

Electric Railway Journal

Consolidation of STREET RAILWAY JOURNAL and ELECTRIC RAILWAY REVIEW

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It's Sabotage to Reject Savings

WE REFERRED recently in these columns to the desirability of making public at frequent intervals the statistics of income and expenses so that the public might be informed of the financial condition of the railway serving their community. Closely related to this subject is the policy which a company should adopt as regards possible economies. Some seem to act as if they believed that any admission from them that new methods might effect a saving, would prejudice their plea for a higher fare.

While it is our firm belief that no economies attainable can offset an unchanging fare in a rising market, we can think of no worse policy than that mentioned. To grant an increase in fare is not the most popular pastime of our regulatory bodies. They must have ample grounds for their decision. Not the least of these grounds is that the applicant has exhausted all the available resources of the art. If it is shown by the commission's engineers that certain possible economies were ignored, the manager who has done the ignoring will not find the road to a favorable decision beset with thornless roses. Furthermore, we haven't found yet that even those who have secured higher rates of fare can afford to overlook any economies. Higher fare or no, we must save! *Save! SAVE!*

Of Course the Cities Want to Settle—On Their Own Terms

THE labored explanations of the secretary of the Conference of Mayors in New York, noted in a recent issue, as to the attitude of municipalities in that State toward public utilities, may indicate the desire of the cities to co-operate in rate cases. They also show, however, the inability of the cities to talk the language of agreement on the subject.

The municipalities in New York are at present in an illogical frame of mind. They want peace in the utility world, but they insist that rate increases be granted by the "proper" officials only in the "proper" way. They are opposed to subterfuges on the part of utilities, but they take it for granted that their own record renders them above suspicion. They evidently have no faith in State or federal regulation of rates on the basis of justice, and they wish full power under permissive public ownership to deal with their utilities in their own enlightened way.

The regulatory law in New York has been held by the courts to be defective in regard to the grant of commission control over municipal franchise rates. Some cities have released their railways from the franchise

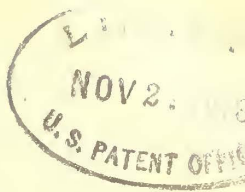
restriction as an act of simple justice, but the Conference of Mayors as a body is obsessed with misconceptions of regulatory practice and procedure and with the delusion that it is better to leave rate decisions to inexperienced, politically-motivated municipal councils than to grant jurisdiction to the well-equipped commissions. The commissions are often slow of action and irresolute of judgment, but these attributes in a rising labor and material market work injury to the utilities, not to the cities. If New York municipalities want to act co-operation instead of merely talk it, the proper course lies open. Let them stop quibbling and submit their cases frankly to the commissions for settlement—they will secure all the justice they deserve.

We Can't Always Blame the Commissions

AS A RESULT of the present electric railway situation, the statement is sometimes made that the principle of regulation by commission has "broken down." It is true that in these abnormal times regulation by commission has not proved a panacea for all electric railway ills. It has not overcome at the same time the scarcity in labor and material, the high money rates and the effect of the war on riding and personnel. Fares have not been increased as rapidly as they might have been or to the degree that the railways on many occasions asked, but in most cases where the commissions have had the power to raise fares they have done so at least to some extent. The real question is what would have been the situation if there had been no commissions and if the company had been obliged to appeal to the cities and legislatures as in the days before commission rule.

Time certainly brings changes. Some seven or eight years ago a civic improvement association requested the railway in its city to use more distinctive route signs. Upon the refusal of the railway, the case was taken to the public service commission. There the manager and the general counsel of the railway argued at length that the commission had no legal authority to compel the company to make the change. Nevertheless the commission ordered the signs to be installed and they were put in. Within the past year the same manager and the same lawyer have argued that the same commission has full legal power to raise the fare to any amount necessary to assure good service!

No system of regulation or government is perfect, but regulation by commission is the best plan yet devised for controlling the affairs of public utility companies, and these companies can greatly help or impair its success as they accept or fight reasonable requests made for the purpose of improving the service.



Getting at the Ultimate Consumer of Electric Railway Energy

IN THE extent to which devices have been installed on cars for the purpose of checking the correctness of their operation we in the United States are far behind our ally, Great Britain. Just why this condition has come about is not easy to explain, any more than is the fact that the air brake has not been widely adopted in that country whereas the contrary is true with the electric brake. It would be considered almost unthinkable in England to put a lot of expensive motor and control equipment on a car without giving the motorman something to indicate that the equipment is being handled effectively. The number of cars so equipped in this country is still relatively small.

While every effort should be made to reduce power consumption by means of the skip stop, by cutting down power plant and line wastes, by using better car equipment and by other means beyond the control of the motorman, it must not be forgotten that the motormen are the "ultimate consumers" of the energy. They are the men who have it in their power to waste all that is saved elsewhere. Their intelligent co-operation in energy saving must somehow be secured.

Granting for purpose of argument that the motormen desire to save power, and it is practicable to furnish the necessary incentives to this end, it is obviously impossible to turn this desire into tons of coal unless the men can know when they are operating efficiently, and especially when they are not.

Just how far the British managers have been successful in securing the full results possible with checking apparatus on the cars we are unable to say. After all, such apparatus is a means to an end rather than an end in itself. The present point is simply that they appreciate the importance of having the checking apparatus there.

To What Extent Should Washington Control Intra-State Railways?

ONE of the first questions to be taken up in any plan of reconstruction for the electric railways is the future extent of federal control. Is the supervision which has been exercised from Washington during the war period over wages to be continued during peace and is federal supervision to be extended so as to include federal supervision over rates, or will there be a resumption of state control in practically all electric railway matters, except where interstate commerce is concerned?

In the days before the war electric railways generally favored state rather than national control. This was shown in 1914 when the Interstate Commerce Commission requested statistics on accidents, whether occurring in Detroit or elsewhere, from the Detroit United Railway because the company did some business which was interstate in character. At that time counsel for the company, assisted by a committee from the American Electric Railway Association, at a hearing before the Interstate Commerce Commission urged that such subjects should be reserved for state action, and this view was accepted.

During the past year the federal government, through the National War Labor Board, which was organized

for the purpose of devising for "the period of the war" methods of labor adjustment, has passed upon a number of labor disputes on electric railways, and the federal government has taken over or assisted in the financing of other electric railway undertakings under various acts of legislation. The slowness with which the state authorities, in some cases, acted on pleas for higher rates has led, during the past year, to a strongly expressed sentiment by many electric railway men that the rate-making power should also be assumed by the federal government. Now that the war is over, it is safe to say that many of the states will feel as if they were the best judges as to the needs of the electric railways within their boundaries, and many electric railway men will agree with them.

It Must Not Be Public Ownership By Default

ANY plan for the solution of the troubles of the electric railways must comprise certain fundamentals. Among these are:

1. Unity of interest between company and public, and the public's confidence.
2. Safe and dependable service, responsive to the needs and demands of the public.
3. Adequate revenues, either direct or indirect, for good wages, skillful direction, adequate reserves and sufficient return to invested capital to preserve credit.
4. A keen incentive for efficient operation.
5. Flexibility enough to meet the widely varying needs of different communities.

It is to determine the best way of securing these desiderata that the American Electric Railway Association at its conference on Nov. 1, authorized the appointment of a committee "to make a study of reconstruction problems, particularly those relating to local franchises."

Fortunately the committee will not be pioneers in their research, and much time should therefore be saved. The Massachusetts legislative committee, from whose studies the present "service-at-cost" laws in that state arose, made a comprehensive study of the whole field. There are also numerous working agreements and partnership relations, beginning with the Cleveland plan and continuing through the arrangements in force in Chicago, Kansas City, New York and Cincinnati, differing from the conventional American plan and all available for immediate study. As Ivy Lee points out in an article elsewhere in this issue, the legislative sessions of the coming winter are near at hand, and there is need for quick and united action; otherwise, in some states, it may be public ownership by default.

There are certain to be important changes in some states in the existing relationships between companies and communities. There will surely be established in other communities a greater measure of public participation in management. The danger is that in the effort to attain these ends, legislators, insufficiently informed in the industry and its intricate bearings, both social and financial, may adopt unwise methods, ignorant as they undoubtedly are of the large body of experience with existing railway franchises.

If this possibility—perhaps probability—of precipitate action is to be forestalled, some effective educational work must be done immediately.

Cities Should Recognize that Track Depreciation Is Cumulative

IN NO DEPARTMENT of an electric railway company has the present shortage of men and materials been felt to a greater extent, perhaps, than in the way department. In spite of wage rates, which have been relatively high, it has been practically impossible to compete in the labor market against the various contractors engaged in war work, especially when these contractors have used methods to take men from other work which would manifestly be called unfair in any other than war times. As a result of these conditions, combined with the actual losses of men already in the army, many way departments have been obliged to do their work with forces anywhere from 30 to 50 per cent of normal.

Meanwhile, the condition of the tracks has been deteriorating for want of attention, and the rate of deterioration is constantly increasing. Each "bad track" condition which is not attended to promptly tends to create more in its immediate vicinity. The ultimate result is threefold. The cost of repair increases greatly; in some instance the car service must be reduced because of poor track, and the damage to equipment increases the troubles of the mechanical department which is already under a great handicap for lack of men and material.

The material phase of the present situation is even more alarming than the shortage in man-power. Steel rails are as scarce as precious stones, and it is almost impossible to obtain them at any price. Orders more than two years old remain unfilled upon the books of the mills, and no hope is extended as to when delivery will be made. It is about as difficult to secure ties. Much of the tie timber on the Atlantic coast at least comes from the South by water, and since the government took over coastwise shipping, very few ties have been shipped.

The situation as to prices of all kinds of track material is so well known that it is only mentioned because prices now tend to curtail purchase, and in many cases there is not sufficient cash in hand, nor can credit be obtained, with which to purchase. Nevertheless, many people seem to think that by some form of the conjurer's art the railways can take a dollar's worth of nickels and make it buy two dollars' worth of rails in spite of the fact that everything the public buys has advanced in cost except the transportation for which in many cities it still pays only a nickel.

It is doubtful if there were over 100 miles of track reconstructed this season in this country. It is stated that no reconstruction has been done in England since the beginning of the war. Every mile of reconstruction deferred now means greater operating expense and future difficulty. The future demand for track materials will be unprecedented, if the railways are not bankrupt, and even bankrupt roads in large cities must continue operation somehow. The *Tramway & Railway World* estimated an immediate demand in Great Britain for 20,000 tons of rail and that a total of 318,000 tons will be needed by 1921. Most of this rail will have to be obtained from America. On the basis of these figures we may assume present rail requirements here of 80,000 tons, with a total of about 3,000,000 tons up to 1921.

This indicates that anyone who thinks that prices will drop within a year or so after the war is likely to be very much mistaken.

We cannot forget the other materials which are required in electric railway service, and it is quite safe to say that the problems which confront the executive, as presented by way department conditions alone, are extremely difficult of solution. Meanwhile the engineers will continue to do their best with the diminishing means at their command, to keep some kind of tracks under the cars. In these circumstances, it is obvious that war service, or war conditions, are not leading to efficiency but rather to the reverse, and unless there is public recognition soon of the fact that an efficient railroad is a city's best asset, there is bound to come an awakening.

Higher Fares Just as Important Now as Ever

CESSATION of hostilities in Europe has given rise to all sorts of speculation as to what will be the effect on business in this country. This is of special concern to public utilities, and while all have occasion to rejoice at the approaching return of peaceful days, the outlook for electric railways is not much if any bettered by the return of peace.

Take the situation of the electric railway companies which have not yet filed applications for higher fares or those whose petitions for relief have not yet been acted upon. While the future seems to hold out more hope than it did a few months ago, hope does not pay expenses and it would be unfortunate if it lead the too timid executive into relaxing his efforts for extra revenue which he thought essential not long ago. Some petitions have been filed based on financial estimates that a certain rate of fare was necessary to save the company from bankruptcy. The authorities who are considering such applications are likely to be optimistic to the extent of believing that conditions are going to improve rapidly and that the public meanwhile should not be burdened with a rate of fare which the future may prove to be excessive.

This is the time for the electric railway companies to insist that conservatism be not stretched to their financial detriment. Many of these companies have struggled along on the brink of disaster for several years. They do not hope or ask to regain the losses of the past. But they do feel that they are entitled to a return on their investment and that they should not be put off with a compromise that will give only partial relief until better days bring lower costs and added business.

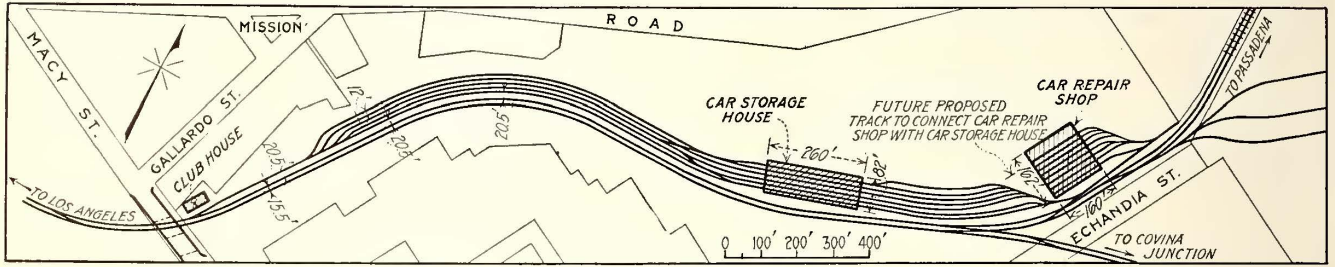
No one knows how many months or years will pass before costs of materials and supplies will go down to a normal level. No one is expecting that the price of labor will be reduced in the near future, if indeed it ever goes down for employees of electric railways. This being the case, the companies which can make a showing that entitles them to relief should not be put off. Their bills must be paid, and they must be put in a position to raise new capital for extensions and improvements which the return of prosperous times will call for. These utilities are the backbone of the nation in time of peace as well as of war. Justice should be done and no half-way measures will do.

Pacific Electric's New Car Storage and Repair Facilities

Three Divisional Storage Track Layouts, with Carhouses and Repair Shops, Have Recently Been Placed in Service

BY CLIFFORD A. ELLIOTT

Cost Engineer Maintenance of Way Department, Pacific Electric Railway, Los Angeles, Cal.



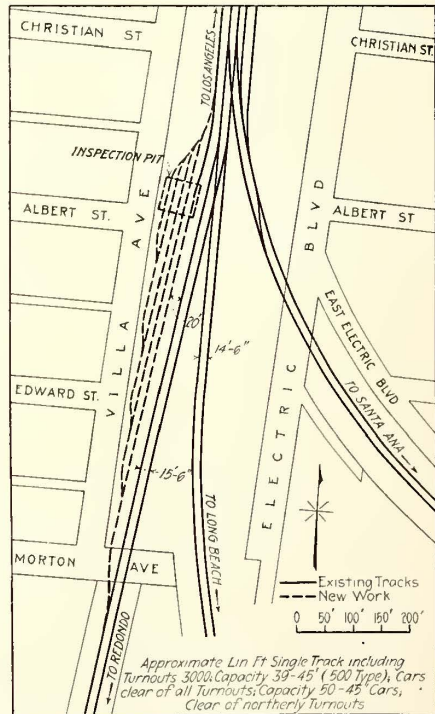
CARHOUSE AND STORAGE YARD TRACK LAYOUT AT MACY YARD, LOS ANGELES, CAL.

THE Pacific Electric Railway's main division carhouses, storage tracks and shops were, prior to 1917 and 1918, located in Los Angeles, approximately 1 mile from the main passenger terminal. This carhouse and shop site comprised 28 acres of land, of which approximately 6½ acres was taken over by the Los Angeles Union Terminal Company for its market terminal layout reviewed in the issue of *ELECTRIC RAILWAY JOURNAL* for Feb. 19, 1916, page 376. On the property not disposed of the Pacific Electric retained its main freight receiving and dispatching stations, together with the freight switching tracks that serve the Los Angeles district proper. The property sold to the terminal company had become of such great value, due to its logical location with respect to the constant increase of industrial activity in this particular district, that it was to the advantage of the company to make way for this industrial project and to seek other locations for its carhouses and shops.

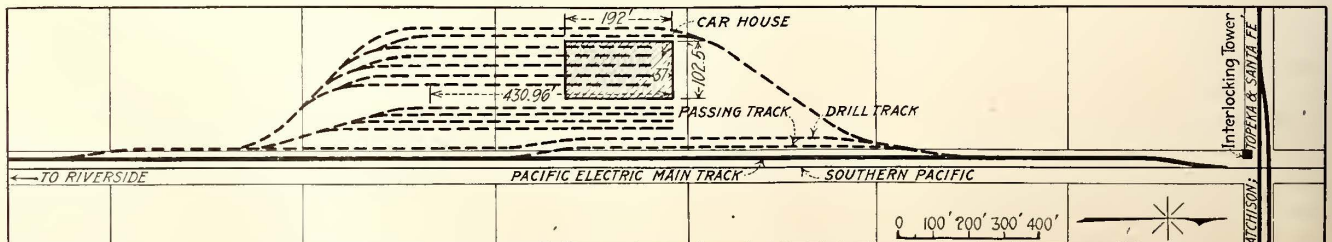
The main shops, now under construction, are being established at Torrance, approximately 16 miles from Los Angeles. The proposed new shop layout was reviewed in the issue of the *JOURNAL* for July 21, 1917, page 95. New carhouse facilities, with storage track layouts, were arranged for at convenient locations, and the company resorted to a divisional plan in carrying out its improvements. This plan was followed in order that trainmen could begin their runs most conveniently, with provision for handling minor repairs and cleaning

cars under standardized conditions. Further, the idea was to perfect arrangements for more highly organized switching and inspection of cars. The divisional car-

houses are equipped to such an extent that they can care for quite a variety of small repairs and thus avoid unnecessary "deadheading" of the cars to the shops at Torrance. The carhouse and storage tracks for the northern division, the cars of which terminate their runs at Los Angeles, were located 2 miles from the company's Los Angeles main passenger terminal at Macy Yards,



TRACK LAYOUT AT WATTS STATION



CARHOUSE AND STORAGE YARD TRACK LAYOUT AT SAN BERNARDINO

on the Pasadena "Short Line." Property located on a steep hillside, and of no use for any other purpose, was utilized. Some 51,000 cu.yd. of earth was removed with steam shovels to provide the proper level for the contemplated tracks and buildings. The site was obviously well drained.

The new layout has proved effective in lessening congestion in the streets, the former layout having been in the districts of dense traffic where extreme city restrictions interfered with the maintenance of schedules and necessitated much inefficient switching in the endeavor to obtain the fullest service possible from the old carhouses and storage tracks.

