120 shares of Lake Street Elevated at 11 to 11 $\frac{1}{4}$, slightly lower than 12, which was the figure reached Jan. 2.

Other Traction Securities

There has been practically no change in Boston Elevated this past week from 167, while West End common has remained practically stationary at 94 to 94 $\frac{1}{2}$. Massachusetts Electric common closed on Jan. 7 at 36, an advance of slightly over four points from the figures of Dec. 23, while the preferred, at 93 $\frac{1}{2}$, shows an advance of two and one-half points during the past two weeks. United Railways, of Baltimore, common, improved on reports of the defeat of the ordinance in the City Council for the creation of a rival company, on the idea that the Legislature will deal tenderly with the property, and closed Jan. 7 at 14 $\frac{3}{4}$ for the common, and 33 for the preferred. Other transactions in the Baltimore market include Anacosta & Potomac 5s at 97 $\frac{1}{2}$, City & Suburban 5s, of Washington, at 95, Lake Roland 5s at 121 $\frac{1}{2}$, Lexington Railway 5s at 102 $\frac{1}{2}$, United Railways of Baltimore 4s at 95 $\frac{1}{2}$. The New Orleans market quotes bids on Birmingham Railway, Light & Power, preferred, at 93, and common at 43 $\frac{1}{2}$. It is stated that H. H. Pearson, of the Pearson syndicate, of Philadelphia, had secured 50,000 of the 75,000 shares of the common stock of the New Orleans Street Railway Company, and would enter the proposed lease by Jan. 15. The Cleveland market was naturally affected during the end of last week, on account of the embarrassment of the Everett-Moore syndicate, and on Jan. 2 two blocks of fifty shares of the Cleveland Electric Railway were sold at 70, a decline of 7 $\frac{1}{2}$ points from the previous sale. By the end of the week the price had risen to 70 $\frac{3}{4}$. Detroit United sold on Jan. 6 from 61 to 62 $\frac{3}{4}$, closing at the latter figure. The selling on the Exchange of securities identified with the Everett-Moore interests last week was confined practically to Federal and Cuyahoga Telephones, Elevated Electric, and Detroit United. The slight falling off in values of the Everett-Moore traction stocks caused considerable surprise in the Cleveland market, as it was the general impression that there would be a large drop in all these securities immediately after the announcement of the embarrassment. The report that the increase of \$1,000,000 in Cleveland Electric capital stock will not be made, also tended to increase confidence in these securities. The practically continuous rise which Twin City R. T. has enjoyed since it has been on the market still continues, and on Jan. 6 it made its record figure of 110 $\frac{1}{2}$.

Iron and Steel

The tone of the iron and steel market still continues strong, and with so many furnaces tied up for lack of material, and others unable to make prompt deliveries, because of inadequate transportation facilities, it is becoming more difficult to obtain supplies. The result is a natural increase in prices, which have made a substantial advance during the last thirty days. These are so high now that under normal circumstances it would seem hardly possible that they should be again increased, certainly within the next month, but even this is by no means certain, in view of present conditions.

Bessemer pig iron is quoted in Pittsburgh at \$16.75 to \$17. Steel billets, \$28 to \$28.50, and steel rails at \$28.

Metals.

Copper has again fallen, the nominal quotations being 12 1/8 cents for Lake Superior ingot, 12 cents for electrolytic, and 11 1/2 cents for casting, but it is said that these prices are being cut to some extent. Lead remains at 4 cents, tin at 22.50 cents to 23 cents, and spelter at 4.40 cents.

The following table shows present bid quotations for the leading traction stocks, and the active bonds, as compared with a week ago:

	Closing Bid	
	Dec. 23, 1901	Jan. 7, 1902
American Railways Company.....	44 1/2	44 3/4
Boston Elevated	166 1/2	164
Brooklyn R. T.....	64 3/4	65 5/8
Chicago City	185	188
Chicago Union Tr. (common).....	10 1/2	10 1/2
Chicago Union Tr. (preferred)	47	47
Cleveland City	a113	112
Cleveland & Eastern	61 1/2	a31
Cleveland Electric	71 1/2	72
Columbus (common)	45	38
Columbus (preferred)	101	90
Consolidated Traction of N. J.....	67 1/2	67
Consolidated Traction of N. J. 5.....	109 1/4	109
Consolidated Traction of Pittsburgh (comon).....	23	23
Consolidated Traction of Pittsburgh (preferred).....	63 1/2	64
Detroit United	73	62 7/8
Detroit United Certificates	73	62 7/8
Electric-People's Traction (Philadelphia) 4s.....	97 7/8	98 3/4
Elgin, Aurora & Southern	40	a40
Indianapolis Street Railway	42	46
Indianapolis Street Railway 4s.....	87 3/4	87 1/2
Lake Street Elevated	10 1/4	11
Louisville (common)	107 1/2	..
Louisville (preferred)	115 1/4	..
Manhattan Ry.	133 1/4	135 3/8
Massachusetts Elec. Cos. (common).....	32 1/2	36
Massachusetts Elec. Cos. (preferred)	91	93 1/2
Metropolitan Elevated, Chicago (common).....	39 1/4	42 3/4
Metropolitan Elevated, Chicago	90 1/4	92 1/4
Metropolitan Street	162 3/8	162 3/4
New Orleans (common)	30 3/4	28 1/2
New Orleans (preferred)	104 1/2	104 1/2
North American	93	92
Northern Ohio Traction (common).....	45	a42
Northern Ohio Traction (preferred)	88 1/2	88 1/4
North Jersey	24	22
Northwestern Elevated, Chicago (common).....	36 1/4	39 3/4
Northwestern Elevated, Chicago (preferred).....	87	..
Philadelphia Traction	97 7/8	97 3/4
Rochester (common)	41	42
St. Louis Transit Co. (common)	33 3/4	32 5/8
South Side Elevated (Chicago)	108 1/2	107 1/2
Syracuse (common)	23	21
Syracuse (preferred)	60	61
Third Ave.	122 1/2	122
Twin City, Minneapolis (common)	108	108 1/2
United Railways, St. Louis (preferred).....	88 1/2	85 1/2
United Railways, St. Louis, 4s.....	90	89 1/2
Union Traction (Philadelphia)	33	32 3/4

* Ex-dividend. † Ex-interest. (a) Asked.

MONTGOMERY, ALA.—A meeting of the stockholders of the Montgomery Light & Power Company has been called for Jan. 15, to vote on a proposition to sell the property. The meeting is to be held in New York.

GADSDEN, ALA.—The Alabama City, Gadsden & Attala Railway Company has filed a deed of trust to the Queen City Bank, of Gadsden, to secure an issue of \$80,000 bonds.

SANTA BARBARA, CAL.—The Santa Barbara Consolidated Railway Company has filed for record a mortgage for \$250,000, given in favor of the Broadway Bank & Trust Company, Los Angeles.

MERIDEN, CONN.—The Connecticut Railway & Lighting Company is said to be negotiating for the purchase of the Meriden, Southington & Com-pounce Tramway Company.

CHICAGO, ILL.—Stockholders of the Northwestern Elevated Railroad have taken substantially all of the \$4,000,000 worth of bonds offered by the directors, leaving little for the syndicate which stood ready to acquire the balance unsubscribed by the shareholders. The old 5 per cent bonds, which were redeemed with the proceeds of the 6 per cent issue, were turned in for redemption on Jan. 1.

MONROE, MICH.—Judge Lockwood, of the Circuit Court of Monroe County, has appointed David B. Cunningham, of Detroit, receiver for the Detroit & Toledo Shore Line Railroad, and he will have charge of all the property of the line in Michigan. Judge Lockwood has granted an injunction restraining the Detroit & Toledo Shore Line Railroad, its secretary,

George S. Stewart, and the Detroit Trust Company from disposing of any of the bonds of the road.

ST. LOUIS, MO.—Interest coupons are due on street railway bonds this month as follows: Baden & St. Louis, 5 per cent on \$250,000; Cass Avenue & Fair Grounds, 5 per cent on \$1,813,000; Citizens', 6 per cent on \$1,500,000; Compton Heights, Union Depot and Merchants' Terminal, 6 per cent on \$1,000,000; Taylor Avenue, 6 per cent on \$500,000; United Railways, 4 per cent on \$28,292,000.

ST. LOUIS, MO.—The United Railways Company will pay its regular quarterly dividend of 1 1/4 per cent on \$14,136,100 of preferred stock issued this month.

CLEVELAND, OHIO.—Stockholders of the Cleveland Electric Railway have received their regular quarterly dividend of 1 per cent. The annual report of the company, which will be published within a few days, will show that the road had a very prosperous year. The company has earned all its fixed charges, operating expenses, a 4 per cent dividend and over \$500,000 that went to pay for improvements and new equipment. In 1900 the company paid 51.38 per cent of its earnings for expenses and taxes, while in 1901 the figures were 55.13. The annual meeting will be held Jan. 15, when a proposition to increase the capital stock \$1,000,000 will be voted on. In view of the embarrassment of the syndicate, it is believed that the proposition will be voted down.

CLEVELAND, OHIO.—F. T. Pomeroy, of the Pomeroy-Mandelbaum syndicate, states that the embarrassment of their business rivals is not having the effect upon their properties that might be imagined would be the case. On Monday the syndicate shipped to Philadelphia \$25,000 worth of Cleveland, Elyria & Western bonds, being the February instalment of the large block of bonds sold by Mr. Pomeroy some months ago. The Philadelphia brokers have already disposed of the December and January instalments, and telegraphed to have the February block of securities forwarded at the earliest possible moment. This indicates that the value of this sterling property, at least, is satisfactory to Eastern financiers. Mr. Pomeroy states that, of course, his people will go very slow about taking up new propositions, and will not make contemplated extensions until the move can be made with perfect safety. He states that as a matter of fact he has felt for six months or more that traction propositions were being developed faster than the money situation justified, and he has turned down a number of favorable deals which might otherwise have been taken up. Mr. Pomeroy states that all of the Pomeroy-Mandelbaum properties have been financed, and that the properties in operation are making excellent showings.

CLEVELAND, OHIO.—It is reported at Canton and Alliance that the Northern Ohio Traction Company has absorbed the Stark Electric Railway, which is building a line between Canton, Alliance, Salem and Sebring. The company is composed largely of Cleveland people, and Edward Weiberson, a well-known banker, is secretary and treasurer of the company. Mr. Weiberson states that there is no truth in the report, and adds that he has never heard of a proposition to buy property. Construction work on the line is well under way. Almost the entire distance has been graded on private right of way, and rails and ties are being distributed. The power house is nearly completed, and equipment will soon be installed. The section of the road between Alliance, Sebring and Salem will be placed in operation first, but it is expected that the entire road will be placed in operation during the coming year.

Portsmouth, Ohio.—It is stated that J. N. Camden, of Parkersburg, W. Va., who is interested in the Camden Interstate Railway Company, has submitted a proposal to buy out the property of the Portsmouth Street Railway & Light Company, consisting of a lighting plant and a 6-mile line to Yorktown. A 15-mile connecting link to the Camden line to Hanging Rock would give a continuous line from Huntington to Portsmouth, about 60 miles in length. This is believed to be part of a plan to consolidate all the lines in the Ohio River Valley and form a continuous electric railway from Cincinnati to Pittsburgh.

DAYTON, OHIO.—The Dayton, Lebanon & Cincinnati Railroad Company has increased its capital stock from \$500,000 to \$2,000,000.

HAMILTON, OHIO.—The statement of the earnings of the Southern Ohio Traction Company for December follows: Gross earnings, \$25,308.84, against \$24,743.61 for December, 1900; operating expenses, \$14,780.56, against \$14,338.73 a year ago; net earnings, \$10,528.28, against \$10,404.88 a year ago. The net earnings for 1901 were \$154,786.83, against \$140,542.18 in 1900.

DAYTON, OHIO.—The Dayton & Lebanon Railway has filed a mortgage for \$2,000,000 in favor of the Cincinnati Trust Company. The company proposes to utilize the old Dayton, Lebanon & Cincinnati Railway for electric and steam propulsion, and an extension may be built from Lebanon to Cincinnati.