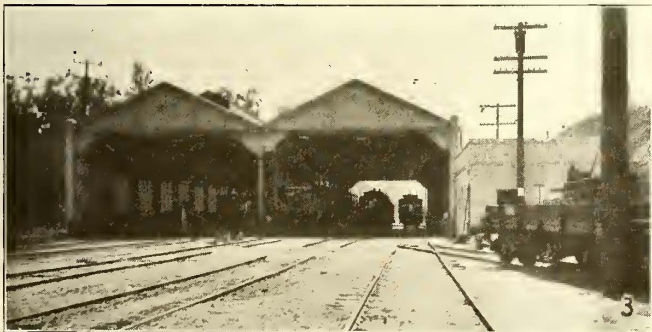
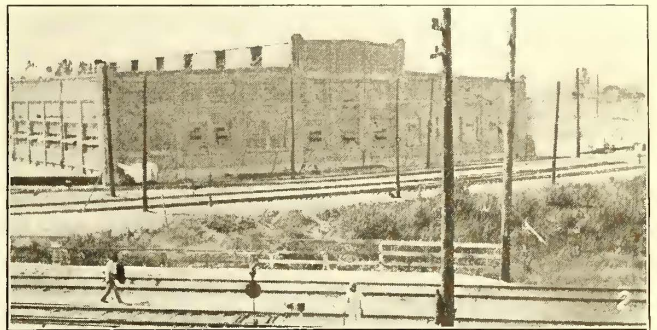
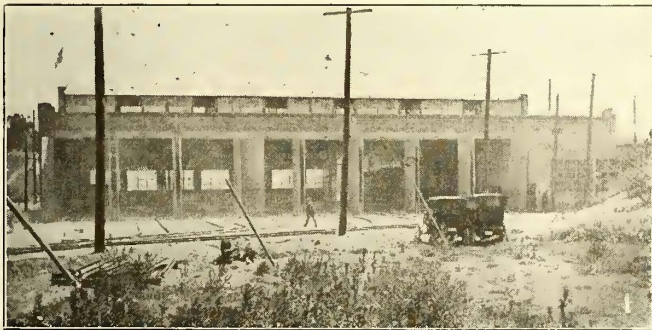
In constructing the new Macy Yards car-storage track layout fifteen tracks were provided with storage as follows:

	Car Storage Capacity
One main lead track.....	42
Four storage and car inspection tracks.....	166
One car inspection track.....	15
One storage track.....	7
Eight tracks through car repair shop.....	16
Total, fifteen tracks.....	246

accommodate a 20-ton steel traveling crane. Outside and adjacent to the south wall of the shop a platform was built, and car-wheel storage tracks provided.

In the repair shop there are eight tracks with concrete pits for the entire length of the building and a portion of the interior is partitioned off into independent building units for a battery room, an armature room, a machine shop and a blacksmith shop. A separate building adjoining the blacksmith shop, was erected as a fender room. A separate unit outside the shop was also built and equipped with adequate toilet facilities, including shower baths.

The inspection house was constructed in the form described, with tracks extending from end to end, with a view to facilitating through movement of the cars through the yard and the inspection house. Adjacent to this house is a storeroom, 25 ft. x 45 ft., where an adequate store stock is maintained under the direction of a division storekeeper. The storeroom is built of brick, and is furnished with racks for storing material and supplies, so arranged that material can be stored from either side. This facilitates handling and also



BUILDINGS OF THE PACIFIC ELECTRIC RAILWAY AT MACY YARDS, LOS ANGELES

Fig. 1—Car repair shop with track entrance. Fig. 2—Side view of same. Fig. 3—One end of car inspection house, small building

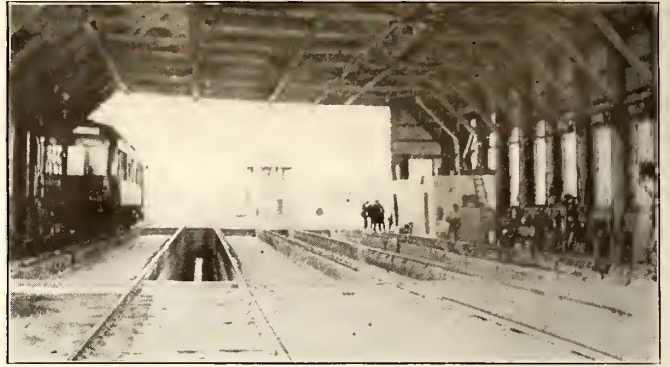
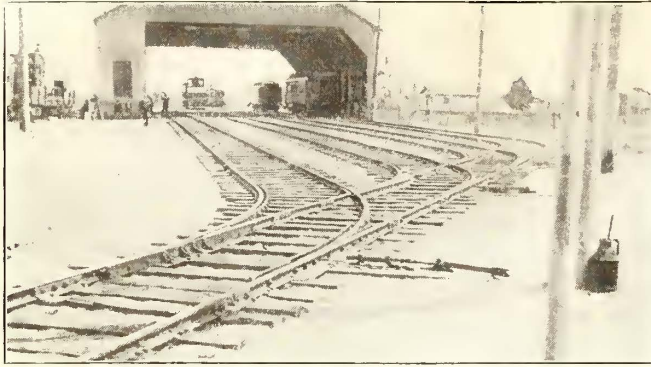
at right being the storehouse. Fig. 4—Other end of inspection house, small building at left being the car foreman's office.

The principal structures in these yards were the car inspection house, 82 ft. x 260 ft., and the car repair house, 160 ft. x 160 ft. The inspection house is steel framed, and has brick exterior walls with asbestos-covered roof, steel sash and cement floor. It contains six concrete inspection pits, each 260 ft. long. The repair house has brick and concrete exterior walls, combination wood and steel trusses, and H. W. Johns-Manville "Adjex" three-ply roof. The roofing material had previously given four years of service on the company's old main carhouses abandoned at the terminal site. It was reclaimed in first-class condition for reuse.

On each side of the new repair shop a 60-ft. car-storage space was arranged, and through the center of the structure a 40-ft. craneway was constructed to

economize space. Next to the storeroom are six underground steel storage tanks for oil, with the same number of Bowser oil pumps mounted inside the storeroom. Two of the tanks utilized were old and obsolete oil-tank cars, while the remaining four were reclaimed oil tanks of no further service at other car shops.

At the Macy Yards shop machinery and tools were installed for efficiently handling the work assigned to the division, but the purchase of new machinery and tools was discouraged where it was possible to transfer such from the old carhouses. In addition such brick, steel and other construction material as could be reclaimed at the former site were used to good advantage here. As a consequence of the strict economy exercised, the new storage tracks, buildings, machinery, etc., have



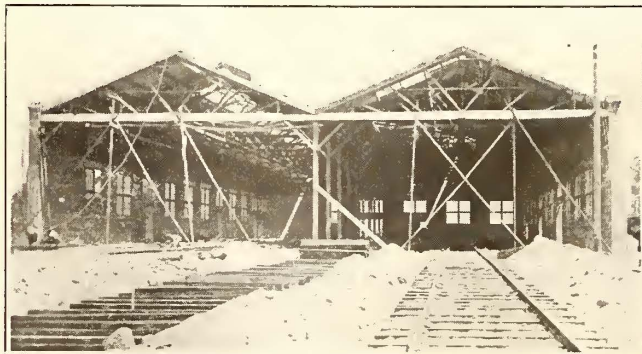
DIVISIONAL CARHOUSE AT WATTS STATION, SHOWING OPEN TYPE OF CONSTRUCTION SUITABLE TO CALIFORNIA CLIMATE

been put in at a cost of approximately \$170,000. In addition to the details given I may mention that all concrete pits in these structures are electrically lighted and all structures are protected by means of an auxiliary fire alarm system.

On account of the importance of this division and because a large number of men are employed here and many trainmen begin and end their runs at this station, it was considered advisable to construct a trainmen's club house to replace the one previously maintained at the abandoned carhouse location. A house was therefore designed to be attractive to the men during working and emergency times, especially in view of the difficulty experienced in holding extra men in service. At this station some fifty unmarried trainmen remain daily from 9 a. m. to 3 p. m., to be ready for service in emergency runs. The building constructed is a brick, "class C," two-story structure. It contains an instruction room, a locker room and toilet facilities on the first floor, and the club secretary's office and a recreation room with pool and card tables on the second floor. The building is 31 ft. x 82 ft. in plan and 25 ft. high, supported on concrete and pile foundations. The estimated cost, inclusive of equipment, was \$12,000. The building is shown in an accompanying illustration.

SOUTHERN DIVISION HAS LESS EXTENSIVE BUT ADEQUATE FACILITIES

For the southern division a carhouse and a storage track layout were provided at Watts Station, approximately 7 miles from the main terminal passenger station in Los Angeles. At this point the Long Beach four-track line terminates and diverges into double tracks. The Santa Ana double-track line and the Wadda-Redondo double track line diverge here also.



COMBINATION CAR REPAIR SHOP AND CAR INSPECTION HOUSE UNDER CONSTRUCTION AT SAN BERNARDINO

At Watts Station a car inspection house, 150 ft. x 65 ft., was erected which, exclusive of the small tool equipment and light machinery for minor car repairs, cost about \$18,000. The building is of frame construction, with frame bays, and is covered with corrugated iron. The outside walls are of concrete, 5 ft. high. Where practicable the frame portion of the carhouse was constructed by utilizing material salvaged from carhouses abandoned in Los Angeles. Four car-storage tracks extend through the carhouse with a total capacity of eighty-four cars.

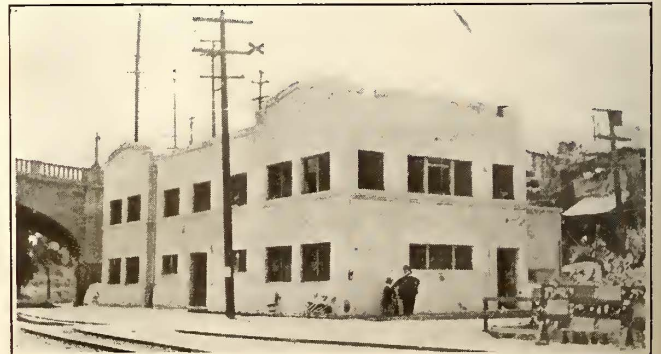
ABOUT \$60,000 SPENT AT SAN BERNARDINO

The most central point for the new divisional carhouse on the eastern division was at San Bernardino, approximately 59 miles from Los Angeles. Riverside and Redlands on this division were already suitably provided with carhouses and storage facilities. The growing importance of San Bernardino made better facilities necessary and a structure was erected to serve as a combination repair shop and car inspection house.

It was considered more than ordinarily important to have this shop properly equipped with machinery and tools, as the "deadhead mileage" to the new shops at Torrance is some 75 miles.

The building is 100 ft. x 192 ft. in plan, has brick exterior walls, wood columns, combination wood and steel trusses and a corrugated iron roof. It contains five concrete car-inspection pits. Timbers 12 in. x 12 in. in size were used on the pits above the concrete work.

Inside the main building are a storeroom, a machine and blacksmith shop, and an office for the chief foreman and his force. The building also contains one automobile pit for repairing and overhauling a number of automobile buses, owned by the company and operated



BUILDING FOR TRAINMEN'S RECREATION QUARTERS AT MACY YARDS

between San Bernardino and Highland, a distance of 6½ miles. This service was but recently inaugurated.

The track layout at this point provides for ten storage tracks and one through track, the total storage capacity of all storage tracks as installed being ninety-five cars.

Since the construction of the new divisional carhouses, the company has also installed small club quarters at the Sherman carhouses and shops, in the Long Beach

passenger station, in the Hill Street passenger terminal at Los Angeles, at the Sixth and Main Streets terminal storage-track yards in Los Angeles, and at the Colorado Street carhouse in Pasadena. Rest rooms and recreation quarters have also been established at six of the divisional carhouses for the use of women car cleaners who, as a war measure, now largely replace the male Japanese cleaners previously employed.

There Is No Further Time for Drifting

A Crisis in the Affairs of the Electric Railways Is Here—
Approaching Sessions of Legislatures Render Action by
the Industry and a Specific Program Necessary

BY IVY L. LEE

THE course of the electric railways in the United States is going to be given definite direction within the next few months. Their entire future is involved. This immediate action will be taken:

1. Because the financial condition of the industry will force it.

2. Because state utility commission regulation has not been able to meet the situation.

3. Because popular dissatisfaction with the actual condition of affairs will force the legislatures to act.

The industry has been drifting—waiting for something to turn up. There is no longer any time for drifting. It is absolutely certain that the sessions of legislatures during the coming winter are bound to attack this problem. What course shall they take?

Several plans have been suggested for the amelioration of the railway situation, relating both to the fare and to the method of operation. For the former the choice lies between an increase in the flat fare or else an increase in the average fare by the zone system. In modes of operation the suggestions most frequently made are public ownership, service at cost, or some partnership arrangement which would unite the interest of both company and city in profitable operation.

FLAT FARE INCREASE NOT A PANACEA

While several hundred companies in the United States have been enabled to make an increase of flat fares, it is now apparent that this method will not meet the whole situation. There are two reasons for this. In some states the commissions are without power to authorize the companies to increase the flat fare or make any other increase of fare contrary to franchise stipulation. This throws the whole matter into the hands of local councils and means politics.

But even in states where commissions have the power to increase fares the situation has not been met. Massachusetts, Maine, New Jersey and Pennsylvania are evidences of this. The instance of Massachusetts is particularly enlightening, for as Public Service Commission regulation there has existed for more than thirty years the failure of that system seems conclusive.

The increase of fare from 5 to 6 or even 7 cents has not resulted, in most cases, in sufficient increase of

revenue. It has proved that there is a point at which an increase of flat fare results in a decrease of revenue.

ZONE SYSTEMS

While there has been relatively little experience with zone systems in the United States, the experience has been sufficient to show that the problem of collecting the fares in dense traffic conditions is so great that the zone system is not practicable. It may be practicable in less well-populated communities. Palpably, the zone system will meet the situation in only a limited number of communities.

In addition to changes in the rate of fare, service-at-cost and partnership arrangements have been effected, and lately the movement for public ownership has gained headway. That the headway gained has been unintelligent matters not. It is a fact and as such must be dealt with.

The New York State Conference of Mayors has declared itself openly for the program of public ownership. Both political parties in the State of New Jersey have declared for public ownership. Seattle has just voted for municipal ownership. San Francisco has it already.

In New Jersey the decision by the Court of Errors and Appeals sustaining the Public Utility Board's jurisdiction over fares, regardless of franchises, will result in a legislative warfare over municipal ownership and both party platforms had municipal ownership planks.

THE TIME FOR DRIFTING HAS PASSED

Whatever be the merits or the demerits of any one of these systems, it is perfectly plain that within a very few months some one of these plans, or combination of them—something that differs from the existing system—is going to be selected as a legislative basis.

Therefore, the time for drifting is passed. The industry must now perforce get behind some definite, concrete program, if it is not to be municipal ownership by default.

The American Electric Railway Association is the one important national body representing the industry in this country. Yet, at its conference in New York on Nov. 1 the lack of a definite program was notable.

It was only after the day's proceedings were practically over and after at least one-half of those in attendance had left the conference hall that Mr. Mortimer offered the resolution committing the American Electric Railway Association to a policy of furthering legislation looking toward public ownership, which has been so ably debated in the columns of the *ELECTRIC RAILWAY JOURNAL*. That something of this sort would happen might have been suspected from the paper by Mr. McCulloch, in which the argument was entirely in favor of a policy of public ownership. Mr. Mortimer's resolution was referred to the executive committee.

The resolution at first seemed fated to go by without any serious debate, when the gage was seized by Mr. Gadsden, whose resolution for the appointment of a committee for a complete study of the situation looks toward real constructive action.

The incident was by far the most important of the conference. It is important because it is symptomatic and significant of the thought of the times.

LEGISLATURES MEET SOON

Unquestionably a large fraction of the community and even some railway men have come to a feeling that public ownership is bound to come and even now that it is the best solution, under the circumstances. That is why those who regard this policy as a mistaken method of conserving the interests of the public itself must get actively behind some better program.

The result of the studies made by the industry within the last few years must be put into some concrete form. Legislative sessions of the coming winter are almost upon us. Shall the association allow the legislatures to undertake the solution of this program uninformed, guided only by political interest and partisan rancor, or shall it, by an intensive, intelligently directed effort, see that public sentiment is informed and legislators and other officials are enlightened so that the resultant action may be something really constructive?

The public realizes in a more or less definite way the difficult situation of the electric railways. Yet the collective mind is such that the public will not agree to sufficient increases of fare. They will not agree to any program which they believe or suspect will be mainly for the benefit of stockholders. They want financial control separated in interest from operation.

So extreme, in fact, is this attitude of mind, that many, even leading citizens, do not hesitate to say that they prefer to see the electric railways go into bankruptcy. They frankly are not open to argument. They insist upon a much larger—or even complete—public control of the electric railways.

WHAT THE MASSACHUSETTS MEN DID

At the New York conference, Mr. Loring of Boston gave a very instructive paper on the way that the situation has been met in Massachusetts. With less reason for popular antipathy toward the electric railways in that State than in many other states, it was nevertheless realized that the public would not stand for increases which apparently were for the benefit of the companies alone. A campaign of education was started to get stockholders, bankers, investors of all sorts, and leading minds in all communities behind a service-at-cost program with the result that the present legisla-

tion in Massachusetts was put into the form of law without any serious opposition.

It need not be claimed that the Massachusetts law is an example of perfection. It undoubtedly is not. But it cannot be denied that a significant forward step has been taken. It has been demonstrated that the tendencies of legislation can be guided by intelligent information furnishing work. It need not be public ownership by default.

One important objection made to the service-at-cost system is that it fails to preserve sufficient incentive to economical operation. It is argued that a city partnership plan does preserve this incentive. Experience in partnership cities is available and should be carefully studied.

Under this legislation people in Boston, for instance, have been paying a 7-cent fare and they have been doing it without complaint. It may be that they will have to pay a 10-cent fare, but they know that the increase, whatever it may be, will come because it is a necessity of the service and not for the enrichment of stockholders. The legislation has, however, in the service-at-cost plan provided for the stockholder and has rehabilitated the credit of the Boston Elevated, so much so that its preferred stock has been sold over the counter at par, and its common stock and bonds have both notably increased in value.

The system in Massachusetts recognizes that in certain thinly-settled communities no possible increase in traffic will furnish to the companies the needed income, and the way is provided for the community to maintain its service by lending aid to the utility in the form of either reduction of taxes or by direct appropriation for the benefit of the service. In short, communities in Massachusetts are now in the position to have exactly what they are willing to pay for. If any fault is to be found the public must find it with itself.

Under the system as it now exists, whatever its imperfections may be, the notable point is that there is no inherently necessary basis for popular antipathy toward the railway. And this situation was brought about by intelligently concentrated work of education.

A MOVE IN THE RIGHT DIRECTION

The adoption of the Gadsden resolution puts the American Electric Railway Association in a position to benefit by the experience of Massachusetts and elsewhere. If it can improve on the legislation of that State so much the better.

An end must now come to drifting or floundering or uncertainty or vacillation. The early signing of the treaty of peace in Europe is no more likely than that the immediate treatment of the electric railway industry will be determined in this country in the next few months.

Despite the progress that has been made in the cultivation of public ownership sentiment there is still no reason to believe that it reflects the intelligent opinion of the major part of the country. Because the industry has had trouble is no reason for it to throw up its hands. A law that does not reflect sentiment will be a dead letter upon the books. Either the electric railway industry will be a victim of the settlement that is certain to come or it will seek to guide the settlement along intelligent, constructive lines and thus prove of the highest service, not only to itself but to the public.

Public Service Railway Does War Work at Camden and Gloucester

New Cars, Loading Loops and Additional Feeder Coper Were Needed to Get the Shipbuilders to Work on Time—The Improvements Will Cost Nearly \$1,250,000



SCENES AT PLANTS ENGAGED IN GOVERNMENT WAR WORK, ON P. S. R. LINES

CAMDEN, N. J., just across the Delaware River from Philadelphia, the home of Victor machines, Campbell's soups, and sundry other more or less well-advertised articles, has been a thriving manufacturing community for years. As at other points along the Delaware River, the excellent water and rail facilities are favorable for shipbuilding, one of the old industries of the vicinity. The district includes the town of Gloucester, whose corporation line, as shown in Fig. 1, on page 920, adjoins that of Camden.