DAYTON, OHIO.—The Dayton & Xenia Transit Company, controlling the two electric railway lines between Dayton and Xenia, has issued \$800,000 in bonds, which have been taken by the Old Colony Trust Company.

HAMILTON, OHIO.—The Miamisburg & Germantown Traction Company has issued \$50,000 in bonds, which have been taken by the Cincinnati Trust Company. The road is owned by the Pomeroy-Mandelbaum syndicate.

NASHVILLE, TENN.—Col. T. G. Jones, vice-president and general manager of the Memphis Street Railway Company, and John Armistead, president of the Mercantile Bank of Memphis, and also a director of the street railway company, were in Nashville recently, inspecting the Nashville Railway for the purpose of reporting to a syndicate which will purchase the entire system if the report of Colonel Jones and Mr. Armistead is favorable, so it is said.

BELLEVILLE, ONT.—The Belleville Electric Street Railway has been purchased by A. E. Lewis and Walter Alford, of Belleville.

HALIFAX, N. S.—The Halifax Electric Tramway Company, Ltd., has declared a quarterly dividend at the rate of 5 per cent per annum.

TABLE OF OPERATING STATISTICS

Notice.—These statistics will be carefully revised from month to month, upon information received from the companies direct, or from official sources. The table should be used in connection with our Financial Supplement "American Street Railway Investments," which contains the annual operating reports to the ends of the various financial years. Similar statistics in regard to roads not reporting are solicited by the editors. * Including taxes. † Deficit due to strike.