Since the advent of this country into the war, the shipbuilding industry, together with others which are engaged in war work, has grown enormously. There are two large shipyards, one belonging to the New York Shipbuilding Corporation and the other to the Pusey & Jones Company, formerly known as the New Jersey and Pennsylvania Shipbuilding Corporation. The old yard of the first-named company lies between Broadway and the river front on the Camden side of Newton Creek (see Fig. 1). This yard has been greatly increased in size during the past year and an even larger extension is now under construction on the Gloucester side of the creek. At this plant about 11,000 men are now employed and many more will be employed when the new yard is completed.

The other yard is in the southern outskirts of Gloucester and employs about 9000 men. Of course, the actual number of workers in both yards fluctuates, but the total is increasing at a rather rapid rate. In addition to these workers about 4000 men are employed in building workmen's homes in the housing project which is being developed by the Emergency Fleet Corporation on the high ground between the two branches of Newton Creek east of the New York Shipbuilding Corpora-

tion's yard. The Welsbach Works and a number of smaller industries in this same vicinity employ several thousand other workers. The employees of these plants for the most part live in Gloucester and a number of the smaller towns in the district. A few live across the river in Philadelphia.

THE ELECTRIC LINE IS THE MOST IMPORTANT MEANS OF LOCAL TRANSPORTATION

To transport these workers from their homes to their several places of employment in the morning, and return them again in the evening, has been the transportation problem which the war has thrown upon the passenger carrying facilities of the district, the Public Service Railway, the Pennsylvania Railroad's West Jersey & Seashore Line, the Philadelphia & Reading Railroad, and river ferries. Of these the Public Service Railway with its network of electric lines connecting together the widely-separated parts of the community is by far the most important. The ferries, of course, are of service only to those living in Philadelphia, and the railroads are able only to transport passenger masses from one point to another, thus leaving still unsolved the problem of distributing the passengers to their homes.

The problem which has confronted the Public Service Railway has been a most difficult one. The successful handling of heavy rush-hour traffic is a hard problem with any railway, and the difficulty is greatly increased when passenger masses in one corner of the community which the electric railway serves are suddenly added to the previous rush-hour traffic. The electric railway soon found that its own facilities were inadequate to handle the new traffic. For one thing, a

carhouse fire early this spring destroyed eighteen of its cars. The fact that on this division of the Public Service Railway the rails are laid to a 5-ft. gage, whereas the northern lines of the company are laid to the standard gage of 4 ft. 8½ in., made the interchange of equipment between the divisions impossible.

Possibly the greatest difficulty of all, however, has

ployees may work eight, nine or ten hours, there is some natural diversity in the afternoon quitting time. As it happens to work out, the majority of the men in the New York Shipbuilding yard work eight hours a day, while the majority of those in the Pusey & Jones yard work ten hours a day.

THE SHIPYARDS FURNISH PLATFORM MEN

To remedy the crew labor situation, arrangements were made with the shipbuilding companies who agreed not to solicit trainmen for their work and also to discharge any trainmen who secured work at their plant without a release signed by the local manager or the electric railway company. It was impressed on the railway employees that in their specialized service they were quite as much in war service as if doing shipbuilding or other war industry work. To take care of the problem of supplying extra crews for the rush-hour periods, each shipbuilding company appointed a transportation man whose duty it was to study this phase of his company's work. Among other things, he selected employees who had had railway experience and were willing to serve as trainmen during the rush-hour period. These men, after being given a brief training on the cars they were to handle, were assigned to extra runs for rush-hour service. At present, twenty-six crews, fifty-two men in all, or practically enough to handle the shipbuilding rush-hour service, are so employed. These men have been assigned special quarters in the car-storage yard, an old car being used for the purpose. They report at the carhouse sufficiently early in the morning to take their cars out for the morning rush hour, and to gather their passengers and deliver them at the shipyard by the time the yard starts work. The cars are then returned to the carhouse. In the

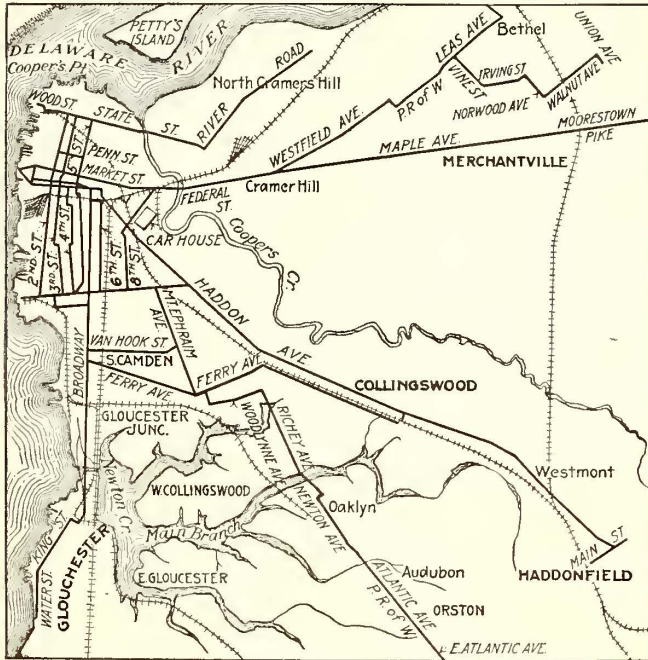


FIG. 1—THE CAMDEN LINES OF THE PUBLIC SERVICE RAILWAY

been that of securing crews for the operation of such cars as were available. As on other electric railways in the war industry regions, a large number of the platform men early left the railway service to go into war industry work. To fill the ranks thus depleted, the company employed a number of women conductors. These have done their work satisfactorily enough, but since the opening of a large munitions works employing women, the railway finds women as hard to obtain as men. As a result of these conditions, the electric railway was unable to give good service and get the shipyard employees to their work on time.

With unsatisfactory service on the railroads and inadequate service on the trolley lines, the transportation conditions in Camden vicinity were at a low ebb, when early in April the Emergency Fleet Corporation organized its transportation division under the supervision of A. Merritt Taylor, director of transportation. Relief campaigns were at once inaugurated by this organization. One measure was that of staggering the hours at which the men went to work. At that time the employees of the New York Shipbuilding Corporation started work at 7.15 a.m., those of the Pusey & Jones Company at 7.30 a.m., and those employed at the Emergency Fleet Corporation's housing development at 7 a.m. These hours were so staggered as to put one hour between the time when the shipbuilding employees started work.

With the present arrangement, the employees of the Pusey & Jones Company start work at 6.45 a.m., and those of the New York Shipbuilding Corporation at 7.45 a.m. Owing to the fact that the shipyard em-

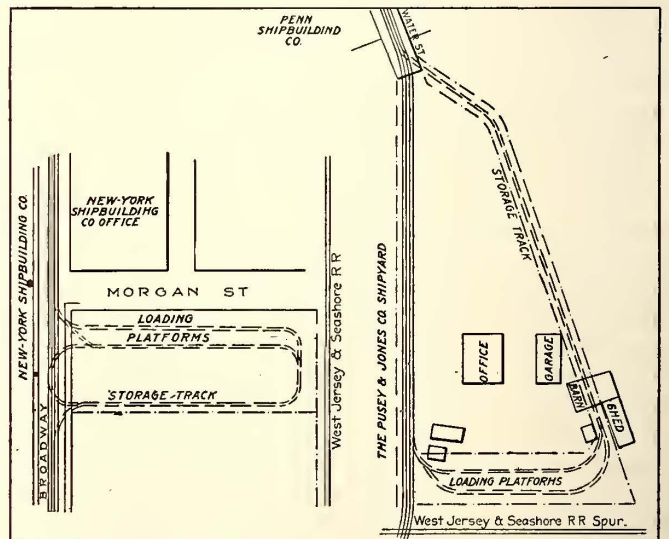


Fig. 2

Fig. 3

FIG. 2—PLAN OF THE PREPAYMENT STATION TRACKS AT THE NEW YORK SHIPBUILDING YARD. FIG. 3—TERMINAL AND STORAGE TRACKS AT THE PUSEY & JONES SHIPYARD

evening, the men leave the shipyards sufficiently early to get their cars to the shipyard gates by quitting time.

These measures afforded temporary relief, but, as noted in the ELECTRIC RAILWAY JOURNAL for Aug 3, 1918, page 186, a number of new additions to existing facilities were planned to take care of increases in the

traffic. At present, the Public Service Railway is carrying about 40 per cent of the employees of the shipyards, the railways and ferries 20 per cent, and the remaining 40 per cent live within walking distance of the yards. With the new extensions in service, the traffic on the trolley lines will probably increase somewhat.

THE NEW FACILITIES WILL COST \$1,240,000

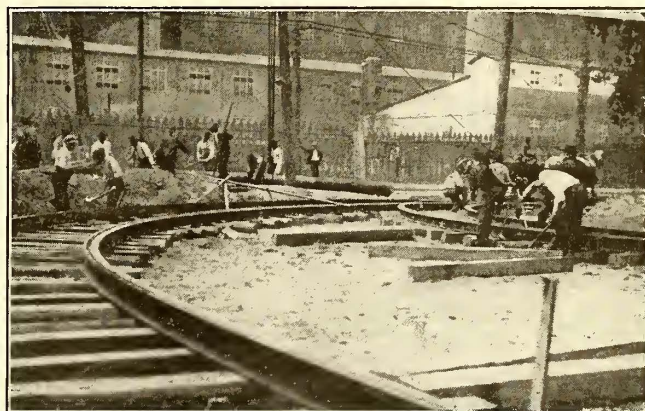
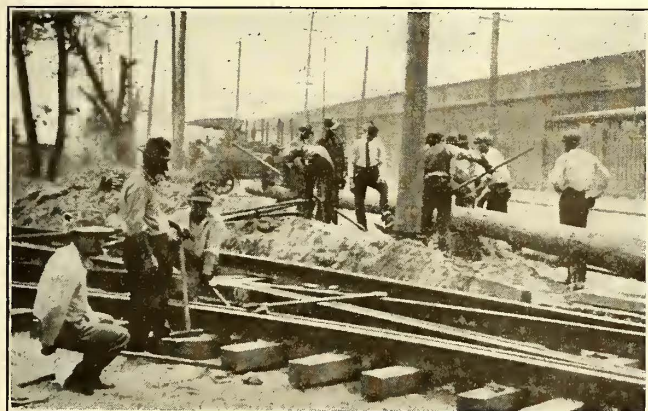
The improvement of electric railway facilities in the Camden district is more in the way of a lot of odds and ends than the construction of a single piece of new work, yet these are estimated to cost \$1,240,780. In brief, they are as follows: Prepayment loading loops in front of the shipyards on the Broadway line of the electric railway; a one-track connecting curve at Broadway and Van Hook Avenue; a one-track connection at Kaigs Avenue and Eighth Street and at Fifth and Arch Streets; a double-track connecting curve at Kaigs Avenue and Broadway; a new addition to the carhouse at Newton Avenue; eight car-storage tracks

hailed, while in the evening they will be required to leave the shipyard only a few minutes before the regular quitting time.

These men are paid at the shipyard wage rate, the difference between this rate and the railway platform rate being absorbed by the Emergency Fleet Corporation. When the new facilities are in complete operation about sixty-six additional men will be secured from the shipyards.

Plans of these loading stations are illustrated in Figs. 2 and 3. In each case the loading platforms have been placed along the double-track portions of the loops. These stations are on property belonging to the shipbuilding companies. In operation, the station at the Pusey & Jones yard will be entered at the double-track end and the cars after unloading will go to the farther end of the loop for storage. The loop surrounds the office buildings of the shipbuilding company, and considerable fill was necessary at the south end of the loop to bring the grade up to street level.

Extra connecting curves have been placed in the New



FIGS. 4 AND 5—TRACK AND OVERHEAD GANGS AT WORK ON THE PREPAYMENT LOOPS

at this carhouse and a connecting track connecting these additions at the back of the carhouse to the Haddon Avenue line; thirty-three new cars and reinforcement of the feeder system and of the power generation and conversion apparatus.

The connecting curves mentioned above will permit the routing of through cars direct from the shipyards to the outlying towns of Haddon Heights, Haddonfield, Merchantville and Cramers Hill. The operation of these through cars will save a great deal of time, as by routing them over the new routes made available by the connecting curves, they can avoid the more congested parts of the city. The connecting curve at Fifth and Arch Streets will permit the operation of trippers from the shipyards along Broadway to Federal Street and around the loop thus formed at Fifth and Arch Streets.

CARS ARE STORED IN THE PREPAYMENT LOOPS

The new prepayment loading loops at the shipyard will not only speed up the car loading, but each of them will also provide storage for thirty cars. It is estimated that they will save one hour of platform time in the morning and one and a half hours in the evening, as the men in the morning will simply park their cars on the storage tracks of the loop and will be able to get to their morning's work almost as quickly as the men they have

York Shipbuilding yard loop to permit the loop operation of cars to an extension which it is proposed to run to the New York Ship Village already alluded to. The site of the New York Shipbuilding yard loop was practically level and only a little grading was necessary. The tangent track of both loops is laid with 67½-lb. T-rail, known as Russian rail. This name comes from the fact that the rail is some of that ordered by the Imperial government of Russia and had not been delivered at the time the Imperial government was overthrown. While of T cross-section, this rail has a smaller head than the standard A.S.C.E. rail of similar weight would have. It stands 5.04 in. in height.

The curves on these loops are laid with 80-lb. A.S.C.E. standard rail. Chestnut ties, 6 in. x 8 in. x 8 ft., are used, these being laid on cinder and sand ballast. The special work is of 7-in. 132-lb. Lorain No. 443 rail. Both loading loops are fully inclosed in stockades, and suitable gates have been provided so that the stockades may be closed while the cars are stored.

The new cars conform in general design to the class 2600 Public Service Railway cars which were described at some length in the *ELECTRIC RAILWAY JOURNAL* for Jan. 15, 1916, page 115. In order to permit of train operation on curves of 30-ft. radius, they are one window shorter than the Newark car described in the article referred to. The new cars are 34 ft. over the ves-

tibules and weigh approximately 42,500 lb. They are equipped with longitudinal seats, Tomlinson automatic couplers, air and electric, and two Westinghouse 307-CV-4 motors mounted on the Standard Motor Truck Company's maximum traction O-45 trucks. H-L control is used. The cars have a seating capacity of forty-six and are arranged for rear-end loading and front-end and rear-end unloading. Other dimensions and a list of accessory equipment were published in the *ELECTRIC RAILWAY JOURNAL* for June 22, 1918, page 1217.

As in most of the other shipyard transportation projects, the reinforcement required for the overhead system seems all out of proportion to the increase in track facilities. This, of course, is because of the very large increase in number of cars operating on a given piece of track. To illustrate from the particular problem in hand during the rush-hour period, eighty-two cars will be in service on Broadway when the contemplated extensions are complete and all of the new cars ordered are received.

The only overhead contact line being built in connection with the improvement is that necessary for the connecting curves, the car storage tracks, and the terminal loops. For these loops the usual span-wire construction has been employed. As to the magnitude of feeder reinforcement, the following excerpt from the bill of materials probably conveys the best idea:

10,300 ft. of 1,000,000-circ.mil paper-insulated lead-covered cable.
 600 ft. of 1,000,000-circ.mil rubber-insulated lead-covered cable.
 600 ft. of 1,000,000-circ.mil submarine cable.
 13,000 ft. of 500,000-circ.mil triple braid weatherproof cable.
 7,600 ft. of 1,000,000-circ.mil triple braid weatherproof cable.

This copper was distributed as follows: To reinforce the copper running to the heart of the city, two 1,000,000-circ.mil cables were run underground from the Camden power station to Fifth and Market Streets, submarine cable being used for crossing Coopers Creek. From Fifth and Market Streets the line to Broadway has been reinforced with a 1,000,000-circ.mil triple-braid weatherproof copper feeder and from Third Street to Broadway on Federal Avenue with a 500,000-circ.mil feeder. On the north end of Broadway an additional 1,000,000-circ.mil cable has been run from the Atlantic Avenue substation to Broadway with a 500,000-circ.mil cable along Broadway between Federal Street and Ferry Avenue. Running to another section of trolley from this same substation, 1,000,000-circ.mil cable has been run underground from the Atlantic substation to Broadway and connects there with the existing aerial feeders and an additional 500,000-circ.mil cable which has been run along Broadway to Van Hook Avenue. In addition to these large reinforcements of existing positive feeders the copper between the tracks and the busbars of three substations has also been augmented. In each substation two 1,000,000-circ.mil cables run from the track structure to the substation buses.

These improvements are being financed by the Emergency Fleet Corporation, under the general terms of an agreement which was described in the article already referred to. All of the work is being done after plans made by the Public Service Railway in co-operation with the transportation experts of the Emergency Fleet Corporation. The actual construction of the loading loop tracks was done by the shipbuilding companies.

State Commissions Jealous of Powers Convention of Regulators Wants Full Intra-State Control—Committee Favors Zone Fares for Electric Railways

THE approach of peace having made permissible more free discussion of administration policies, the attention of the National Association of Railway and Utilities Commissioners has been turned to the subject of federal control of railroads and other utilities. At the annual convention held last week in Washington, D. C., beginning on Nov. 12, the association went on record with a resolution to the effect that consideration ought to be given by the President and Congress to legislation defining the future status of such governmentally controlled enterprises, and that any plan for the future should safeguard the powers of the local commissions responsible to the people of the states with respect to matters essentially intra-state in character.

The association resolved further that suitable action should be taken by the President or the Director-General of Railroads to recognize the unimpaired authority of the states over intra-state rates, service and facilities of carrier properties under federal control. In any event, however, it was said to be the duty of each state commission to maintain and exercise its constitutional and statutory authority as the public interest demands, taking into account the present status of the enterprises, the responsibilities of the treasury and the desirability of achieving results by friendly co-operation wherever possible.

A preliminary report of the convention, with particular reference to addresses, the work of the special war-service committee and the election of new officers, was published in the *ELECTRIC RAILWAY JOURNAL* of Nov. 16, page 893. The program also included the reports of various standing committees on railroad, public utility and general topics. These were received into the record, according to the association's custom, without any vote on the question of indorsement by the association.

ZONE SYSTEM MOST PRACTICAL

Among the committee reports of particular interest to electric railway operators was the one on public utility rates, signed by E. F. Morgan, West Virginia, chairman; R. C. Bacon, Vermont; H. H. Corey, Oregon, and L. J. Williams, Colorado. On the subject of electric railway rates this report said:

"Among utilities most seriously affected by war conditions, because of increased cost of fuel, materials and labor, are the electric railways, where in many instances they are burdened with increased numbers of patrons due to war industries and additional increase due to the recent restriction in the use of gasoline for automobiles on Sunday.

"It is believed that when it is possible to do so the zone system offers the most practical method whereby increased income may be obtained.

"Where zones are already established, an increase in number of zones and a shortening of the zones, will usually yield the increased revenue desired.

"Where only a single zone prevails the establishment of one or more additional zones may be indicated. Be-

fore the changing or establishment of new zones is made careful preliminary studies of the traffic conditions should be made.

"Freight and express service could be profitably introduced in many cases.

"A rate per mile expressed in cents with a minimum charge for any passenger would appeal to all as being the most equitable, and a fair trial of such a method is recommended."

In regard to the rate of return the report continued:

"The commissions are called upon to regulate rates and service but not to operate the public utilities. The management was left by the Legislature to those whose money has been invested in the public service. The rate of return should be ample and frequently revised by the commission, and the efficiency of the management should not be lost sight of in these frequent rate adjustments.

"Experience with utility regulation shows that some broad-gaged plan must be devised in order to encourage the construction of new utilities in many communities not now served and to encourage present utilities to reach the maximum of efficiency in operations, which would result in a lower average price of its product.

"The right of the public to regulate and control the operation of public utilities is no longer questioned and there can be no valid objection to such regulation and control provided it is judiciously and equitably administered in the interests of all concerned."

STUDY OF PUBLIC OWNERSHIP TO BE CONTINUED

The committee on public ownership and operation deemed it inadvisable and impracticable to present any definitive report this year. In connection with federal operation of the railroads, however, it remarked that the results so far can hardly be successfully defended from the standpoint of economy or general public service. The committee summed up its opinion as follows:

"Public ownership and operation or public ownership or operation as among the federal government, the states and the municipalities, and the legality and wisdom of such, must eventually be considered with reference to each public utility. Legal objections may be removed by legislation or constitutional amendment. The wisdom of such a course is not so clear. Certainly we should not in exceptional times and in the light of insufficient data jump at a conclusion which will lead to the disturbance of long existing social and economic conditions.

"While it is impossible, therefore, at this time to present anything approaching or even suggesting specific conclusions or recommendations, it is believed that the subject is one which should be under the constant study of the association with a view ultimately, after the war shall be successfully ended and when the work of reconstruction begins, to present not only general conclusions but data upon which they are based."

The report of the committee on safety of operation of public utilities was devoted to a description of the methods followed by the Public Service Commission for the First District of New York. Another report dealt with valuation. The standing committees on public utility service, public utility accounts and statistics,

capitalization and inter-corporate relations, and state and federal legislation did not present reports.

The progress of the federal valuation was described by Charles A. Prouty, director of public service and accounting of the Railroad Administration. He said that the field work will be completed as of the average date of Jan. 1, 1920, but that owing to the war and the resulting conditions another year will be required for the office work.

City Official on Mr. McCulloch's Paper

THE comments of a number of electric railway officials on public ownership of electric railways, as raised by the paper and resolution on the subject at the New York conference, have been published in recent issues of this paper. For this reason some comments from a public works official, Edward E. Wall, Water Commissioner, Department of Public Utilities, City of St. Louis, will be of interest. They are embodied in a letter written by him under date of Nov. 4 to Mr. McCulloch and are published with the permission of Mr. Wall. The letter follows:

I have just received a copy of your paper on "Public Ownership," which was submitted at the recent meeting of the American Electric Railway Association.

It is very apparent to me that this paper was written by a man who has had no actual experience in the administration of a public utility owned by the public. While I appreciate all the troubles that have accumulated and made the operation of a privately-owned public utility more and more difficult each year for several years past, I am not yet ready to say that public ownership is a cure for these evils.

Under the caption, "Service Question Solved," I note that you say a great many things may be done and are entirely possible. Theoretically, I am willing to agree with you, but practically the thing cannot be done. It is a good deal like the dreams which resulted in ancient time in the elaborate description of Plato's "Republic" or Sir Thomas More's "Utopia," and in later days Henry George's "Single Tax" or Edward Bellamy's "Looking Backward." All of the good things outlined by you, which might possibly come to pass if human nature could be changed somewhat, and everyone made to see that certain specific courses of action would eventually result in the greatest benefit to all, are no more likely to happen in fact than that the millennium will come in our lifetime.

I had to smile when I read this sentence in your paper: "Under public ownership, wages would be a simple matter to adjust." If the adjustment of wages were a mere matter of equity, your statement would undoubtedly be true; but the wages of municipal employees are established in most cases without much regard to the principles of equity. There are at least three parties who must be taken into consideration in regard to the establishment of wages—namely, the labor organization, the political organization and the public, the latter of which is supposed to be represented by the press but is not. Various civic organizations also claim to represent the public but reflect the opinions of only a limited number in one locality.

I cannot agree with you that the operation of the fire department, police organization and water systems owned and operated by so many municipalities are in any sense an unqualified success. It may be that in the course of time the people will become more alive to their own interests and will take a more active part in seeing that the various divisions of their governmental system are administered in the proper way; but it seems to me that they are very far from this desirable state to-day, and I would not be in favor of placing a greater responsibility upon them than they are now endeavoring to carry and are doing so with such poor success.

There is a great deal more that I could write you on this matter, and could readily go into a great deal more detail, but I could not refrain from writing something of what was in my mind after reading your very capable paper, which from your standpoint makes out a very good case in favor of public ownership.

Central Electric Holds Meeting

Association Begins Season with Conference at Indianapolis This Week—Safety and Freight Rates Discussed on First Day

ACCORDING to program, the November meeting of the Central Electric Railway Association was held at Hotel Lincoln, Indianapolis, Ind., on Thursday, Nov. 21. The session began at 2.30 p.m. and there was a good attendance in spite of the fact that there was a new outbreak of Spanish influenza in Indianapolis. Following the requirements of the local health board, all those at the meeting wore gauze masks. During the morning the executive committee of the association held a meeting in the office of A. L. Neereamer, secretary of the association, at which routine business was transacted.

C. L. Wilcoxon, president Chicago, Lake Shore & South Bend Railway, was chairman of the meeting on Thursday afternoon, and after the delegates came to order, Secretary Neereamer read the minutes of the Cedar Point meeting. The proposed amendment to the constitution raising the dues of the supply members to \$10 was then read. It had been suggested by the supply men and applies to the dues for 1919. The association then authorized the appointment of a committee on readjustment problems. Chairman Wilcoxon then announced the selection of Detroit by the executive committee for the annual meeting.

A letter from G. H. Kelsey, superintendent of power Union Traction Company of Indiana, was then read, suggesting the appointment of a committee on the generation, distribution and utilization of electric power. It was referred with approval to the committee on subjects. Resolutions on the death of E. B. Peck, formerly vice-president Indianapolis Traction & Terminal Company, and on the wife of R. A. Crume, general manager Dayton & Troy Electric Railway, were then passed. A nominating committee was then appointed.

SAFETY PRESENTED IN ALLEGORY

After the conclusion of these matters R. N. Hemming, superintendent of transportation Fort Wayne & Northern Indiana Railway, with a lady assistant presented an allegory advocating the necessity of universal safety. The actors appeared in costume with various stage properties. The presentation was very effective and received hearty applause. After its completion, Mr. Hemming gave an address on "Preservation of Humanity," his purpose being to show the extent and effect of railway casualties and to suggest remedies, with the striking allegory just presented for a background. Thus, Mr. Hemming showed the value of music in impressing the necessity for accident reduction and demonstrated that publicity was also a great factor in the same cause. He pointed out that the public agitation in favor of precautionary measures in the case of the influenza epidemic had been due to publicity, and he urged that similar agitation was needed along safety lines.

The public, Mr. Hemming said, is tired of the ex-

pression "safety first," and he considered that the phrase he used as the title of his address—"Preservation of Humanity"—is preferable. After all, he said, the efforts of every soldier and of every industrial and other worker is for the preservation of humanity. The public is naturally reckless, and apparently legislation will be necessary to insure the maximum of safety.

The allegory which Mr. Hemming presented was shown for the first time at the meeting in Indianapolis. Later it will be staged in the local theater at Fort Wayne and before chambers of commerce and church clubs. It was very effective.

PROPER BASIS FOR INTERURBAN FARES

A paper on this subject, abstracted in this issue, prepared by A. Swartz, vice-president Toledo & Western Railroad, was then read by W. S. Roger, general traffic manager Detroit United Railway, in the absence of the author.

The discussion on this paper centered on the extent to which an increase in interurban rates is desirable in competition with steam railroad rates. Charles A. Laney, traffic manager Northern Ohio Traction & Light Company, said that the Public Utilities Commission of Ohio had ruled that freight rates on electric railways might be higher than those on steam railroads if necessary. Chairman Wilcoxon said that his road had charged interstate rates which were higher than steam railroad rates with satisfactory results. Charles L. Henry, president Indianapolis & Cincinnati Traction Company, agreed with Mr. Swartz in the principle that electric freight service was intrinsically worth more than steam service but said that the practical question was the point beyond which an increase in rates does not produce increased income. In general, he thought that lower than the steam railroad rates were often preferable. The future was problematical, and railways must feel their way step by step. He considered that commissions are inclined to consider railway problems constructively.

GOOD SERVICE CONTROLLING FACTOR IN RATE INCREASES

William K. Morely, vice-president Grand Rapids, Grand Haven & Muskegon Railway, said that in one case with which he was acquainted increased steam rates did not increase the neighboring interurban electric railway business. A. W. Brady, president Union Traction Company of Indiana, said that this was unusual. He said that a differential in favor of the interurbans was advisable. The crucial question in his opinion is the point beyond which an increase in rates does not pay. Mr. Wilcoxon reiterated his opinion that good service is a great factor and that higher rates will be profitable.

A report of the proceedings of Nov. 22 will appear in next week's issue of this paper.

The Proper Basis for Interurban Passenger Rates*

Rates Should Be Based on Cost and Service—
—Electric Rates Should Be Higher
Than Steam Rates

BY A. SWARTZ

Vice-President, Toledo & Western Railroad

A PROPER or suitable basis is one which may be said "to suit" both the railway and the public. In these days of ever-increasing costs it is hardly possible to name a rate that will meet our needs and still please the public. My personal belief as to a proper fare is the "service at cost" idea, including, of course, a fair return of the capital invested. On this basis it should not be such a hard matter to determine a proper rate charge per mile. It is necessary only to determine the cost per mile and make due allowance for depreciation and return on the investment. Localities can be treated separately if need be, and it would be just, as to-day there are steam roads in the West that charge to exceed 3 cents per mile.

Laws have been passed in years gone by, controlling the fixing of rates and prohibiting monopolies, as well as prohibiting monopolistic control of parallel lines, thus requiring competition. It hardly befits me to criticise our federal government, but in cases of dire necessity such as exist to-day the laws mentioned have been thrown to the wind. Why? Simply to bring about the maximum of efficiency, and railroad men have been taught to do many things much differently than before.

The government has recognized the necessity for higher rates. It has required pooling of equipment; it has dismissed traffic solicitors, thereby ostensibly destroying competition; it has required all shipments of freight between large cities to be transported on specific roads, and it has done away with differential rates due to inferior accommodations. Is it not possible that these things in a great measure are what a good many railroad officers would like to have done, if they were perfectly frank about it?

Let us suppose two roads between the same terminals; one a direct line; the other a circuitous line. The direct line must of necessity attract the traffic between terminals. According to the intermediate traffic we have a resultant revenue for each road. The short line probably has the best net revenue. The longer line was originally built to accommodate intervening territory rather than the terminals. At the original rates it is presumed a fair profit on capital invested was possible from the resultant revenue. Conditions such as exist to-day will reduce the net results and finally produce a deficit on the longer road, while on the shorter road the results are less but may still show a margin of profit.

ELECTRIC RATES SHOULD BE HIGHER THAN STEAM

The situation mentioned is just what is staring us in the face to-day. The reason for it however, is somewhat different. We have charged (as a whole) less than the steam roads for the same service, due to the false conception that we can operate more cheaply. How-

ever, based on handling the same volume of business, we would necessarily require a greater capital expenditure for equipment and facilities than we have made. Eventually, when this point is reached, we can handle the business no cheaper, if as cheap. Therefore our rates should surely be no less than the steam roads' and probably more.

Why not a higher rate than steam roads? There are few lines of such great length that we can expect the long-haul traffic. Therefore on short-haul traffic we necessarily should be more attractive, due to cleanliness of travel and much more frequent service.

Service should be paid for at its proper value. It is much easier to remember that a train runs regularly every one, two or three hours than at unfrequent intervals. We provide a service that permits a farmer running into town and back again in time to do a day's work. We also provide a service that permits salesmen making a half dozen towns per day. Compare this with steam road service that requires lengthy lay-overs and high livery bills. I have no doubt that each of you can name wholesale concerns who have reduced the number of salesmen in this territory due to the advent of interurban roads. Therefore the public has been much benefited and should be willing to pay a higher rate for our service. The same thing holds good in the express or less-than-carload freight service provided by the interurban roads. Due to more frequent and quicker delivery, the small merchant in small towns is not required to carry such a large stock on hand.

CONCERTED ACTION DESIRABLE

Since our last meetings at Dayton and Sandusky the predicament of interurban roads, I am sure, has grown worse instead of better, so that it behooves us to act in a concerted manner for further increases in rates than some of us have been fortunate to obtain. It is imperative that we work in absolute unison for the one result of getting out of our predicament. My guess is no better than that of anyone else, but let me advance the statement that fares on interurban roads should be 25 per cent, at least, higher than on steam roads.

In some way, it would seem that we should be able to make our controlling governing bodies see this predicament and come to our assistance with higher rates, notwithstanding the fact that a recent ruling of a certain railroad commission was to the effect that interurban rates should be lower than steam roads'.

Traction Company Has Its Own Y. M. C. A.

The Virginia Railway & Power Company's Y. M. C. A., which was opened on Oct. 13, 1917, with a membership of 250, now has a membership of over 400. The association is open to white male employees of the company of good moral character, upon payment of a nominal fee of 25 cents per month. Owing to lack of rooming facilities for the men in the neighborhood of the carhouses, there is being constructed at this time a fifty-two-room dormitory, to be operated under the supervision of the Y. M. C. A. Owing to the absence of proper rooming facilities in the neighborhood, during the last six months the Y. M. C. A. has temporarily accommodated 4056 men with free sleeping quarters.

*Abstract of paper presented at meeting of Central Electric Railway Association, Indianapolis, Nov. 21-22, 1918.

The Yankee Tram Makes Its Appearance

A New Type Bus in New York Has Roof Over the Outside Seats to Protect the Passengers Riding on Top

THE Fifth Avenue Coach Company of New York has recently remodeled one of its double-decked motor buses and added a roof over the top seats. Windows along the sides are provided with curtains which have large isinglass panels. This construction affords an effective protection from the weather and at the



NEW BUS IN CENTRAL PARK

same time permits of an uninterrupted view outside and admits light to the interior. Glass windows are provided in front and rear. The bus as reconstructed weighs 11,000 lb., being but 360 lb. heavier than the standard buses without the top roof. The passenger capacity is fifty-one persons, twenty-two below and twenty-nine on top. This is an increase of seven passengers over the green buses used by the company. The inclosed top gives the bus an additional height of barely 1 ft. over the regulation coaches as the chassis



NEW AND OLD BUS SIDE BY SIDE

is swung low to the street with a wide base. Other improvements consist of push buttons for signaling the driver to stop, installed in the risers between windows instead of along the rails as was done with the open buses, and the addition of an electric light at the rear of the upper deck. This location and arrangement of lighting was adopted because the light coming from

the rear does not interfere with the observation of outside objects by the passengers.

This first experimental bus is becoming very popular and it has been nicknamed the "Yankee Tram" by the public. Commercially it is an unqualified success as it increases the capacity of the bus during stormy weather when people do not wish to ride outside. A few minor changes from the first bus constructed have been decided upon and will be incorporated in several of the new buses which will be put in service in the next few months. These changes consist of shaping the ends of the roof so as to give a more pleasing appearance and vestibuling the front portion of the bus in order to protect the driver from the weather.

Data on Bearing Metal

WILLIAM H. KAVANAUGH, consulting engineer, Philadelphia, Pa., has made some mechanical tests of the bearing metal produced by the Cosmic Metal Company of the same city. Mr. Kavanaugh subjected the metal to tension, compression, cross bending, or transverse, and hardness tests, in the mechanical engineering laboratory of the University of Pennsylvania. The hardness tests were made with a Shore

TABLE I.—CROSS-BENDING TEST OF BEARING METAL

Specimen number	1		2	
	On end	At center	On end	At center
Specimen cast	12	12	12	12
Length of span, inches	12	12	12	12
Load applied	At center	At center	At center	At center
Dimensions of cross-section	Inches	1.010	1.035	1.035
	Depth	0.905	0.960	0.960
Breaking load, lb.	980	1,170	1,170	1,170
Maximum fiber stress under breaking load, pounds per square inch	21,360	22,110	22,110	22,110
Scleroscope hardness	9	14	14	14

TABLE II.—TENSION TESTS OF BEARING METAL

Specimen number	1		2		3	
	Original	Final	Original	Final	Original	Final
Diameter, inches	0.546	0.506	0.545	0.510	0.552	0.510
Length, inches	Original	2.00	2.00	2.00	2.00	2.00
	Final	2.34	2.36	2.36	2.29	2.29
Area, square inches	Original	0.234	0.233	0.239	0.239	0.239
	Final	0.201	0.204	0.204	0.204	0.204
Ultimate strength, lb.	Total	4,980	4,750	4,795	4,795	4,795
	Per square inch	21,280	20,390	20,660	20,660	20,660
Elongation	Inches	0.34	0.36	0.29	0.29	0.29
	Per cent	17.0	18.0	14.5	14.5	14.5
Reduction in area, per cent	14.12	12.45	12.45	14.65	14.65	14.65
Scleroscope hardness	9	9	9	9	9	9

TABLE III.—COMPRESSION TESTS OF BEARING METAL

Specimen number	1		2		3	
	1.5	1.5	1.5	1.5	1.5	1.5
Length, inches	0.768	0.770	0.770	0.770	0.770	0.770
Diameter, inches	0.463	0.466	0.466	0.466	0.466	0.466
Compression area, square inches	Total	29,050	28,710	28,710	26,94	26,94
	Per sq.in.	62,740	61,610	61,610	60,81	60,81
Crushing load, pounds	62,740	61,610	61,610	61,610	60,81	60,81
Scleroscope hardness	13.5	11	11	11	11	11

scleroscope, the tension test on an Olsen 30,000-lb machine, and the compression and cross-bending tests on a Riehlé 30,000-lb. machine. A Berry strain gage was used for measuring the elongation in the tension test, and an ordinary lever deflectometer was used for measuring the deformations and deflections in the compression and cross-bending tests. The tests were made in the presence of two witnesses besides the observer. The results of these tests are given above.

More than 75 per cent of the cars of the International Railway, Buffalo, N. Y., have been equipped with steel wheels, and E. G. Connette, president of the company, expects to have all cars equipped with these wheels by Jan. 1, 1919. Last winter 60 per cent of the company's cars had cast-iron wheels. The steel wheels cost \$33.25 as against \$15.25 paid four year ago.

Hydraulic Car Lift Gives Increased Output to Shops

Additional Safety Is Provided and Time Is Saved by Using the Hydraulic Lift for Raising Cars

By HOMER MACNUTT

Superintendent of Motive Power San Diego (Cal.) Electric Railway Company

IN JUNE, 1917, one of the car shop tracks of the San Diego (Cal.) Electric Railway was equipped with a pair of hydraulic car lifting jacks of the type shown in the accompanying illustration. This installation was somewhat in the nature of an experiment to determine the practicability of this construction. The lift has proved highly efficient and it has been decided to install this equipment on all of the shop tracks. At present four pairs are in operation and in the near future we will double this number, which will make it possible to raise both ends of the car at one time.

The pump used in this installation is of the plunger type manufactured by the Deane Steam Pump Company of Holyoke, Mass. It is a 1½-in. x 4-in. triple-plunger type designed for operation under a maximum pressure of 700 lb. per square inch. This capacity is sufficient to take care of all the hydraulic lifts which we expect to install. With the present installation, however, we require but 300 lb. per square inch. The pump is belt driven from the shop line shaft and is started from convenient points in the shop by means of an electro-pneumatic belt shifter. Control push buttons are provided for this purpose at convenient points. The oil piping is so arranged that control of the lift is effected by means of two ¾-in. globe valves which avoid the necessity of having special valves made for the purpose.