COMPANY	Period	Total Gross Earnings	Operating Expenses	Net Earnings	Deductions From Income	Net Income, Amount Available for Dividends	COMPANY	Period	Total Gross Earnings	Operating Expenses	Net Earnings	Deductions From Income	Net Income, Amount Available for Dividends
AKRON, O.							DULUTH, MINN.						
Northern Ohio Tr. Co.	1 m., Nov. '01	49,249	27,746	21,501	11,492	10,009	Duluth-Superior Tr. Co.	1 m., Nov. '01	39,217	22,199	17,018	9,195	7,823
	1 " " '00	40,932	27,042	13,890	11,620	2,270		1 " " '00	37,487	19,367	18,125	8,929	9,196
	3 " Sept. '01	193,833	98,904	94,929	-----	-----		11 " " '01	413,163	236,273	186,890	100,755	86,135
	3 " " '00	158,379	94,977	63,402	-----	-----	ELGIN, ILL.						
	9 " " '01	462,800	263,361	199,439	98,973	100,466	Elgin, Anrora & Southern Tr. Co.	1 m., Nov. '01	27,322	17,138	10,184	-----	-----
	9 " " '00	387,972	241,782	146,190	109,786	36,404		1 " " '00	25,323	16,681	8,642	-----	-----
ALBANY, N. Y.								9 " " '01	275,504	152,904	122,600	75,000	47,600
United Traction Co.	1 m., Nov. '01	121,007	85,464	35,544	22,040	13,504		9 " " '00	234,125	149,851	84,274	67,500	16,774
	1 " " '00	111,610	73,198	38,412	19,901	18,511	HAMILTON, O.						
	5 " " '01	626,048	408,525	217,523	101,644	115,879	Southern Ohio Tr. Co.	1 m., Dec. '01	25,360	14,781	10,528	-----	-----
	5 " " '00	595,528	392,962	202,566	99,929	102,637		1 " " '00	24,744	14,339	10,405	-----	-----
AUGUSTA, GA.								12 " " '01	337,741	182,954	154,787	-----	-----
Augusta Ry. & Elec. Co.	1 m., Oct. '01	18,031	10,012	8,019	-----	-----		12 " " '00	294,907	154,465	140,542	-----	-----
	1 " " '00	15,772	9,668	6,104	-----	-----	LONDON, ONT.						
	10 " " '01	169,950	102,279	67,671	-----	-----	London St. Ry. Co.	1 m., Nov. '01	12,084	6,002	6,082	2,176	3,907
	10 " " '00	157,049	91,785	65,264	-----	-----		1 " " '00	10,425	5,106	5,319	1,647	3,672
BINGHAMTON, N. Y.								11 " " '01	128,898	78,277	50,622	21,976	28,646
Binghamton St. Ry. Co.	1 m., Nov. '01	15,107	8,304	6,805	-----	-----		11 " " '00	108,066	74,748	33,318	19,941	13,376
	1 " " '00	13,615	6,591	7,024	-----	-----	MILWAUKEE, WIS.						
	5 " " '01	95,150	48,621	46,529	-----	-----	Milwaukee El. Ry. & Lt.	1 m., Nov. '01	206,356	102,286	104,069	63,166	40,903
	5 " " '00	83,588	42,252	41,336	-----	-----		1 " " '00	189,961	98,550	91,411	62,960	28,451
BOSTON, MASS.								11 " " '01	2,198,416	1,079,875	1,118,541	687,977	430,564
Boston Elev. Ry. Co.	12 m., Sept. '01	10,869,496	7,356,597	3,532,899	2,806,359	626,539		11 " " '00	2,010,811	1,031,860	979,011	754,923	224,089
	12 " " '00	10,236,994	6,828,110	3,408,884	2,932,839	476,044	MINNEAPOLIS, MINN.						
Massachusetts Elec. Cos.							Twin City R. T. Co.	1 m., Nov. '01	268,517	114,444	154,072	58,350	95,722
	12 m., Sept. '01	5,778,133	3,915,486	1,862,648	937,206	925,442		1 " " '00	239,713	109,477	130,235	51,965	78,270
	12 " " '00	5,518,837	3,659,337	1,859,500	994,294	865,206		11 " " '01	2,879,635	1,301,345	1,578,289	619,787	958,502
BROOKLYN, N. Y.								11 " " '00	2,582,536	1,199,984	1,382,551	577,622	804,929
Brooklyn R. T. Co.	1 m., Oct. '01	1,067,106	* 772,366	294,710	-----	-----	MONTREAL, CAN.						
	1 " " '00	991,454	* 639,982	351,472	-----	-----	Montreal St. Ry. Co.	1 m., Nov. '01	154,913	96,490	58,423	13,967	44,456
	4 " " '01	4,500,707	* 3031519	1,469,188	-----	-----		1 " " '00	147,616	96,257	51,358	9,790	42,168
	4 " " '00	4,217,912	* 2601525	1,616,387	-----	-----		2 " " '01	320,973	181,700	139,273	29,351	109,922
	12 " June '01	12,135,559	* 7216008	4,919,551	1,341,748	577,893		2 " " '00	306,893	182,070	124,823	15,797	106,026
	12 " " '00	11,768,556	* 7106373	4,662,177	1,135,305	526,772	NEW YORK CITY.						
PUFFALO, N. Y.							Manhattan Ry. Co.	3 m., Sept. '01	2,284,565	1,312,136	972,429	632,350	340,084
International Tr. Co.	1 m., Oct. '01	601,241	268,989	332,252	100,928	231,323		3 " " '00	2,081,964	1,236,711	845,253	626,925	218,328
	1 " " '00	240,417	120,454	119,963	82,758	37,205		12 " " '01	10,455,872	5,328,649	5,127,223	2,688,132	2,444,091
	4 " " '01	2,477,795	1,029,687	1,448,106	408,134	1,039,972		12 " " '00	9,950,735	5,195,312	4,755,423	2,688,644	2,666,779
	4 " " '00	1,081,887	469,199	562,688	324,551	238,137	Metropolitan St. Ry.	3 m., Sept. '01	3,750,285	1,563,260	2,187,025	1,148,714	1,038,311
CHICAGO, ILL.								3 " " '00	3,608,306	1,555,036	2,053,270	1,128,985	924,285
Chicago & Milwaukee Elec. Ry. Co.	1 m., Nov. '01	12,041	5,804	6,237	-----	-----		12 " June '01	14,720,767	6,755,131	7,965,636	4,534,068	3,431,567
	1 " " '00	9,781	5,604	4,177	-----	-----		12 " " '01	14,437,134	6,631,254	7,805,880	4,445,720	3,360,160
	11 " " '01	159,453	68,234	91,218	-----	-----	OLEAN, N. Y.						
	11 " " '00	131,065	53,940	77,125	-----	-----	Olean St. Ry. Co.	1 m., Nov. '01	4,200	2,044	2,156	1,146	1,010
CLEVELAND, O.								1 " " '00	3,934	2,392	1,541	1,597	-----
Cleveland & Chagrin Falls	1 m., Nov. '01	4,305	3,768	537	1,404	-----		5 " " '01	25,876	11,077	14,799	7,160	7,640
	1 " " '00	4,227	2,912	1,315	1,416	-----		5 " " '00	23,837	11,005	12,832	7,276	5,555
	11 " " '01	43,670	29,583	14,087	12,642	1,445	PITTSBURG, PA.						
	11 " " '00	45,152	30,600	14,552	12,322	2,230	Consolidated Traction	1 m., Nov. '01	296,588	126,215	170,373	88,792	81,581
Cleveland & Eastern.								1 " " '00	106,548	106,588	156,952	89,526	67,426
	1 m., Nov. '01	7,753	* 5,332	2,421	3,479	-----		8 " " '01	2,314,887	1,004,710	1,316,178	718,118	622,060
	1 " " '00	5,591	* 3,085	* 2,506	3,297	-----		8 " " '00	2,194,256	904,171	1,290,085	709,897	586,188
	11 " " '01	82,916	* 48,457	34,459	39,132	-----	PHILADELPHIA, PA.						
	11 " " '00	57,722	* 32,941	24,781	34,865	-----	American Railways	1 m., Nov. '01	73,798	-----	-----	-----	-----
Cleveland El. Ry. Co.								1 " " '00	61,888	-----	-----	-----	-----
	1 m., Nov. '01	191,295	105,538	85,758	21,635	64,122		5 " " '01	418,929	-----	-----	-----	-----
	1 " " '00	174,734	96,808	77,926	20,795	57,131		5 " " '00	373,025	-----	-----	-----	-----
	11 " " '01	2,097,210	1,158,183	939,027	222,526	716,501	RICHMOND, VA.						
	11 " " '00	1,876,050	1,019,601	856,450	239,008	617,441	Richmond Trac. Co.	1 m., Sept. '01	20,991	15,669	5,322	3,196	2,126
Cleveland, Elyria & Western.								1 " " '00	20,727	10,770	9,957	3,843	6,115
	1 m., Nov. '01	21,125	12,370	8,756	4,478	4,278		12 " " '01	218,569	139,542	79,027	38,618	40,410
	1 " " '00	15,813	11,793	4,021	3,228	793		12 " " '00	203,057	108,198	94,859	37,608	57,250
	11 " " '01	229,853	125,768	104,085	49,253	54,833	ROCHESTER, N. Y.						
	11 " " '00	163,674	92,993	70,681	35,503	35,179	Rochester Ry.	1 m., Nov. '01	85,025	44,963	40,962	25,062	15,900
Cleveland, Painesville & Eastern.								1 " " '00	82,225	48,997	33,228	24,229	8,999
	1 m., Nov. '01	13,228	8,619	4,608	-----	-----		5 " " '01	428,781	232,399	196,382	124,846	71,536
	1 " " '00	10,925	6,311	4,614	-----	-----		5 " " '00	405,918	244,182	161,736	120,760	40,975
	9 " Sept. '01	124,184	63,243	60,941	54,375	6,566	SCRANTON, PA.						
	9 " " '00	106,187	49,979	56,207	54,375	1,833	Scranton Ry. Co.	1 m., Oct. '01	2,638	20,300	† 26661	-----	-----
DENVER, COL.								1 " " '00	48,781	34,787	13,993	-----	-----
Denver City Tramway Co.	1 m., Nov. '01	118,863	64,838	54,024	32,437	21,588		10 " " '01	507,989	295,079	212,910	-----	-----
	1 " " '00	1,976	60,858	48,911	31,607	17,303		10 " " '00	501,852	298,122	206,730	-----	-----
	11 " " '01	1,374,784	750,850	623,934	350,749	273,185	SYRACUSE, N. Y.						
	11 " " '00	1,187,728	661,097	523,721	343,229	180,501	Syracuse R. T. Co.	1 m., Nov. '01	58,626	31,562	27,064	19,025	8,039
DETROIT, MICH.								1 " " '00	51,657	27,901	23,756	18,601	5,154
Detroit & Port Huron Shore Line	1 m., Nov. '01	27,979	17,447	10,532	9,466	1,066		5 " " '01	283,199	153,913	129,286	95,071	31,216
	1 " " '00	25,039	16,921	8,118	9,692	-----		5 " " '00	246,561	135,114	111,451	93,148	18,303
	11 " " '01	355,195	206,052	149,143	106,1								