As shown in the accompanying drawing, Fig. 3, this belt-shifting device consists of a cylinder operated by a rotary valve which is actuated by two solenoids 1 and 2. The power for energizing the solenoids comes from a twelve-cell dry battery. Push buttons are installed on posts over the control valve for energizing the relay through which the cylinder attached to the shifter is operated. When the operator wishes to raise a car he presses the button which actuates the belt shifter and starts the pump. This gives pressure to the jacks at once. To supply the pressure for raising the car the operator merely opens a standard ¾-in. Lunkenheimer globe valve installed between the pump pressure line and the inlet at the base of the cylinder. When the car has been raised to the desired height the valve is closed and the jack will remain indefinitely at the height set. To provide for negligence or in case the operator should be called away, the travel of the car hoist is automatically limited to a few inches above the height ordinarily required for car horses. This feature is obtained by the simple expedient of placing a collar on the plunger which permits the pressure to continue indefinitely without harm. A relief valve on the pump takes care of any undue rise in pressure.

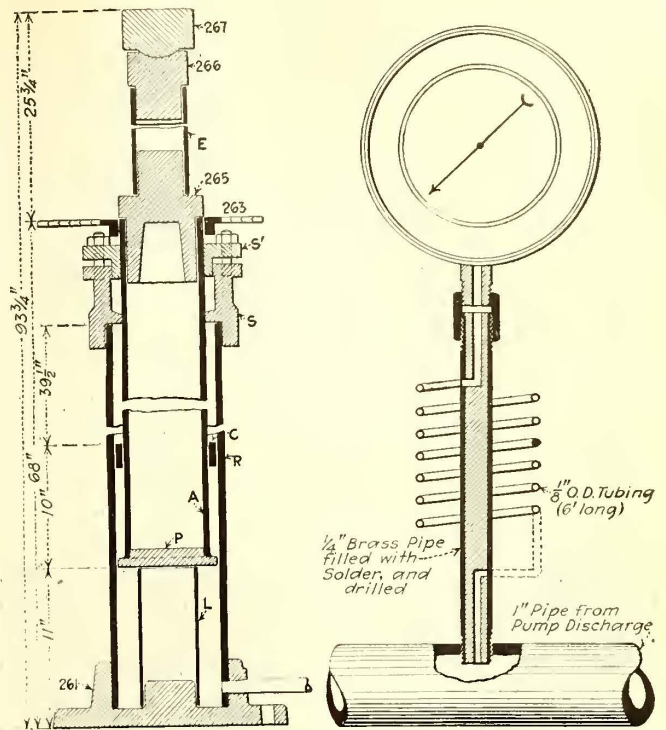


FIG. 1—VERTICAL SECTION OF HYDRAULIC CAR HOIST USED AT SAN DIEGO. FIG. 2—METHOD OF SUPPORTING PRESSURE GAGE SO AS TO PREVENT FLUCTUATIONS IN PRESSURE INTERFERING WITH GAGE READINGS

relief valve on the pump takes care of any undue rise in pressure.

To lower the car a valve is opened, allowing oil to flow from the cylinders into the discharge line leading to the sump. In order to prevent interference should it be desired to raise or lower two cars at the same time, a check valve is installed in the supply line. This prevents one man from lowering a car while another is in the act of raising one.

The construction of the lift may be followed by referring to Fig. 1. The collar C is welded to the plunger A and serves to limit the travel of the same. The member L is to limit the downward travel and is con-

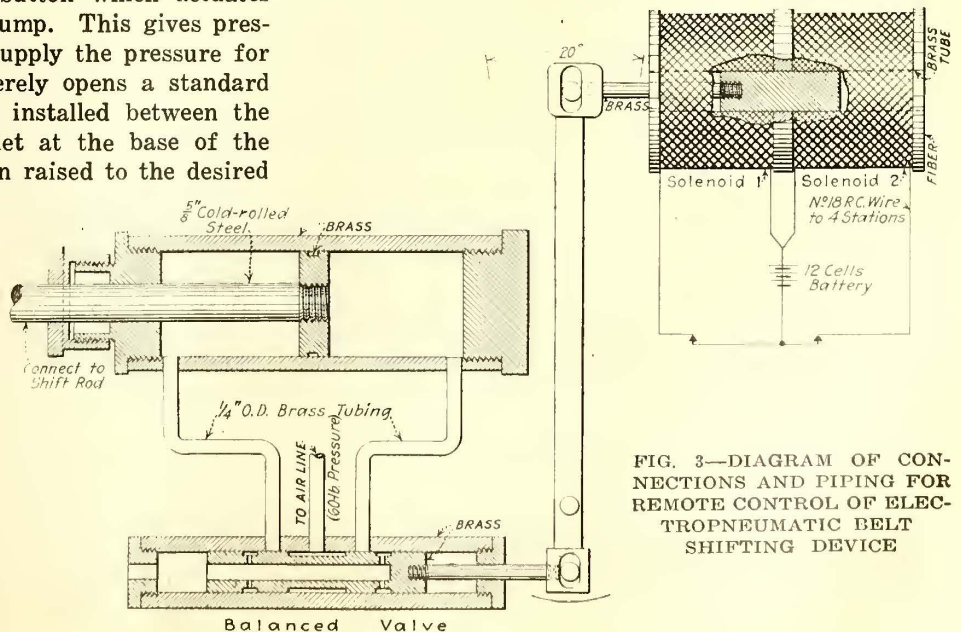


FIG. 3—DIAGRAM OF CONNECTIONS AND PIPING FOR REMOTE CONTROL OF ELECTRO-PNEUMATIC BELT SHIFTING DEVICE

structed of a standard 4-in. pipe. The plunger is made of hydraulic pipes and is machined from the collar *C* to the upper end. The plate *P* is welded to the pipe, closing the same against pressure and also this takes up the difference in diameters of the plunger and cylinder, acting as a guide. The cylinder is made of 8-in. extra heavy pipe. The casting No. 265 fits loosely into the upper end of the plunger and is removed when not in use. The castings No. 266 and 267 take care of the angle of the car body when one end only is being raised as is necessary with our present equipment. All connections are made with standard pipes, but it was considered advisable to use hydraulic fittings. In operation it was found that if the packing was tightened until there were no leaks the friction was so great that the plungers were likely to bind, causing unsatisfactory operation, especially when the car was being lowered. To

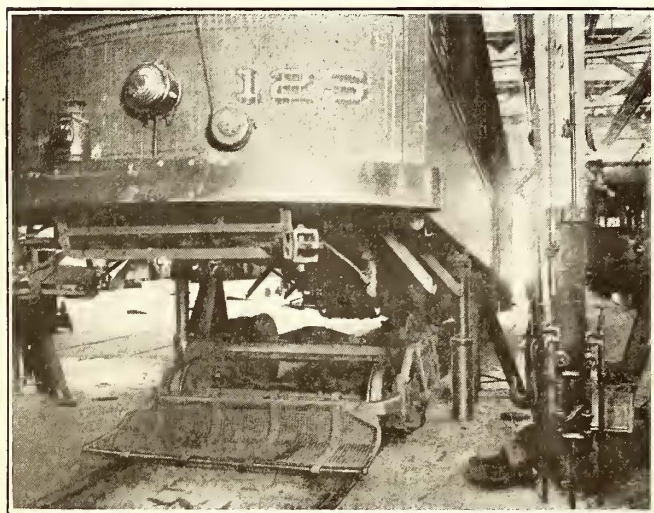


FIG. 4—ONE END OF THE CAR RAISED FREE FROM THE TRUCKS BY THE USE OF HYDRAULIC HOISTS

take care of this leakage it was found necessary to install drip pans under the stuffing boxes. These pans are connected by $\frac{1}{2}$ -in. pipe to the sump and the packing may be left loose enough so that there is a slight leakage.

Oil is used rather than water in these lifts, the advantage being that the friction at the pump and plungers of the lift is reduced and also rusting of the piping is prevented. A pressure gage should be connected to the discharge line of the pump. In order to prevent the fluctuations in pressure caused by the action of the pump giving trouble in reading the gage, the connection should be made in the form of a coil about $1\frac{1}{2}$ in. in diameter from copper tubing about $\frac{1}{8}$ in. in diameter by 6 ft. long. A piece of solid bar brass about 4 in. long forms the connection between the gage and the pipe line. The coil of copper tubing is connected to the solid bar at either end. This construction is shown in Fig. 2, and due to its use we have found no trouble in reading the gage.

The difference in efficiency between a hand-operated hydraulic jack and that described is not merely the difference in time which can be saved by the power lift. By the use of this hoist the men are not tired out from their efforts in raising a car as with hand-operated jacks and are ready to take up their other duties of repairing parts on the trucks as soon as the

car body is in position. There is also the advantage of safety, as this type of lift raises the car steadily without possibility of the car being dropped, as sometimes happens with the portable hand-operated jacks. Obviously there is very little maintenance connected with this type of equipment.

The cost of the first pair of jacks, including the cost of the pumps all installed ready for operation, was \$694.91. The cost of the last three pair of jacks installed was \$822.21 or \$274.07 per pair. These costs include piping and foundations.

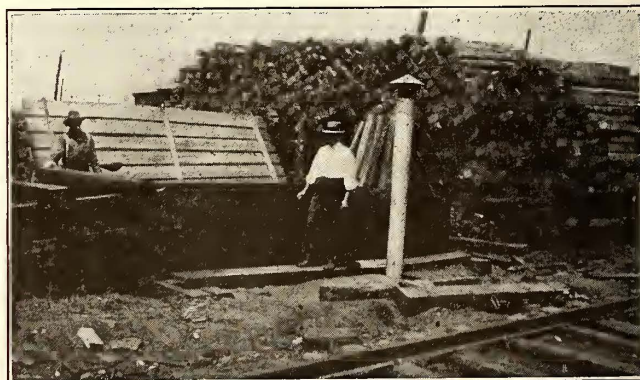
A Safety Wall-Type Switching Unit

A WALL-TYPE switching unit for the control of alternating current circuits up to 300 amp. and 2500 volts has recently been placed on the market by the General Electric Company. The unit consists of an industrial type oil circuit breaker with a space above which serves as a housing for disconnecting switch, current and potential transformers and also provides a location for either voltmeter or ammeter, or both.

Following safety-first lines the disconnecting switch is interlocked, mechanically, with the oil circuit breaker so that the switch cannot be opened when the breaker is closed, nor can the breaker be closed while the disconnecting switch is open. A key projecting through the front of the panel is used to operate the disconnecting switch. This key can be removed when the switch is open and carried by the operator, who then is assured that no one will close the switch while he is working on lines or apparatus on the circuit controlled by this unit. The interior of the switch compartment is inaccessible while the switch is closed and the oil tank cannot be removed while the disconnecting switch or oil circuit breaker is alive.

First Tie-Treating Plant in Missouri

The photograph reproduced below shows an open-tank tie-treating plant in use in the operation of treating 10,000 ties for the East St. Louis & Suburban Railway. The tank is 10 ft. x 14 ft. in size and the plant is said



OAK TIES UNDER TREATMENT FOR EAST ST. LOUIS & SUBURBAN RAILWAY

to be the first tie-treating plant ever established in the State of Missouri. C-A wood preserver is being used. The plant is operated by Charles B. Kerry & Company, the contractor for the ties, and the ties under treatment are of well-seasoned Missouri oak.

New Universal Type of Milk Ticket

THE Illinois Traction System is using a new form of milk ticket intended to overcome the difficulty of furnishing milk tickets from any road crossing stop to the destination of the milk shipment. Obviously it

ILLINOIS TRACTION SYSTEM MILK TICKET.	
GOOD FOR TRANSPORTATION OF ONE CAN	
AGENT'S STUB.—NOT GOOD FOR TRANSPORTATION.	
Capacity in number of Gallons indicated by notch A and for a distance not more than indicated by notch B. Void after 30 days of date of issue as stamped on back by issuing Agent.	Or Milk or Cream as indicated by notch A.
* * * * *	* * * * *
5 Gallons	5 Miles
8 Gallons	8 Miles
10 Gallons	10 Miles
* * * * *	* * * * *
200 Miles	200 Miles
100 Miles	100 Miles
* * * * *	* * * * *
90 Miles	90 Miles
80 Miles	80 Miles
70 Miles	70 Miles
60 Miles	60 Miles
45 Miles	45 Miles
40 Miles	40 Miles
35 Miles	35 Miles
30 Miles	30 Miles
25 Miles	25 Miles
20 Miles	20 Miles
15 Miles	15 Miles
10 Miles	10 Miles
5 Miles	5 Miles
* * * * *	* * * * *
Form P 53	Form P 53

FORM OF MILK TICKET USED BY THE I. T. S.

can is to be transported. The three adjustable points and cutting edge of the cutter enable tickets to be issued very rapidly with but one operation.

This scheme, the universal type milk ticket, with which the Illinois Traction System has had good success, provides a ticket which an agent can issue and which is good from any crossing or non-agency point. The rates from these points are, of course, different from those for

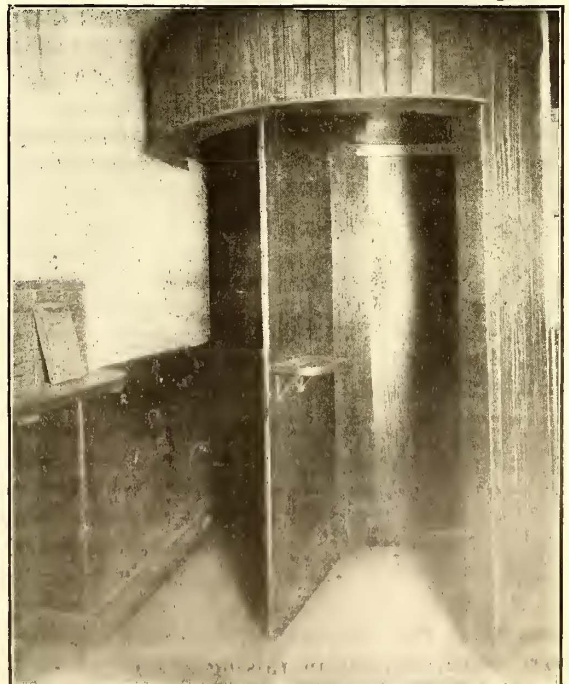
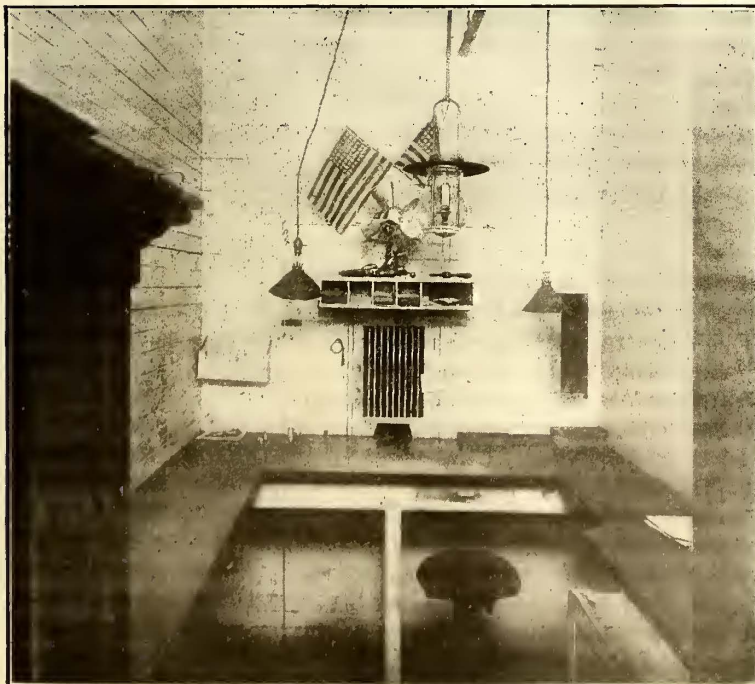
station stops. This condition could not be taken care of readily by the use of card tickets with the destinations printed upon them.

Revolving Door Protects Receivers Against Hold-Ups

H. H. BROWN, superintendent Duluth division Duluth Street Railway, has adapted the principle of the revolving door to insure receivers against hold-ups while making the work of deposit easier for the conductor. Ordinarily, railway companies do not consider the necessity of guarding the receiver and his cash, but several near hold-ups satisfied the Duluth management that some form of protection was most desirable—hence, the revolving door which has been worked out in detail and patented by Mr. Brown.

Formerly when conductors made their deposits it was not uncommon for some one in a desperate hurry to break up the line, yell "Here's my cash" and then rush off regardless of the scattered change and the almost inevitable argument later about shortages.

Now every conductor is furnished with a horizontal tray containing five change grooves to enable him to stack up his returns according to denominations. He then enters the cell of the revolving door with his tray, paper money and report envelope in hand. As he swings around to the receiver's grilled window, the receiver actuates a treadle which in turn locks the door. As soon as the transaction has been completed—say thirty seconds—the treadle is actuated to permit the door to turn and let the conductor out. It is not possible for anyone outside to shoot at the receiver through the door because his window is not exposed as the conductor passes out. A mirror also enables him to see who is entering the cell. Should it be a stranger, he would naturally be trapped. The conductors are also pleased with this scheme as it insures the orderly and correct reception and checking of their returns.



AT LEFT, RECEIVER'S CAGE WITH LOCKING TREADLE BELOW; AT RIGHT, CLOSE UP VIEW OF REVOLVING DOOR—NOTE THE CHANGE TRAY AT LEFT

Remodeling Center Bearings At a Saving of \$27 Per Car

Denver Uses Old Type of Bolster Plates Remodeled at \$3 Per Car to Give Semi-Roller Bearing Service

MANY of the cars of the Denver (Col.) Tramway have Brill 27-G trucks with 4-ft. wheelbase and these were initially equipped with the regular Brill center bearing. Some years ago, however, a large per cent of the rolling stock was equipped with ball-bearing

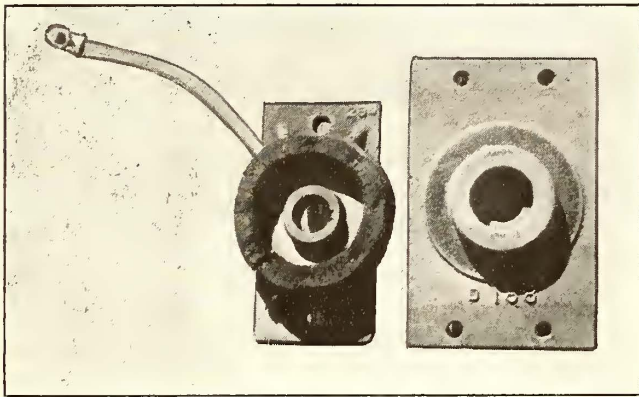


FIG. 1. CENTER BEARING BOLSTER PLATE AS REMODELED AT DENVER

center plates which gave excellent service, but of course eventually showed wear. It recently became necessary to renew some of the center bearings and it was found that new ball-bearing equipment would cost at least \$30 per car. The company was not in a position to make this outlay.

When the cars were equipped with ball-bearing center plates, there was still on hand a large supply of the old center bearings and these had been kept in stock. In fulfillment of the old adage, "necessity is the mother of invention," a method was devised whereby the old type of center bearings could be remodeled to give a semi-roller bearing service. Slightly different sizes and designs are used on the various types of rolling stock, but the general idea is the same.

Fig. 1 shows a photo of the body and truck bolster plates after remodeling and Fig. 2 shows the drawing as

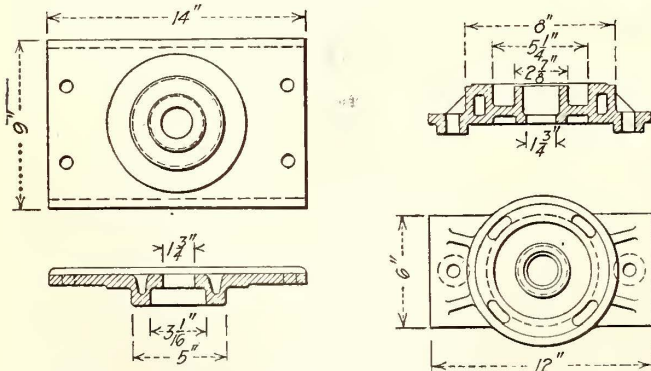


FIG. 2 DESIGN OF ORIGINAL BOLSTER PLATE

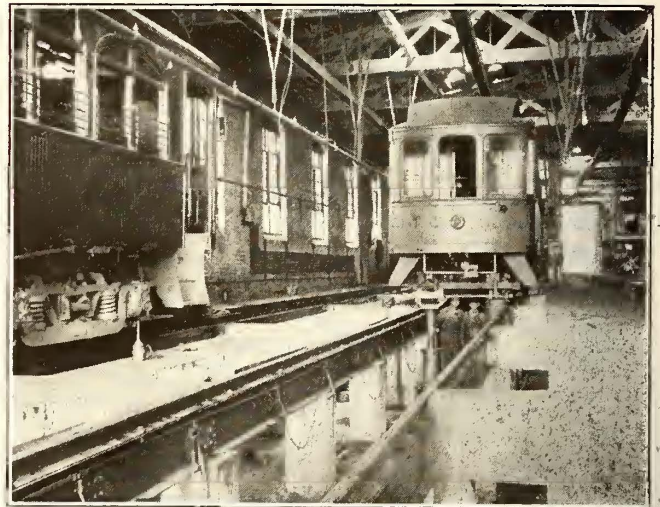
originally made for this same set. Referring to the truck bolster plate in the latter, four 1/2-in. holes, 45 deg. apart and half-way between the top holes, are bored through the wall. Wooden wedges are driven into

the four top holes and thick felt is tacked around the top as shown in Fig. 1. A brass center ring is placed in the groove of the truck plate, the rings being cast in a sleeve and cut off in the lathe. A hole is bored through the wall and a 1/2-in. pipe with an elbow, as indicated in Fig. 1, is screwed into this hole.

The nailing pieces for the felt are made wedge shape so as not to fill up the chamber, and when oil is poured into the pipe it fills the chamber and flows out into the groove both above and below the brass ring. The felt is nailed on to take up approximately the thickness of the rings so that when the body bolster plate is in place the bearing on the ring is such that, with the oil above and below, the result is a close approximation to a roller bearing. Oil of a mixture of 1 gal. of coal oil to 4 gal. of oil is poured into the pipe once a month through a trap in the car floor. The total cost of remodeling this center bearing has been \$3 per car and they have been in use long enough to show that they are giving excellent service.

Open Pit Construction in Fremont, Ohio, Repair Shop

The particular form of open pit construction which has been found very satisfactory in the repair shop of the Lake Shore Electric Railway at Fremont, Ohio, is shown in the accompanying photograph. In this construction the rails are mounted on 12-in. I-beams



VIEW IN GENERAL REPAIR SHOP, LAKE SHORE ELECTRIC RAILWAY, FREMONT, OHIO

supported on concrete posts, space about 5 ft. apart. Between tracks and at every other post is a concrete beam which serves to prevent spreading of the rail and at the same time to support the concrete runway. The runway does not come clear up to the outside of the rails, but an open space about 2 ft. wide is left on each side of the track to permit workmen to reach the outside of the track without stooping. This type of open pit construction also makes it easy to enter the pits when the tracks are occupied by cars and also makes adjustments to the outside of trucks more easy to carry out, than with closed pits.

Incidentally, this picture shows a telescopic pit jack in extended position, which was in the local machine shop of the company.

LETTERS TO THE EDITORS

Cleveland Plan Better than Municipal Ownership

CLEVELAND RAILWAY COMPANY

CLEVELAND, OHIO, Nov. 18, 1918.

To the Editors:

Municipal ownership and operation may be ideal; municipal control of service, involving no risk of financial loss to the municipality, combined with private ownership and operation at the cost of the required service, including a fair return on investment, is more practicable just now. This is the Cleveland plan. The right reserved to the city in the company's franchise to dictate and regulate the service guarantees to the public as good service as the public wants at the price that it is willing to pay. There should be no fixed maximum or minimum rate of fare; the rate should be the cost of the desired service.

Private owners are more likely to maintain the property in the good operating condition that is necessary for good service and less likely to build unprofitable extensions than a body of public servants such as a city council would be. There should be a check, of course, as there is in the Cleveland franchise, on expenditures for maintenance of and additions to the property, but there is very little likelihood of such over-expenditures under private ownership. The Cleveland franchise seems to me, in these respects, to combine the advantages claimed for municipal ownership with many of those claimed for private ownership.

Private operation means experienced and efficient direction and management—management that *must earn* the fair return on investment, that seeks no political favors, either for itself or the company, and grants none. Municipal operation *may* mean operation by politicians without experience in street railroading and without the responsibility that a manager feels to his stockholders by reason of their closer relation to him and watchfulness of him. But the Cleveland plan provides for checks of operation and operating expenses by both the municipality and the company.

As president of the company, responsible for the management of the railroad, I have tried to maintain and operate it as economically as possible, realizing and appreciating the obligations of the company not alone to its stockholders but to its patrons—an obligation to the latter to furnish satisfactory service and to the former to earn the cost of that service. I admit that the management has been closely, honestly and efficiently watched and aided by each of the three city street railroad commissioners who have served since the Tayler grant went into effect on March 1, 1910. A different management and a different, or indifferent, commissioner might have produced better, or worse, results.

I have frequently expressed in public a willingness to sell the street railway system to the city. The city has a right to buy it at a fixed price. It was hoped that a return of 6 per cent upon the company's capital stock would keep the market price of the stock at par. It was the purpose of the framers of the ordinance that the stock should not be permitted to reach a price very much above par, and it was thought that the provision

for purchase by the city would hold the market value of the stock down to or below the purchase price. I shall place no obstacle in the way of municipal ownership here, if the people of the city shall ever wish to purchase the railroad.

The Tayler plan is not perfect. Modifications advantageous to both parties are possible. None should be expected in the sole interest of the company. For illustration, provisions for the better assurance of the return on investment could be made, to the advantage of both city and company. And it has more than once been suggested that a provision for a higher return upon investment as a reward for more economical operation and reduced fares would encourage efficiency on the part of the management to the advantage of both the stockholders and the car riders.

JOHN J. STANLEY, President.

Car Not an A. E. R. E. A. Standard

CHICAGO SURFACE LINES

CHICAGO, ILL., Nov. 16, 1918.

To the Editors:

I desire to correct an erroneous impression which seems to be prevalent relative to the plans and specifications for the cars that were approved for government use by the sub-committee of the American Electric Railway Association War Board, that was appointed to consider this problem. In your issue of Oct. 26, you refer to the cars as "The First Universal Car," but unfortunately through error, the plans were marked as a "Standard Car" and the impression seems to have gone forth that the American Electric Railway Association War Board had approved these cars as a standard, whereas the car designs and specifications were passed and approved—as "plans and specifications for a car to be purchased by the United States Bureau of Industrial Housing & Transportation for use as outlined in the letter from Otto M. Eidlitz, director of that bureau, dated Aug. 19, 1918, and addressed to the American Electric Railway Association War Board," as follows:

This bureau proposes ordering fifty cars for such future distribution as may be found necessary, these cars to be placed in cities where war activities will require additional equipment. It is thought your association could promptly prepare specifications for a car which would meet the operating conditions of almost any city using standard-gage tracks. If your association cares to take this matter under consideration, we will appreciate it if you will communicate with Gardner F. Wells, manager of the transportation division of this bureau.

As chairman of the committee on standards of the American Electric Railway Engineering Association and as a member of the sub-committee of the war board having this matter under consideration, I desire to take this opportunity of clearing up the misunderstanding relative to the plans and specifications of the cars passed. In the deliberations of the sub-committee it was distinctly understood that the plans and specifications submitted were for cars to be used in cities under conditions where extreme density of traffic would not be encountered.

Please give this subject the publicity it deserves, as it is not desirable to have the impression go forth that cars having the approval of the association have been passed as standards, when the necessary steps for this procedure have not been taken.

H. H. ADAMS,
Chairman Committee on Standards, A. E. R. E. A.

Committee on Reconstruction, American Electric Railway Association

PRESIDENT PARDEE has appointed the association committee on reconstruction authorized by the resolution presented at the conference, Nov. 1. The committee consists of seven members, as follows:

P. H. Gadsden, Charleston, S. C., chairman; P. J. Kealy, Kansas City; H. H. Crowell, Grand Rapids; E. W. Wakelee, Newark, N. J.; Walter A. Draper, Cincinnati; C. L. Henry, Indianapolis, and H. G. Bradlee, Boston.

According to the resolution the committee will "make a study of reconstruction problems, particularly those relating to local franchises, and report their recommendations at an early date."

Rewards for Efficient Car Operation

WHEN the energy-saving campaign of the Connecticut Company was begun some months ago, a plan of awarding prizes to efficient motormen was developed. Great care was used in working out this prize award system, and as a basic principle, it was felt that better results would be obtained by an arrangement which permitted a large percentage of the men to participate in the awards, rather than by offering a few high prizes, as these latter would be apt to be worn by the same few men each time, with consequent discouragement to the rest of the men. This plan has worked well, and as finally developed results in about 60 per cent of the men participating in the benefits.

The checking device used is the Arthur "power-saving recorder," which indicates both the duration of the "power-on" period in minutes and the number of stops and slow-downs. In rating the men the following procedure is used:

The "power-on" period and the number of stops and slow-downs for a month are totalized for each man. Each of these totals is divided by the number of hours the man has operated his car. This gives two indices of efficiency; one based upon his operation of the controller, and the other upon his operation of the brakes. These are averaged to give the man's monthly index—more weight being given to the "power-on" period than to the number of stops and slow-downs. This "weighing" of the indices is done because reduction in the power-on period is considered more important than reduction in the number of stops and slow-downs.

The men's individual figures are then totalized and averaged for each route, which sets a "bogie" or standard for the route. The list of performances of all men on the route, together with the bogie, is posted on the bulletin board in the carhouse, a line being drawn across the list at the average record.

All men who make records above the average receive prizes which are paid quarterly. The number of men on each route runs from twelve to fifteen, of whom of course one-half are above the average, or say six to seven men. Due to the spirit of friendly rivalry which is developed, however, the same men do not always appear in the list above the average line, so that in practice about 60 per cent of the men participate in the awards.

Further, once a month each man finds in his pay envelope a slip containing the records of the actual "power-on" periods per hour of all the men on his own route.

This record is signed by the division superintendent. Each man, therefore, knows at all times "how many minutes to the hour" he is running with the power on, and also exactly how each other man on the same route is doing. The savings so far realized have been very encouraging. Particulars of these savings were given in the issue of the ELECTRIC RAILWAY JOURNAL for Oct. 12, page 657.

Anti-Auto Pro-Railway Advertising at San Diego

DURING the last year the San Diego (Cal.) Electric has issued some effective appeals to the user of the private automobile. A few of these are reproduced. "Save Your Automobile for Pleasure Trips" was printed as a postcard for every automobile owner in San Diego. The dodgers, "A Durable Machine" and "Gasoline Superseded," were hung from a cord or tacked up in stores and

A Durable Machine

"The car I use today I've been using steadily for six years. It has taken me to my office in town and back every day, and it hasn't cost me one cent for repairs yet."

"Great Scott, what a record! What car is it?"

"The street car."

—San Diego Business Man

Save Your Automobile For Pleasure Trips

We believe, and figures on auto expense bear us out, that it is in the line of economy to use the street car in going to and from your place of business daily, instead of your auto.

Especially is this true when no further use is made of auto during the day and the machine left standing on the street for hours at a time

	Miles to Town	Miles to Office	Round Trip
Windsor Cliff	4.00	40.00	10c
31st and Railroad	2.92	28.20	10c
Kennett Park	2.41	24.10	10c
Fris and Stockton Dr.	4.05	40.50	10c
30th and Washburn	2.80	28.00	10c
East San Diego	6.32	63.20	10c

The above auto expense based on 5c per mile, not counting insurance or depreciation. Your average expense may run higher.

Try patronizing the street car in going to and from your work. It will save you considerable money for other comforts or necessities, and prolong the life of your auto for more extended pleasure trips.

San Diego Electric Railway Co.

HINTS TO THE AUTOMOBILE USER

Gasoline Superseded

FOR RENT—A Bargain.

The finest, most reliable and economic Auto ever built. Will run 10 miles at a total cost of 5 cents. Self starter, electric lights, perfect brakes and lots of power. No investment needed, no upkeep, no depreciation and no trouble. Always ready for service. The most reliable and economic outfit on earth. Strongly recommended by the U. S. Government as a gasoline saver and a war help.

Apply any time between 5:30 a. m. and 12:30 midnight to

STREET CAR

We need the money to pay our men who live and buy in San Diego all they eat, wear or use.

SAN DIEGO ELECTRIC RAILWAY COMPANY

other public places. The company has also published newspaper advertisements featuring the necessity of curtailing the use of gasoline as a war measure.

The railway is a lively advertiser of its service through hotel cards and folders. Moreover, as the incoming visitor to San Diego leaves the railway station, a large painted billboard gives him the names of all the hotels and the route number of the cars which serve them.

News of the Electric Railways

FINANCIAL AND CORPORATE • TRAFFIC AND TRANSPORTATION

PERSONAL MENTION

Bonded Debt a Problem

This Matter Now Up for Consideration in Seattle Municipal Ownership Negotiations

Negotiations are progressing for completion of the purchase by the city of Seattle of the railway properties of the Puget Sound Traction, Light & Power Company. Complications which have arisen in connection with the transfer are being worked out.

The company has outstanding bonds and mortgages against its Puget Sound properties, including its railway system in Seattle, aggregating \$27,000,000. One-half of this is a mortgage debt on the railway system, and the other half bonds and mortgages on all the company's interests, including the Snoqualmie Falls and White River power plant. The entire amount, however, operates as a lien on the electric railway properties.

The company secured permission last summer from the Capital Issues Committee to issue refunding bonds to the extent of \$15,000,000 to take up outstanding indebtedness. These bonds have three years to run and bear 7 per cent interest. Under this authorization the company issued and sold \$13,500,000 of bonds, which operate as a lien on the Seattle railway properties. It has been suggested that an agreement be entered into whereby the city shall place \$15,000,000 of bonds in escrow, with an agreement that when the company pays off the \$13,500,000 of bonded debt, the bonds voted by the city shall be turned over to the company. The sum of \$13,500,000 in mortgage indebtedness would still be outstanding. The problem that confronts the city and traction officials is how to handle this part of the traction company's debts. No further steps can be taken until these questions are settled, making it possible to prepare and pass an ordinance covering the transaction.

The street railway employees' union in Seattle has asked the City Council to guarantee the union scale of 50, 55 and 60 cents an hour, pending the negotiations for the purchase of the railway system. The request has been referred to the finance committee.

Cincinnati Plans Improvements

C. W. Culkins, Street Railway Director of Cincinnati, Ohio, has outlined a number of improvements which the Cincinnati Traction Company is expected to make, following the removal of limitations as to expenditure of money for building and improving railroads and the expected increase in man-

power due to the release of many young men from military service.

Among other things under consideration is the construction of an outside belt line connecting the East End, Hyde Park, Oakley, Norwood, Winton Place and the Spring Grove Avenue district. This would give needed relief to those points.

Work on the extension of the Warsaw Avenue, North Norwood, Sixth Street and McMicken-Main lines will be begun soon. New track will be laid on other lines, on which work was held up by war restrictions. Improvements are also to be made in the transmission system which will insure additional power on some of the longer lines.

Substitution of light cars with larger seating capacity is another improvement which Mr. Culkins hopes to see made soon. Plans for such a car are now under consideration. It is probable that about 150 of the present double-truck cars will be remodeled into prepayment cars.

Fly to Commission Hearing

Capt. William J. Lewis and Lieut. Ralph Schenck flew from Chanute Field, Rantoul, Ill., to Springfield, Ill., to testify before the Public Service Commission of Illinois in connection with the hearing on the application of the Illinois Central Railroad to cross the tracks of the Kankakee & Urbana Traction Company at grade.

Forfeiture of Franchises Recommended

Mayor Thompson and a minority group of Aldermen of Chicago, Ill., opened battle on the traction companies of Chicago at the reconvening of the City Council on Nov. 18. The Mayor submitted a message recommending the forfeiture of the franchises of the Chicago Surface Lines because the service requirements of the 1907 ordinance had not been complied with. Several Aldermen presented resolutions intended to prevent the elevated lines from obtaining an increase in fares from the State Utilities Commission, and for the formation of a committee to design a municipal ownership ordinance and new traction program. All these matters were referred to the local transportation committee.

Electrification of all steam road lines within the city limits is asked in a resolution presented by Alderman Nance, who stated that this ought to be part of the after-war reconstruction work. There has been much discussion of this subject lately, especially with reference to the Illinois Central terminals.

A Three-Mile Municipal Line

One Car and Two Crews on Massachusetts Road Saved from the Scrap Heap

Massachusetts has a 3-mile municipal electric railway. It is the A. B. C. Railway and operates from Attleboro to Briggs Corner, from which places it accordingly got its name. The present road was formerly part of the Bristol County Street Railway. This was explained very briefly in the *ELECTRIC RAILWAY JOURNAL* for Oct. 19, page 716.

Things did not go well with the old Bristol County property. Finally service had to be abandoned and the road was sold for junk. That left Briggs Corner in a sad plight. With its only means of communication for most of the slender population gone, the town began to fade and fade rapidly.

At this juncture Mayor Sweet of Attleboro and the Municipal Council decided to reclaim the section of the line in question. The property cost the city \$18,000, but notes were negotiated for \$22,500, thus leaving \$4,500 for the restoration of the line. This work was completed and the road opened under municipal auspices on Sept. 1 under the direction of Harry J. Goodale, superintendent of public works of Attleboro.

There is one car with two car crews, which alternate in service. The solitary unit of rolling stock is leased from the Interstate Consolidated Street Railway, which furnishes the crews and current for \$1.67 an hour during the time the car is in service. This period extends from 6.05 a.m. until 10.35 p.m. Operating expenses including interest on investment are figured at \$30 a day. For the first few weeks the daily average of receipts is reported to have been \$34.50. The road is thus facing the winter with a paper profit of \$4.50 a day. But without the road Briggs Corner would undoubtedly have died and with that would have gone nearly the last vestige of value so far as property taxation was concerned.

Just as fate seemed about to lay its heavy hand on Briggs Corner the solution was found of preserving a semblance of its former self to the place by having the municipality take over and keep the railway in operation. To make this possible an act authorizing the purchase of the road by the city was passed in the closing hour of the Legislature. The section of the road between Attleboro and Briggs Corner is the only part of the old Bristol County Street Railway that has been saved from the maw of the second-hand man, the rest of the road having been dismantled.