NEWS OF THE WEEK

CONSTRUCTION NOTES

BIRMINGHAM, ALA.—The Birmingham Railway Light & Power Company has commenced double tracking its line from the city to the Baseball Park. This will give another mile of double track.

SAN FRANCISCO, CAL.—It is reported on good authority that the Oakland Transit Company has about completed negotiations for the purchase of the remaining half interest in the Macdonald and Henshaw franchise for an electric railway from Martinez via Richmond to Oakland, Cal.

VENTURA, CAL.—The Ventura & Ojai Valley Railway, it is said, has been purchased by a Pasadena syndicate of capitalists, headed by W. R. Staats, who is a large stockholder in the Ventura Water, Light & Power Company. The road has not been operated for several months. It is reported that the new owners contemplate equipping the road with electricity.

HARTFORD, CONN.—The formal opening of the Interstate Trolley Line, running from Hartford to Springfield on the east side of the Connecticut River, will take place on Monday, Jan. 13. Work upon the connecting link has been pushed, and within a week over 3000 ft. of track have been laid in the town of Enfield. Various unfinished details of construction will be completed this week. The power station is located at Warehouse Point.

WILMINGTON, DEL.—The Wilmington & South Delaware Traction Company has perfected its organization, electing the following officers: H. A. Richardson, president; Willard Saulsbury, secretary and treasurer; C. P. King, F. H. Treat, B. Heisel, H. A. Richardson and Willard Saulsbury, directors. The company will control the Wilmington & Chester Traction Company and the Wilmington & New Castle Electric Railway Company, and it is said that a number of important extensions will be built in lower Delaware, Cecil County, Maryland, and Chester and Delaware Counties, Pa.

EAST ST. LOUIS, ILL.—It is stated that local capitalists will build an electric railway from East St. Louis to Millstadt by way of Falling Springs. The road will run along the ridge from Fireworks Station direct to Cahokia, with a branch to Falling Springs and Millstadt.

EAST ST. LOUIS, ILL.—The Union Traction Company, which received a franchise last July to build electric roads over all parts of the East Side, will increase its capital stock from \$50,000 to \$500,000. The company will begin immediately the construction of an electric road from Gross Park to Collinsville and Caseyville, and before its work is completed will have connected these villages with Alton. It has also in contemplation the extension of its lines to the third bridge as soon as the location of that structure is decided upon. Agents of the company are at work procuring signatures of property owners along the proposed route. The president of the company is W. K. Murphy, of Pinckneyville, and W. S. Wilson is secretary. Former Commissioner of Internal Revenue, William S. Forman, is one of the incorporators.

COVINGTON, IND.—It is expected that the construction of the Fountain-Warren Traction Company's proposed road will be begun early this year. The plan of the company is to build a line to connect Danville, Ill., Covington, Veadersburg and Lafayette, Ind., constructing in all about 52 miles of line. The officers of the company are: Charles M. McCabe, president; Harry C. Marten, vice-president; Albert E. Harris, secretary; Wallace W. Luke, treasurer.

ADEL, IA.—Prominent citizens of Adel, Dallas Centre and Perry are considering plans for the organization of a company to construct an electric railway connecting these cities. It is proposed to organize with a capital stock of \$200,000 and to have all the preliminary work done this winter, so the work of construction can commence early in the spring. The promoters of the line have proposed a novel plan to secure the right of way. The land is to be appraised, and the plan is to issue stock in the company to farmers whose lands are taken, up to the amount of the appraisement. It is stated that subscriptions of a considerable amount of the capital stock have already been guaranteed to the new company in the cities of Perry and Adel.

CAMBRIDGE, IA.—The proposition to give a 3 per cent tax to aid in the construction of the interurban electric railway between Des Moines and Eldora has been carried.

SIoux CITY, IA.—The Sioux City Traction Company is constructing twelve new cars for the narrow-gage lines of the system. These cars will be about as long as the cars on the regular lines, and will be turned out of the shops at the rate of one a month.

TOLEDO, IA.—The Toledo Electric Railway Company has been organized, with a capital stock of \$200,000, for the purpose of constructing an electric railway from Toledo in a northerly and southerly direction. The company is empowered to purchase and lease other electric railways within the State. The officers of the company are: W. C. Walters, president; J. R. Caldwell, vice-president; C. E. Walters, secretary; H. A. Shanklin, treasurer. These officers and Leander Clark constitute the board of directors.

OTTUMWA, IA.—There is a project on foot to connect Oskaloosa and Ottumwa with an interurban railway within the next year. It is said that the Ottumwa Traction Company is fathering the scheme, and that there is little doubt of the plan being worked out successfully. Samuel Mahon and Harry O'Neill, of the Ottumwa Traction Company, were in Oskaloosa recently interviewing the citizens of that city and obtaining their views of the plan. Mr. O'Neill, it is said, will go again to Oskaloosa to appear before the City Council and submit a proposition for the entrance of the line into that city.

DES MOINES, IA.—The Interurban Railway Company has decided to extend the Des Moines-Colfax line, which is now under construction, from Colfax to Newton. It is the intention to complete the line from Des Moines

to Colfax by July 1, 1902, and to complete the further extension from Colfax to Newton, a distance of 12 miles, by fall of the same year.

CEDAR RAPIDS, IA.—Messrs. Bennett & Conn, who a few weeks ago were granted a franchise to construct and operate an electric railway over certain streets in this city in connection with an interurban line from Cedar Rapids to Iowa City, have now decided to build the interurban line from Cedar Rapids to Marengo, in place of Iowa City. The citizens of Marengo have been consulted, and are favorably disposed toward the project, so much so, in fact, that they are willing to extend to it material financial aid. An ordinance permitting the entrance of the road into Marengo and giving it depot and terminal privileges is now pending before the City Council of that city and will undoubtedly pass at the next meeting of the Council. As soon as the ordinance passes, it is the intention to call a special election for the purpose of voting a tax in aid of the enterprise. The decision of the promoters of this project to build to Marengo in place of Iowa City is a happy one for the city of Cedar Rapids, as it will open up new territory and removes a rival from the field of the Cedar Rapids, Iowa City & Southern Railway Company, which was organized recently to construct an electric railway from Cedar Rapids to Iowa City.

OWENTON, KY.—William Lindsay, J. W. Gayle, Florian Cox and W. P. Swope are interested in a plan to construct an electric or steam railway from Owenton to Sparta or Sanders, on the Louisville & Nashville Railroad.

WINCHESTER, KY.—The Winchester Railway, Light & Ice Company has been incorporated, with a capital stock of \$100,000. The incorporators of the company are: J. M. Pickell, A. A. Hollenrock and Edward S. Jouett.

MILTON, MASS.—At a hearing before the Norfolk County Commissioner, Dec. 30, objections to the construction of an electric railway on Blue Hill Avenue, Milton, were heard. The Blue Hill Street Railway Company has petitioned for a line of tracks on the east side of Blue Hill Avenue, which is to be widened, and the town desires the line to run on the west side of the street. Attorney Charles F. Choate, Jr., raised the point that in the matter of laying out a special reserved space for street railway use the Selectmen of Milton are the only board having jurisdiction, and derive their authority from special legislation. The matter was taken under advisement for early decision.

CAMBRIDGE, MASS.—At a meeting of the Cambridge City Government, held Dec. 31, Mayor Dickinson submitted an important communication on rapid transit. In substance it stated that the franchise for placing elevated structures in the streets of Cambridge is the same as applies to the structures already completed in Boston. As the Boston Elevated Railway Company's charter is a contract between the company and the Commonwealth for a period of twenty-five years, any substantial change in its contractual terms must have the consent of the company. Under these circumstances, the question is raised if a subway should not be substituted for an elevated structure, as a better means of furnishing rapid transit between Cambridge and Boston. The Boston Elevated has expressed its willingness to consider a subway, provided the underground franchise is the same as the present elevated franchise. Mayor Dickinson recommended the further consideration of the matter, with a view, in case the subway appear finally desirable, to join with the company in a petition to the Legislature to secure it on conditions that are acceptable and just to both parties, and that if such legislation be obtained, a referendum to the voters of Cambridge be provided for. The matter was referred to the next city government for further action.

GRAND RAPIDS, MICH.—The first car has been run on the Grand Rapids, Grand Haven & Muskegon Railway from the power house at Fruitport to Coopersville. It is generally expected that the road will be completed and ready for regular operation by Feb. 1.

LANSING, MICH.—The Gordon Traction Company has decided to build its line from Battle Creek to Lansing via Eaton Rapids, instead of Charlotte, as originally intended, on account of the unreasonable demands made for the right of way along the original line.

JACKSON, MICH.—Hon. Wm. A. Tateum is now engaged in securing the right of way for an electric railway from Jackson to Grand Rapids, and is authority for the statement that such line will be completed and put in operation early next summer.

LANSING, MICH.—Plans have been adopted by the Hawks-Angus Company for a large power house to be erected in Lansing.

KALAMAZOO, MICH.—C. W. Watkins, who was recently granted a franchise for the construction of an electric railway through Charlotte, Eaton County, does not represent the Michigan Traction Company, as was intimated.

KANSAS CITY, MO.—Joseph J. Heim, the principal promoter of the East Side Railway, which is now controlled by the Metropolitan Street Railway, is interested in a plan to construct an electric railway from Kansas City to Topeka, Kan. According to Mr. Heim, the plan is to build the line this year.

ALBUQUERQUE, N. M.—Representatives of the promoters who were recently granted a franchise for the construction of an electric railway here were in this city a few days ago, and give assurance that the road will be constructed. The time for beginning work on the new line has been extended, and a bond to insure the construction of the line has been filed with the city. The promoters of the new road will shortly organize a company to build the road.

TRENTON, N. J.—Mayor Briggs has vetoed the three ordinances granting to the Camden & Trenton Railway Company the right to lay tracks upon a number of the streets of this city, extending its line from the city limit to the business center and to the Inter-State Fair Grounds. In his letter to the Common Council the Mayor says that adequate returns are not given the city, although the terms of the ordinances compel the company to use

fenders on its cars, accept transfers from all other companies, and allow any new company that may so desire to occupy part of the streets over which it runs—three things which have never been asked of any company building lines in this city.

ALBANY, N. Y.—The United Traction Company has entered into a contract with the Westinghouse Electric & Manufacturing Company for the new equipment of the company's power station, rendered necessary in order to care for the additional power to be received from Mechanicville on July next. This will give the United Traction Company 4000 hp from Mechanicville.

MONTICELLO, N. Y.—John Blair MacAfee, of Philadelphia, informs us that he has not been awarded the contract for constructing the Monticello & Fallsburg Electric Railway, as has been reported. The promoters of the new road have begun negotiations for having the road constructed, but up to this time the contract has not been placed, so it is said.

UTICA, N. Y.—Engineers in the employ of the Utica & Mohawk Valley Railway Company have begun surveying for the line through the Sanquoit Valley.

WESTFIELD, N. Y.—The Lake Shore Traction Company has perfected its organization, electing the following officers: Arthur C. Wade, of Jamestown, president; A. N. Broadhead, of Jamestown, vice-president; A. B. Ottaway, of Westfield, secretary; Frederick R. Green, of Fredonia, treasurer. The plan of the company is to construct an electric railway to connect Westfield and Silver Creek.