Oakland Wage Question Up Again

The question of wages has again come up on the San Francisco-Oakland Terminal Railways, Oakland, Cal., and the matter will go before the War Labor Board by mutual agreement.

The wage question on this property has several interesting angles that make it worthy of review. As a result of the submission to a board of arbitration, of the demands of the union, an award was made last November, resulting in an increase in wages to be effective until Nov. 1, 1918. On May 17, 1918, however, the company made a voluntary material increase in the wages of the carmen.

Again on Aug. 21, 1918, not only was the back pay, amounting to \$58,679, paid to the carmen, but a further increase was voluntarily granted, bringing the scale of wages up to the same rates as fixed by the War Labor Board for cities in which street railways are operated under similar conditions.

On Aug. 26, 1918, a new demand was made upon the company by the carmen for a further increase in pay and a shortening of hours. This demand was for \$5 a day and eight hours' work with time and a half for any time beyond eight hours and double time for work on "days off." If this demand had been granted it would have resulted in a flat rate of 62½ cents an hour for traction carmen, without reference to their seniority of service, which principle has always obtained in the operation of street railways.

A demand also was made on behalf of the Key Division motormen and conductors for a rate which would be equivalent to 83½ cents an hour for eight hours' work.

The company found itself unable to accede to these large increases which would add to the payroll something in excess of \$350,000 a year, or approximately \$1,000 a day, and so advised the men.

As stated previously, both parties to the controversy have agreed that the public service and national situation required that the properties should continue to be operated without interruption by strike or otherwise and an agreement was accordingly reached for the submission of the issues involved to the adjudication of the War Labor Board at Washington.

Progress Slow in Brooklyn Inquiry

Most of the recent testimony in the inquiry into the responsibility for the recent wreck on the Brighton Beach line of the Brooklyn Rapid Transit Company has had to do with the plan of organization and operation of the subsidiaries of the company. A really startling lack of knowledge on the part of those conducting the inquiry was shown with respect to the matter of intercorporate relations. In consequence the proceeding has been long drawn out.

At the resumption John B. Talbot,

trainmaster of the West End and Sea Beach lines, testified that Thomas F. Blewett was his immediate superior, and that J. J. Dempsey, vice-president of the Brooklyn Rapid Transit Company, was Mr. Blewett's superior. On Nov. 1, the day of the accident, they were short twelve men out of about the usual number of thirty. Mr. Talbot admitted he had put on as an emergency motorman Walter Davis, a special policeman. He said he did not know about him personally, but Mr. Blewett had told him in case of need he could use Davis; also Simons, a crew dispatcher, and Marino, another dispatcher. Mr. Blewett told him, he said, that Simons and Marino had been instructed either by McCann or by Miller, instructing motormen.

The witness said that Davis had been a special policeman for two years; that he saw him working school trains, but never knew him to take out passenger trains and never saw his certificate of qualification. He never saw Simons' certificate either, but saw Simons operating trains around the yard, and he ran a passenger train two or three times. These three men, the witness said, were ordered on the night of Oct. 31 to make trips with instructing motormen. Davis made one trip. Mr. Talbot said that it took twenty-one days for a man to qualify as a motorman.

Nine New Wage Awards

Wage increases for employees of nine street railway and interurban systems were granted in awards announced on Nov. 21 by the War Labor Board. The advances are for the duration of the war and in each case the board recommended that the companies be permitted to raise the fares.

The companies affected are the Detroit United Railway, the Empire State Railroad and the Syracuse Suburban Railway, Syracuse, N. Y.; the Lewistown, Augusta & Waterville Railway, the Cumberland County Power & Light Company, Portland, Me.; the East St. Louis, Columbia & Waterloo Railway, the Auburn & Syracuse Electric Railroad, the Cincinnati Traction Company and the Denver Tramway.

Motormen and conductors on the Empire State Railroad's city lines received wages ranging from 38 to 42 cents an hour, while the wages of those on the interurban lines were fixed at from 41 to 45 cents an hour. Other employees get proportionate increases. Provision was made that women shall receive equal pay for equal work. This award is retroactive to last Aug. 12 and the company has until next Feb. 1 to make payments of back pay.

The award in the case of the Detroit United Railway affected only car inspectors, controller's men, pitmen and pitmen helpers, who get a flat increase of 20 per cent or more in order to bring the pay of all such adult employees to a flat minimum rate of 42½ cents an hour.

Trainmen on the city lines of the Auburn and Syracuse Railroad receive

wages of from 38 to 42 cents an hour, those in passenger service on interurban lines get 44 cents an hour and those in freight service 47 cents.

The board fixed the wages of trainmen employed by the Cincinnati Traction Company at 43 to 48 cents an hour.

Motormen and conductors of the Denver Tramway Company get wage rates of from 43 to 48 cents an hour.

News Notes

Would Hurry Transit Work.—Hope is expressed by the Public Service Commission for the First District of New York, that, inasmuch as hostilities have ceased, it will be possible to go ahead with much rapid transit work, delayed on account of the war. Consultations have been held with government officials in Washington for the purpose of speeding up this work.

Mr. Cameron Pleads Not Guilty.—Bruce Cameron, superintendent of transportation of the United Railways, St. Louis, Mo., was arraigned in Circuit Judge Calhoun's court on Nov. 12 in connection with the disappearance of the referendum petitions asking for a vote on the franchise settlement ordinance, since rejected by the company. He pleaded not guilty and his case was continued until Jan. 6.

Employees Back From War Will Be Used.—Street cars in Evansville, Ind., may be operated in some cases by crippled soldiers, according to an announcement made by the Evansville Public Utilities Company. Superintendent Parker states that the company is holding open all of the places of men who have entered military service. All these men will be taken back after the war, regardless of their condition.

Nashville Adopts Labor Board Scale.—The Nashville Railway & Light Company, Nashville, Tenn., has posted bulletins announcing that its trainmen will be paid for their services according to the scale of compensation fixed by the War Labor Board for the Memphis (Tenn.) Street Railway. The new rate provides that these employees shall receive 36 cents an hour for the first three months they work; 38 cents for the next nine months, and 40 cents after the first year.

Toledo Paper Pays Fine.—The Toledo *News-Bee* has paid a fine of \$7,500 imposed upon it and \$200 assessed against its editor, N. D. Cochran, by Federal Judge Killits for contempt of court. The charge was based upon publications relative to the street railway suit in Federal Court in 1914, growing out of the attempted enforcement of the Schreiber 3-cent fare ordinance. The suit was begun in that year and was carried through all the

courts to the United States Supreme Court, where Judge Killits was sustained.

Terminal Election on Jan. 6.—Jan. 6, 1919, has been set as the date for the special election on the ordinance for the new depot at the Public Square in Cleveland, Ohio. The City Council may have to act again on this ordinance, however, as it was necessary for the city engineer to make some changes in the measure relating to boundaries. The ordinance will probably be hurried through, since the prospects for lifting the ban on building opens the way to the construction of the depot as soon as it can be financed.

Method of Bus Purchase Upheld.—The State Supreme Court of California has reversed the decision of Superior Judge George Crothers and confirmed the right of the Board of Public Works of San Francisco, Cal., to purchase automobile buses as feeders for the Municipal Railroad. The opinion holds that the Board of Public Works may purchase equipment for a public utility under an ordinance of the Board of Supervisors. According to the court, the Supervisors may provide a scheme for the acquisition of such equipment, and the Board of Public Works is not required to follow the charter provisions for the purchase of ordinary supplies.

Wheeling Franchise Negotiations.—A meeting of the officials of the Wheeling (W. Va.) Traction Company and a committee of the Bellaire Council was held on Nov. 7 to discuss the injunction which it had been alleged would be filed to restrain the company from operating cars in Bellaire. The old franchise expired in May, and the city is making an effort to collect \$25 per day since May 23, or, in all, approximately \$3,800, which the company refuses to pay. The town wants to grant a five-year franchise with a 5-cent fare, an annual tax of \$300 per mile of track and an eight-minute schedule. The company has made a counter proposition, asking for a twenty-five-year franchise and other considerations.

Demand for Transit Inquiry in Norfolk.—At a recent meeting of the special traction committee of the Chamber of Commerce of Norfolk, Va., resolutions were adopted calling upon the City Council for a report on conditions at the power plant of the Virginia Railway & Power Company. The resolution calls upon the City Council to employ immediately an expert to report on the present physical condition of the several properties of the Virginia Railway & Power Company located in Norfolk, together with cause and responsibility for the breakdown in such properties as are now partially or totally inoperative. The Chamber of Commerce wants to know whether this condition is due to natural deterioration, failure to make the necessary replacement and repairs when required, or to causes beyond the company's control as a result of war conditions.

Winnipeg Organizes Influenza Relief.—Winnipeg has suffered severely from the ravages of Spanish influenza, and the staff of the Winnipeg (Man.) Electric Railway has not escaped. As soon as cases of the disease appeared in the city the medical officer of the railway began to inoculate the employees. While this has had a very beneficial effect, at one time nearly 50 per cent of the office staff were suffering. Early in November, A. W. McLimont, the general manager, established a relief committee, upon which each of the sixteen departments in the whole organization is represented. This committee investigates each case of influenza in the home of the employee and reports back to Mr. McLimont, with recommendations as to the nature of relief which should be given. The various cases receive the personal consideration of Mr. McLimont, and either financial or other relief is immediately extended.

Insists Upon Action.—The Public Service Commission for the First District has sent a letter to the Board of Estimate & Apportionment insisting upon action on the Ashland Place agreement affecting the Brooklyn Rapid Transit System, which was on the calendar of the first meeting of the present Board of Estimate last January, and is still unacted upon. Failure to act on this agreement by the board was charged by Commissioner Travis H. Whitney as the reason for the blocking of the efforts of the commission to eliminate wooden cars in Brooklyn. The commission has always been deeply concerned to secure modern steel cars to be operated on the rapid transit lines, but without reconstruction of certain portions of the lines such cars could not be operated. Approval of the Board of Estimate is necessary to further the reconstruction plans.

Wants Indictments Dismissed.—The Court of Errors and Appeals of New Jersey on Nov. 19 heard a motion to dismiss the writs of error in the appeal from the Supreme Court's decision quashing indictments found in the Mercer County Court against officers and directors of the Trenton & Mercer County Traction Corporation, Trenton, N. J. The motion to dismiss was denied pending argument on the main case. Counsel for the railway officials seek to have the court dismiss four writs of error brought by the State to review four orders of the Supreme Court each quashing an indictment found by the Mercer County Grand Jury and brought into the Supreme Court by certiorari. Each indictment charged the officers and directors of the railways now merged into the Trenton & Mercer County Traction Corporation with the commission of a public nuisance by erecting and maintaining poles and wires upon certain of the streets of Trenton. The indictments were quashed by the Supreme Court on the ground that no indictable nuisance was charged.

A New West Side Plan.—Comptroller Charles L. Craig of New York City, who as counsel for the West End Association fought the Mitchel administration's west side improvement plan, has submitted to the Board of Estimate a plan of his own for the improvement of freight terminal transportation and waterfront conditions on the west side of Manhattan. The plan provides for a six-track underground freight railroad, to be owned and controlled by the city, extending from Fifty-ninth Street to a point near Canal Street, with unit terminals at various locations, transfer bridges for car floats and providing means of access to the New Jersey railroads. The underground railroad and its terminal facilities, according to the comptroller, will provide for the business of all railroads handling merchandise traffic originating in or consigned to Manhattan Borough. The West Side plan in its entirety contemplated the removal of the lines of the New York Central Railroad along the Hudson River waterfront from the surface and the placing of them overhead or underground for operation by electricity.

Programs of Meetings

Central Electric Railway Accountants' Association

The members of the Central Electric Railway Accountants' Association will meet at Fort Wayne on Dec. 13 and 14. The program for the meeting will be announced later.

Joint Meeting British Educational Mission and S. P. E. E.

A joint meeting of the British Educational Mission to the United States and the Society for the Promotion of Engineering Education will be held at the Massachusetts Institute of Technology, Cambridge, Mass., on Dec. 6-7. The topics which are to be discussed are as follows:

"The Organization of Engineering Education in Great Britain and the United States."

The discussion will be led by a member of the mission representing Great Britain and Charles S. Howe, president of the Case School of Applied Science, representing the United States.

"The Effect of the War on Engineering Education in Great Britain and the United States."

The discussion will be led by a member of the mission representing Great Britain and Dr. C. R. Mann of the Massachusetts Institute of Technology, Boston, representing the United States.

"The Liberal Element in Engineering Education."

The discussion will be led by a member of the mission representing Great Britain and Prof. George F. Swain of Harvard University, representing the United States.

Financial and Corporate

\$6,000,000 Additional Notes

Interborough Company Plans to Take Advantage of Investment Market by Increasing Recent Issue

The Interborough Rapid Transit Company, New York, N. Y., has arranged, through J. P. Morgan & Company, to issue additional three-year convertible 7 per cent notes to the amount of about \$6,000,000. This sum represents, approximately, the balance of the issue of \$39,700,000 authorized some time ago, \$33,400,000 of which have been issued. Regarding the new issue, Morgan & Company have made the following announcement:

ALLOTMENTS CURTAILED

"In response to the notice sent out by J. P. Morgan & Company for the syndicate managers that the subscription books in the Interborough Rapid Transit Company's 7 per cent notes would be closed on Nov. 11, instead of Dec. 1, the date originally set for the closing of the syndicate, applications for notes were received in large volume, and, in allotting the unsold balance of the notes, it has been possible for the syndicate managers to allot only 15 per cent of the applications in amounts below \$50,000 and 10 per cent of the applications in amounts of \$50,000 and over.

"In order to take advantage of this demand, and to permit the allotment of a larger percentage of notes than would otherwise be available, the Interborough Rapid Transit Company has arranged to issue an amount of approximately \$6,000,000 to cover the cost of work which has been deferred because of its possible competition with the government in its war work.

"At the time of issuing the \$33,400,000 of notes, early in September, President Shonts of the Interborough Company stated that, except for work to cost about \$6,000,000, which was to be deferred until after the war, the proceeds of that note issue would be sufficient to complete the company's contribution to the cost of the Interborough new rapid transit system. The proceeds of the \$6,000,000 now offered are designed to complete the company's share of the work.

SEPARATE INDENTURE FOR NEW ISSUE

"These notes are not issued under the same indenture as that securing the notes previously offered for public subscription, which limited such issues to \$33,400,000, but will be secured by another indenture with identical terms as to maturity, interest rates, character of security, and conversion privileges. The notes of the supplemental issue, which will be known as Series B, will be delivered, principally, to some of the large

corporate subscribers, who except for this issue would have been unable to obtain the 10 per cent which has now been allotted to subscribers of \$50,000.

"It is understood that the company has agreed with the Capital Issues Committee that none of the proceeds of this \$6,000,000 of notes will be used for construction purposes until such expenditures are approved by the committee. In the meantime the proceeds of the notes will be invested in United States certificates of indebtedness or similar obligations."

Financial Restrictions to Continue

Restrictions will be continued by the Capital Issues Committee on the floating of securities for building, road construction, and development enterprises not absolutely essential.

In view of the necessity of another war loan in the spring, the Treasury, with which the Capital Issues Committee is affiliated, holds that the securities market still must be left open largely for government securities. Consequently business interests will have to demonstrate that their projects are needed or advisable in the light of the national situation before the Capital Issues Committee will approve stock or bond issues.

Projects financed without floating of securities also will be affected through the committee's extensive organization of Federal Reserve district and local committees of bankers and business men instructed to use their influence against capital propositions not compatible with national interest.

The extent to which the committee will relax restrictions in the future has not yet been determined.

Abandonment Hearing Put Off

The hearing which was to have been held in Spokane, Wash., on Oct. 23 by the State Public Service Commission to consider complaints against the local railways has been postponed indefinitely because of the influenza.

The most important matter set for hearing was the question whether the commission or the city has jurisdiction in the matter of the abandonment of certain lines in Spokane by the Washington Water Power Company.

The Washington Water Power Company suspended service on several of its less profitable lines a month or so ago as a war economy, and early in October the City Council ordered the company to resume service. The company claims the matter falls under the jurisdiction of the State Public Service Commission and asked for a hearing. The city claims it is purely a franchise provision over which the commission has no jurisdiction.

Security Holders Organize

Director of Toronto Railway Asks Security Holders of Ontario to Favor Service-at-Cost Plan

In view of the increasing difficulty of financing electric railways in Ontario and of giving the public adequate service, and also in view of the expiring franchises bringing the whole subject of urban transportation before the public for immediate action, it has been decided to form an association to be known as the Association of Holders of Public Utility Securities.

PUBLICITY CAMPAIGN PLANNED

The principal object of the new association is to interest all bond and stockholders in a campaign of publicity as to the actual conditions prevailing in the public utility field and to promote a plan to meet the emergency. The secretary of the association is Herman H. Pitts, Ottawa, a director of the Toronto Railway. He has addressed all the shareholders of the Toronto Railway and other electric railways in Ontario in part as follows:

"The co-operative scheme or as it is usually called, service-at-cost, has proved to have in it the remedy. It is fair and equitable to all parties. It gives all the advantages of public ownership while eliminating all the defects. It guarantees to shareholders a fixed rate of interest, provides for necessary improvements and extensions and offers efficient management.

"Under separate wrapper will be found a number of copies of a brief summary of the plan. Your assistance would be appreciated in securing as many as possible of the officials of your financial institutions, business men, and all persons holding shares or bonds of any public utility, as members of this association, and as indorsing the service-at-cost plan as set forth in the summary sent you. It is therefore suggested that if you approve of the policy you sign yourself and have other holders of public utility securities sign the inclosed list of membership. This is done for the purpose of grouping the holders of such securities whose moral support and personal sympathy and propaganda are of paramount usefulness in an educational campaign of such magnitude and importance. When signed, please return the lists to me."

PLEDGES ARE ASKED

The form those who are addressed are asked to sign is headed as follows:

"We the undersigned, are in full sympathy with the Association of Holders of Public Utility Securities, more especially with its object of promoting service at cost, through a wide educational campaign, whereby the public may be impressed with the advantages of this system or of any other modern and progressive policy of co-operation between the public utility owners and the public they serve. It is understood that no financial obligation in any way attaches to my membership in this association."

Republic Returns for 1917

Large Growth in Business Was More Than Counterbalanced by Higher Costs of Operation

The combined comparative income statement of the Republic Railway & Light Company, Youngstown, Ohio, and its subsidiaries for the calendar years 1917 and 1916 follows:

	1917		1916	
	Amount	Per Cent	Amount	Per Cent
Gross earnings	\$4,889,915	100.0	\$3,987,616	100.0
Operating expenses, depreciation and taxes*	3,341,183	68.3	2,327,406	58.3
Net earnings	\$1,548,732	31.7	\$1,660,210	41.7
Other income	67,205	1.4	20,965	0.5
Gross income	\$1,615,938	33.1	\$1,681,175	42.2
Interest and subsidiary company dividends	1,004,427	20.6	827,569	20.8
Net income	\$611,511	12.5	\$853,606	21.4
Dividends on preferred stock	311,484	6.4	311,484	7.8
Balance	\$300,027	6.1	\$542,122	13.6

*Includes charge of \$49,867 for depreciation of equipment.

The gross earnings of all the companies during 1917 gained \$902,299 or 22.63 per cent, but the operating expenses, depreciation and taxes rose \$1,013,776 or 43.56 per cent. As a result the net earnings decreased \$111,477 or 6.71 per cent. Interest and subsidiary company dividends rose \$176,857 or 21.37 per cent, and the balance after the payment of preferred dividends on the holding company stock showed a loss of \$242,094 or 44.65 per cent.