FINDLAY, OHIO.—All right of way for the Findlay & Southern Railway is said to have been secured, and the plan is to begin construction work in the spring. R. Rosenstock & Company, of Cleveland, are engineers for the road.

SANDUSKY, OHIO.—Clark Rude, president of the Sandusky, Bellevue, Monroeville & Norwalk Railway, announces there is no truth in the report that the project has been abandoned, and that the available property will be sold. He claims the construction work has been held up because of inability to secure rails, a large shipment having been lost in transit.

DAYTON, OHIO.—The entire right of way, with the exception of the Hamilton franchise, has been secured for the Hamilton, Eaton & Richmond Traction Company. The road will be 47 miles in length. Surveys have been made and contracts for grading and steel rails have been let. The officers of the company are: J. J. Hall, of Dayton, president; J. S. Stewart, of Gratis, treasurer; G. Hodges, of Dayton, vice-president; Oliver Dillman, of Dayton, secretary; W. G. Riddell, of Dayton, chief engineer. Charles Orr, of Cleveland, is prominently identified with the company.

LIMA, OHIO.—D. J. Cable, president of the Lima, Delphos, Van Wert & Fort Wayne Traction Company, states that all right of way for the line has been secured and that engineers will commence surveys at once. The line will be 60 miles in length, and it is claimed it will be in operation by Dec. 1, 1902.

LIMA, OHIO.—The Council of Lima has finally granted to the Western Ohio Railway a franchise for a line to the center of the town.

NORWALK, OHIO.—The Sandusky, Monroeville, Bellevue & Norwalk Traction Company has asked the Norwalk Council to extend its franchise. The company claims shipments of rails have been received, and that the work of construction will be renewed at once.

DAYTON, OHIO.—The Dayton & Northern Traction Company, which has recently placed in operation its line from Dayton to Greenville, is preparing to extend its road to Muncie, Ind. Right of way is being secured.

UPPER SANDUSKY, OHIO.—It is stated that the Tiffin & Southern Railway Company, which has recently secured Eastern financial backing and has placed a contract for the immediate construction of the road, has acquired the right of way and franchise secured last year by the Tiffin & Southwestern Railway, which was promoted principally by Samuel Bullock, of Tiffin. The road will be built over the route proposed by the Tiffin & Southwestern Company, extending from Tiffin to Kenton by way of Upper Sandusky, McCutcheonville and Marseilles.

WOODVILLE, OHIO.—The Lake Shore Electric Railway has applied for a franchise to double track its line through the town.

DAYTON, OHIO.—It is stated that the Dayton & Xenia Traction Company is considering a plan to join its two lines outside the city and operate both into the city over its present tracks, thus saving time as well as the 3 cents per passenger paid to the city company by one of the lines. The company is planning a number of improvements and will establish a new repair shop.

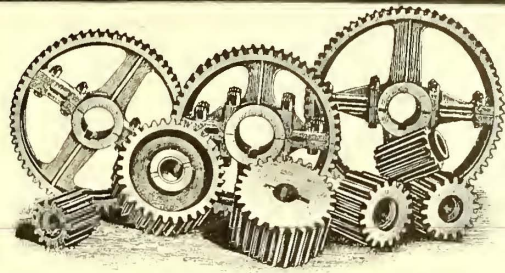
BUCYRUS, OHIO.—The Mansfield, Crestline & Galion Railway has settled a long-standing grade-crossing fight with the Big Four Railway. The crossing will be laid at once, and cars will be operated between Crestline and Galion within a few days.

CLEVELAND, OHIO.—The 3-cent street railroad fare ordinance, recently introduced in the City Council at the instigation of Mayor Johnson, was passed by that body Jan. 6. The next step will be to bid for the new lines.

BOWLING GREEN, OHIO.—To accommodate new cars recently ordered, the Toledo, Bowling Green & Southern Railway will build a large addition to the Bowling Green car houses.

GALION, OHIO.—The Ohio Central Traction Company commenced regular service Christmas Day between Galion and Crestline. Cars are now operated from Bucyrus to Crestline. Work on the line between Crestline and Mansfield is being pushed.

BLOOMSBURG, PA.—The Columbia & Montour Electric Railroad is now completed and being operated through the Borough of Berwick. Heretofore the road has been operated only to the borough line.



GEARS AND PINIONS

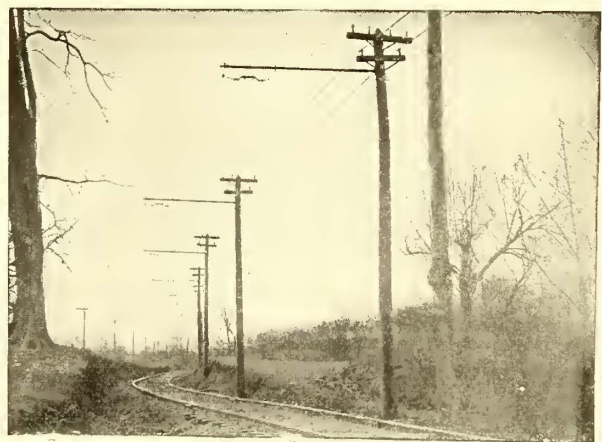
FOR ALL TYPES OF MOTORS & **Gears made of Open Hearth Steel Castings.**
High Grade Material and Workmanship. **Pinions of Hammered Steel Billets** &

THE VAN DORN & DUTTON CO.
CLEVELAND, OHIO.

Creaghead Flexible Brackets

ARE STANDARD

Nearly 100 Different Styles Top and Under Braced



No. 190 Bracket and No. 439 Double Curve Insulator.

LINE MATERIAL POLE FITTINGS

Complete Equipment for Overhead Construction

WRITE FOR CATALOGUE

CREAGHEAD ENGINEERING COMPANY

...Engineers and Manufacturers...

EIGHTH AND PLUM STS.,

CINCINNATI, OHIO.

SOMERSET, PA.—A charter for the Somerset County Street Railway Company, capital \$210,000, has been secured. The promoters are: W. H. Ruppel, J. C. Lowry, George R. Scull, J. M. Cover and George J. Krebs.

PHILADELPHIA, PA.—John M. Mack, who is one of the members of the syndicate that was granted rapid transit franchises by the City Council, is authority for the statement that the construction of the projected elevated railroad lines about which there have been so many conflicting and persistent rumors is to be begun in about sixty days. The plan is to build a line from Delaware Avenue to Sixty-Third Street, to be followed by a branch out Woodland Avenue; then a line on Broad Street, and a further extension of the system to meet requirements. Now it has been reported that J. P. Morgan is to finance the project, but representatives of Mr. Morgan flatly deny this. There is absolutely nothing to indicate that construction work is to be begun.

QUAKERTOWN, PA.—It is expected that the Lehigh Valley and Philadelphia line, which is controlled by the Lehigh Valley Traction Company, will shortly be opened for business from Allentown to North Wales, a distance of 35 miles, as there is only a small break to complete near this place. This will leave but 2 miles of track, excepting two small breaks, which prevent 6 miles of track from being operated as yet, to be completed before connection will be had with the Philadelphia lines at Chestnut Hill. It is expected that this will be completed in the early spring. The upper part of the line, from Coopersburg to Allentown, 11 miles, has been in operation for about a month, and from this place to North Wales, 18 miles, for some weeks.

KIMBERLIN HEIGHTS, TENN.—The Knoxville, Kimberlin Heights & Sevierville Railway Company, which proposes to build an electric railway from Knoxville, through Knox, Blount and Sevier Counties, will shortly perfect its plans for the line, and it is expected that actual construction work will be begun in the near future. Power to operate the road will be secured by damming the Pigeon River 10 miles east of Sevierville. Dr. Ashley S. Johnson, of Kimberlin Heights, is president of the company.

NORTH YAKIMA, WASH.—An inspection of the route of the proposed electric railway that is to connect North Yakima, Moxee, Parker, Sunny-side and Prosser has recently been made. D. P. Robinson, of Boston, was one of those who made a tour of the route, and on his report will mainly depend the construction of the road. Among the Westerners who are interested in the road are: R. H. Denny, E. F. Blaine, of Seattle; H. B. Scudder, Edward Whitson, of North Yakima; Walter N. Granger, of Zillah.

OSHKOSH, WIS.—The Fond du Lac & Oshkosh Electric Railway Company, recently organized, has acquired the franchises and rights of way between the cities of Oshkosh and Fond du Lac that were obtained the early part of last fall, and the contract for construction and equipment of the new line has been placed with the Columbia Construction Company, of Milwaukee. The rails have been ordered for delivery in March or April, and construction work will be begun shortly thereafter. The construction of the new line will be first class in every particular, following as nearly as possible standards adopted by the best steam railroads. All track work will be done by the Falk Company. For the overhead construction cedar poles will be used. The cars will be of the best and most substantial type known to interurban electric service, and will embrace some special features not yet employed by the other lines. Each car will be equipped with four motors, and will be capable of running on the level at a speed of 50 miles an hour. The new road will be 18 miles long. Arrangements have been made with the Winnebago Traction Company, of Oshkosh, for the use of its tracks into that city, and negotiations are progressing favorably with the Fond du Lac Electric Company for trackage in Fond du Lac. It is not expected to build a power house, as negotiations are also under way with the Fond du Lac Electric Company and with the Winnebago Traction Company, of Oshkosh, for furnishing the necessary power.

CANADIAN NOTES

LONDON, ONT.—Application has been made for the incorporation of the London Railway Company to build an electric railway from Ingersoll to London. F. G. Rumball and J. H. Purdom, of London, are among the promoters, and T. H. Incombe is solicitor for the company.

MORRISBURG, ONT.—It is understood that a company is being formed to build an electric railway from Morrisburg to Winchester, with a branch to Chesterville. Irving Hilliard is solicitor for the applicant.

MONTREAL, QUE.—By the decision of the Court of King's Bench the Montreal Street Railway has the right to use electric sweepers in clearing its tracks, and must pay one-half the cost of the removal of all snow in a street through which its cars pass, and not one-half of the amount left after the snow has been removed from the tracks.

MONTREAL, QUE.—Westmont has extended the franchise of the Metropolitan Street Railway Company for fifty years. The route will extend from the Guy Street line, Cote des Neiges, to the Boulevard and western limit of Westmont, with connections later with the center of the town. In view of the fact that a new franchise is granted for fifty years, the town will only contribute a lump sum of \$4,500 to the extension, in lieu of the \$2,000 per annum for ten years, as originally proposed.

WINNIPEG, MAN.—Winnipeg interests are planning to build an electric railway from Winnipeg to Headingly, a distance of 13 miles.

ROSSLAND, B. C.—It is the intention of the Velvet Mines to apply, at the next session of the House of Commons, for a charter to construct and operate an electric or steam railroad of standard or narrow gage between Rossland and the Red Mountain Railroad, a total distance of 30 miles.

KOHLER BROTHERS,

Engineers and Contractors
for Complete Steam and
Electric Railways. ❀ ❀

Write us when contemplating the building of new lines, or improvements to existing properties.

1804-1806-1808-1810-1812

Fisher Building,
Chicago, Ill.

JOHN BLAIR MACAFEE

Harrison Building, Market and 15th Sts.
PHILADELPHIA, PA.

Building and Equipment
of Electric Railways. ❀

Installation of Electric
Light and Power Plants. ❀

J. G. WHITE & COMPANY

INCORPORATED,

Engineers, Contractors,
29 BROADWAY, NEW YORK, N. Y.

LONDON CORRESPONDENT:

J. G. White & Company, Limited
22a College Hill, Cannon St.

ARNOLD ELECTRIC POWER STATION CO.

Engineers, Contractors,

Designers and Builders of Electric Railways,
Power Plants and Complete Electric Systems.

❀ ❀ ❀

Transit Bldg., New York.

Suite 1540 Marquette Bldg., Chicago.