The gross revenue for the year from the railway department increased 10.9 per cent, and that from the electric, light and power department 32.7 per cent. In 1917 the railway department furnished 56.38 per cent of the gross as compared to 60.86 per cent in 1916.

During the year \$2,390,226 was expended upon acquisitions, extensions and betterments. The company has abandoned plans for further immediate extensions owing to abnormal costs and difficulties in financing.

The number of passengers carried in 1917 was 59,923,605 as compared to 53,448,848 in the year preceding, while the car-miles totaled 7,652,866 and 7,575,616 respectively.

Trenton Tax Decision Reversed

In an opinion filed by the New Jersey Court of Errors, on Nov. 18, the Supreme Court's decision, which sustained the taxes for 1915 levied against the Trenton & Mercer County Traction Corporation by the city of Trenton and certain townships.

The Mercer County tax board increased the assessment on the property of the company in 1915 by adding 20 per cent to the valuation of the preceding year. This led to an increase from \$815,000 to \$1,598,500 in Trenton for 1915 and proportionate increases in the assessments in the townships.

Justice Swayze, in his opinion said that the Supreme Court failed to make

an independent determination of facts there was a legal basis for the result reached by the County Tax Board whether that result was right in fact. This error made it necessary to reverse the judgment and remit the record to the Supreme Court.

The opinion also said that the tax board took a valuation of its own expert and added 20 per cent indifferently

Tacoma's Results Poor

After Three Months on a Seven-Cent Fare There Is a Deficit of \$75,145

A financial report prepared by Louis H. Bean, manager of the Tacoma Railway & Power Company, Tacoma, Wash., to the citizens' committee of twenty-five business men, shows that the railway problem is still unsolved. The report covers the first three months of operation under the 7-cent fare, and the increased wages of carmen.

The 7-cent fare became effective on July 8. The month of August shows the largest gross earnings. Since then the cessation of park and Sunday out-going traffic has cut earnings. The order that became effective on Oct. 13, closing all public places, on account of the influenza scare, caused a decrease of \$2,664 in earnings for the ensuing week, while the closing of schools clipped the sum of \$2,236 off the second week. The company asserts that service has been steadily increased, and that for the week of Oct. 14-20, an average of 112.3 cars were operated daily, as compared with 72.5 for the week preceding the beginning of 7-cent fares.

The statement shows that in June, before fares were advanced, the gross earnings were \$100,510. Operating expenses were \$83,085, leaving a balance of \$27,434, which taxes and interest charges reduced to a deficit of \$14,968.

In July, the gross earnings jumped to \$135,149, but as operating expenses increased to \$113,107, a balance of \$22,041 remained, which taxes, etc., reduced to a deficit of \$20,705.

The month of September shows a deficit of \$28,143. The net result of operating three months under 7-cent fares, with the new wage scale, is a deficit of \$75,145.

The committee of business men is expected to resume conferences, with an effort to find a permanent solution of the traffic problem in Tacoma.

and contented itself with finding that to real and personal property as well as to land, the value of which was a site value and not subject to depreciation by wear, and added the same percentage to property in Trenton as it did in suburban and agricultural communities. This uniformity of percentage, the opinion said, challenged attention to any evidence in its support and the higher court found none.

1917 Taxes in Virginia

The sum of \$81,425 was assessed upon electric railways in Virginia for 1917, according to a compilation made by the State Corporation Commission. This tax total, shown in detail in the accompanying table, was based mostly upon \$9,184,098 of real and tangible personal property and \$5,647,747 of gross receipts from transportation.

TAXES ASSESSED IN VIRGINIA FOR YEAR ENDED JUNE 30, 1917

Name of Company	Value of Real and Tangible Personal Property (Except Money)	Tax on Value (1 Mill)	Gross Receipts from Transportation in Virginia	Tax on Gross Receipts at 1 1/2 per Cent	* Total Tax
Appalachian Power Company	\$11,779	\$11	2,576	\$157	\$169
Blue Ridge Light & Power Company	35,460	35	15,764	1,177	213
Bristol Traction Company	12,495	12	5,887	466	78
Charlottesville & Albermarle Railway	137,240	137	15,175	564	703
Danville Traction & Power Company	168,209	168	136,037	1,700	1,937
Hopewell & City Point Railway	15,270	15	9,753	121	139
Lynchburg Traction & Light Company	474,631	474	248,363	3,104	3,579
Mill Mountain Incline, Inc	13,950	13	4,140	51	66
Newport News & Hampton Railway, Gas & Electric Company	996,207	996	448,641	5,608	6,880
Norfolk City & Suburban Railway	27,337	27	8,024	90	117
Norfolk & Ocean View Railway	16,135	16	45,342	566	582
Norfolk Railway & Light Company	662,895	662			662
Petersburg & Appomattox Railway	118,400	118	162,271	2,028	2,175
Railroad Water Power Company	24,527	24	12,644	158	182
Richmond & Chesapeake Bay Railway	309,320	309	58,919	1,662	991
Richmond & Rappahannock River Railway	159,477	159	63,258	790	950
Roanoke Railway & Electric Company	563,114	563	339,502	4,248	4,811
Tazewell Street Railway	8,410	8	8,573	107	121
Virginia Railway & Power Company	3,874,195	3,874	188,544	39,856	44,970
Washington & Old Dominion Railway	943,157	943	417,390	5,217	6,198
Washington Utilities Company					32
Washington-Virginia Railway	611,850	611	416,531	5,206	5,861
Total	\$9,184,098	\$9,184	\$5,647,747	\$70,486	\$81,425

* Total tax includes tax of 2 mills on money on hand and on deposit; the aggregate for all companies was \$877,657, and the tax \$1,755

† Assessed with franchise tax of 1 1/2 per cent on account of operating expenses being in excess of gross earnings.

Tax Liability Decisions

Decisions have been handed down by Common Pleas Court No. 3 in the suits brought by underlying companies against the Philadelphia (Pa.) Rapid Transit Company to determine the liability for the payment of war and excess profit taxes. In ten cases the court found in favor of the plaintiff subsidiary companies and in three cases for the defendant Philadelphia Rapid Transit Company. It is expected that appeal will be taken by both sides to the higher courts. The suits have been referred to previously in the ELECTRIC RAILWAY JOURNAL, the most recent reference being in the issue of Nov. 9.

more, Ill., is under way. The road extends from Sycamore to Genoa and Marengo, a distance of 25 miles. The rails and ties were sold as junk under foreclosure recently to the Hyman-Michaels Company, Chicago, Ill.

Municipal Road Redeems Bonds.—Bond interest and redemption of bonds of the San Francisco (Cal.) Municipal Railway, amounting to \$222,000, was recommended paid by the finance committee of the Board of supervisors of San Francisco on Nov. 8 out of accumulated earnings. Of this sum \$100,000 is for the redemption of bonds issued for building the road and \$122,000 is for interest on bonds still outstanding.

Asks Instructions About Abandonment.—Wallace Donham, receiver for the Bay State Street Railway, Boston, Mass., has asked the Federal District Court for instructions regarding the proposed discontinuance of certain lines which he declared were not paying operating expenses. In some instances, the receiver said, it might be possible to operate cars at certain hours of the day without loss. The lines mentioned are in districts of Lynn, Salem, Danvers, Peabody, Beverly, Lowell, Lawrence, Haverhill, Brockton, Bridgewater and Fall River.

Receiver for New Hampshire Road.—Russell Jarvis has been appointed receiver for the Claremont Railway & Lighting Company, Claremont, N. H. A committee of local manufacturers is said to have offered to buy the outstanding bonds of the company, at 50 cents on the dollar. The company gave notice some weeks ago that it would discontinue business, but was prevented from doing so by injunction proceedings and the application for the appointment of a receiver.

Denver Valuation \$36,118,361.—The inventory which has been made of the

property of the Denver (Col.) Tramway shows that to reproduce the railway now at prices prevailing on Jan. 1, 1918, would cost \$36,118,361. The company explains the work in part as follows: "The valuation is based primarily upon an inventory of the entire system and upon the cost of reproducing from nothing the present network of city and interurban lines with all the equipment, money and experimenting necessary to give transportation service to the people of Denver. Since Dec. 3, 1917, it has taken an aggregate of 131 men, most of them expert engineers, to locate, list and value all this property. Since May, 1918, a staff of seventeen expert appraisers and engineers from the Public Utility Commission has been at work checking all the data gathered by the tramway in its inventory and preparing their own version of it."

Additional Puget Sound Notes Offered.—A syndicate, of which Lee, Higginson & Company, Boston, Mass.; Harris, Forbes & Company and Estabrook & Company, New York, N. Y., are members, is offering for subscription at 98½ and interest, to yield about 7.65 per cent, \$1,841,000 of additional Puget Sound Traction, Light & Power 7 per cent sinking fund mortgage gold notes. The notes are dated June 1, 1918, and are due June 1, 1921. They are in coupon form of the denominations of \$1,000 and \$500 each. It is explained in the statement advertising the notes that the present issue is offered in accordance with the terms of the mortgage indenture to reimburse the company's treasury for additions and extensions made recently to the property. The total authorized note issue is \$15,000,000. Of this sum an amount has already been used sufficient to refund \$10,057,000 of 6 per cent mortgage bonds of the company maturing on Feb. 1, 1919.

Financial News Notes

New Third Avenue Directors.—At the annual meeting of the Third Avenue Railway, New York, N. Y., William A. Day was chosen a member of the board of directors to take the place of the former president, Edward A. Maher, who retired from the company some time ago.

Empire United Receiver Discharged.—Justice Leonard C. Crouch in the United States Supreme Court has signed an order discharging H. S. Holden as receiver of the Empire United Railways, Syracuse, N. Y., sold some time ago under foreclosure and reorganized.

Rails Being Removed.—The work of removing the rails of the Woodstock-Sycamore Traction Company, Sycamore,

Electric Railway Monthly Earnings

CUMBERLAND COUNTY POWER & LIGHT COMPANY, PORTLAND, ME.						REPUBLIC RAILWAY & LIGHT COMPANY, YOUNGSTOWN, OHIO					
Period	Operating Revenues	Operating Expenses	Operating Income	Fixed Charges	Net Income	Period	Operating Revenues	Operating Expenses	Operating Income	Fixed Charges	Net Income
1m., Sept., '18	\$299,726	\$192,083	\$107,643	\$71,242	\$36,401	1m., Sept., '18	\$443,863	*\$321,642	\$122,221	\$100,021	\$29,685
1m., Sept., '17	281,195	159,490	121,705	70,230	51,475	1m., Sept., '17	426,250	*280,674	145,576	87,100	\$63,948
12m., Sept., '18	3,176,543	2,226,215	956,328	853,284	97,044	12m., Sept., '18	5,570,222	*4,002,465	1,567,757	1,155,984	\$529,186
12m., Sept., '17	3,049,224	2,001,371	1,047,853	814,815	233,038	12m., Sept., '17	4,536,528	*2,944,934	1,591,594	957,608	\$683,362
EAST ST. LOUIS & SUBURBAN COMPANY, EAST ST. LOUIS, ILL.						SAVANNAH (GA.) ELECTRIC COMPANY					
1m., Sept., '18	\$385,033	*\$332,031	\$53,002	\$67,031	†\$14,029	1m., Aug., '18	\$103,477	*\$70,838	\$32,639	\$25,493	\$7,146
1m., Sept., '17	320,857	*218,882	101,975	65,495	36,480	1m., Aug., '17	86,570	*57,580	28,990	24,369	4,621
12m., Sept., '18	4,046,013	*\$3,065,325	980,688	808,047	\$172,641	12m., Aug., '18	1,108,248	*749,061	359,187	298,176	61,011
12m., Sept., '17	3,543,807	*2,303,744	1,240,063	773,360	466,703	12m., Aug., '17	914,212	*605,435	308,777	287,627	21,150
GRAND RAPIDS (MICH.) RAILWAY						TAMPA (FLA.) ELECTRIC COMPANY					
1m., Sept., '18	\$113,480	*\$92,340	\$21,140	\$19,403	\$1,737	1m., Aug., '18	\$89,567	*\$53,344	\$36,223	\$5,095	\$31,128
1m., Sept., '17	114,773	*73,920	40,853	18,219	22,634	1m., Aug., '17	79,321	*48,306	31,015	4,652	26,363
12m., Sept., '18	1,278,801	*\$78,818	299,983	232,021	67,962	12m., Aug., '18	1,022,090	*\$595,473	426,613	61,858	\$64,755
12m., Sept., '17	1,308,439	*\$72,905	435,534	212,329	223,205	12m., Aug., '17	1,006,862	*\$51,913	454,949	52,482	402,467
INTERBOROUGH RAPID TRANSIT COMPANY, NEW YORK, N. Y.						PORTLAND RAILWAY, LIGHT & POWER COMPANY, PORTLAND, ORE.					
1m., Sept., '18	\$3,176,577	*\$2,431,998	\$744,579	\$1,429,407	†\$393,587	1m., Sept., '18	\$672,791	*\$476,485	\$196,306	\$188,133	\$8,173
1m., Sept., '17	3,073,470	*1,810,984	1,262,486	1,070,000	†\$155,207	1m., Sept., '17	501,149	*\$299,150	201,999	177,545	24,454
3m., Sept., '18	9,435,624	*6,694,668	2,740,956	4,198,557	†\$123,680	12m., Sept., '18	7,303,001	*\$4,644,192	2,658,809	2,191,381	467,428
3m., Sept., '17	8,909,808	*\$5,202,030	3,707,778	3,203,754	†\$1,356,191	12m., Sept., '17	5,833,067	*\$3,197,453	2,635,614	2,165,120	470,494
LEWISTON, AUGUSTA & WATERVILLE STREET RAILWAY, LEWISTON, ME.						*Includes taxes. †\$21,110 included for depreciation. †Deficit. ††Includes non-operating income. †††For the month, \$20,184 and for twelve months, \$340,609 included for depreciation. §Includes accruals under rapid transit contract with city payable from future earnings.					
1m., Sept., '18	\$91,827	*\$70,320	\$21,507	\$19,822	\$1,685	1m., Sept., '17	86,834	*\$7,184	29,650	15,538	14,112
12m., Sept., '18	882,797	*\$767,379	115,418	214,962	†\$99,544	12m., Sept., '17	883,572	*\$652,173	231,399	185,869	45,530

Traffic and Transportation

Action Expected Soon

Recent Developments Indicate that New York City Is Preparing to Act in Fare Cases

On motion of Comptroller Charles L. Craig the Board of Estimate & Apportionment of New York City on Nov. 14 discharged its franchise committee from further consideration of the various applications from street railways for permission to charge an increased fare.

No explanation of the comptroller's motion was offered, and no debate followed Mr. Craig's motion to dismiss.

PREPARED FOR ACTION

This action by the board clears the decks at once of further committee consideration of all the applications from surface operating companies that have been made direct to the board or have been referred by the Public Service Commission for action, and is regarded as leaving the way open for immediate treatment of the transit situation.

In his consideration of a remedy for the problems confronting the surface railways the Mayor, it is said, is being advised by a Boston lawyer, Grenville McFarlane, who is associated with William Randolph Hearst in the promulgation of the latter's public ownership principles.

According to the *New York Sun*, investigation of the transit problems of the city made following Mayor Hylan's instructions to Corporation Counsel Burr has established the following facts, based upon statements by city officials, officers of the Interborough Rapid Transit Company and New York Railways and members of the Public Service Commission:

1. That the New York Railways, operating the surface lines in Manhattan, must derive an additional revenue through an increased fare or go into the hands of a receiver.

2. That whatever increase of fare may be allowed the surface lines must also be allowed the subway and elevated systems unless one is to suffer at the expense of the other and the public be seriously inconvenienced.

3. That unless an increased fare is allowed to the rapid transit lines the city will face a deficit in returns under the dual contracts that should be applied to payment of interest on its investment, and this deficit will have to be made up through taxation.

It is reported that the Mayor has been advised of the willingness of the New York Railways to agree to the appointment of a controlling body in return for permission to charge an increased fare. The road has further agreed that the city may safeguard itself in the matter of control of any surplus revenue that may accrue after

operating costs have been paid and a fair return on the stockholders' investments provided for. The disposition of this surplus, provided any appears, the New York Railways has agreed to leave for future consideration.

In replying to a request of the Brooklyn Board of Real Estate Brokers that the railways of the city be allowed to raise their fares, Comptroller Craig asserted on Nov. 18 that the city had no intention of granting such applications, as an increase over the present 5-cent fare "would inure to the benefit of the transit companies and not to the city of New York." This reply attracted considerable notice because it seemed to be at variance with the general impression that the city was about to proceed with the fare matter.

The Board of Real Estate Brokers said it seemed reasonable that a slight increase in fares would be fair and just to real estate interests and promote the safety of the public.

Dallas Pleased With Beeler Reports

The reports of John A. Beeler, traffic expert, have been favorably received by the City Commission of Dallas, by whom he was retained, and it is likely that they will be adopted as a whole. Some of the recommendations will be put into effect by the enactment of city ordinances, while others will be carried out by the Dallas Railway through instructions from the supervisor of public utilities. Mayor Lawther has issued the following statement:

"I am very much pleased with Mr. Beeler's recommendations for better electric railway service for Dallas. By adopting the recommendations made by Mr. Beeler, the Dallas Railway will be able to give the public one-sixth more service. Frequent service on schedule time is what the public desires, and what they are entitled to have.

"In addition to greatly increased service, Mr. Beeler makes many other recommendations, which, when put into operation, will mean much for the safety and convenience of the street-car-riding public. I will not take space to comment upon all of these in detail. I feel certain that the city administration will have the hearty co-operation of both the public and local railway in putting Mr. Beeler's recommendation into operation.

"Our city will indeed be most fortunate in getting this greatly improved service without an increase in fare, when we consider that the fares have been raised in most of the other large cities in the United States."

Columbus Inquiry Begun

City Has Started Careful Investigation Upon Which to Base New Rate of Fare

The City Council of Columbus, Ohio, is getting under way its search for information upon which to base a rate of fare for the Columbus Railway, Power & Light Company that will meet present conditions. At a special meeting on Nov. 15 W. J. Bieneman, president of the State Public Service Utility, Audit & Investigating Company, Charleston, W. Va., presented figures which indicate that a 7-cent fare will be necessary if the company is to pay operating expenses and come out even.

2,832,410 NO-FARE PASSENGERS

During the months of September and October 2,832,410 passengers rode without paying fares. They were the conscientious objectors to the 5-cent fare which the company adopted some time ago, because it could not operate further on the eight-for-a-quarter rate. Mr. Bieneman says that between \$1,800 and \$1,900 more revenue daily is needed to balance the expense account.

Actual operating costs for October, as he reported them, were as follows: Operation, \$156,275; taxes \$12,557; depreciation, \$55,600; interest on unfunded debt, \$425; interest on funded debt, \$28,600; amortization, \$2,500; total, \$285,883. Operating revenue for the month amounted to \$156,166. In October, 1917, operating expenses were \$133,126, while the operating revenue was \$188,726.

Mr. Bieneman submitted figures showing that if each passenger had paid 3½ cents, which is the rate of fare allowed by the franchise, instead of 5 cents, the rate the company adopted, with the great number paying nothing, the revenue would have been less than it was under present unsatisfactory conditions. This offsets the claim of some members of the Council to the effect that the old rate of fare would have produced more revenue than the 5-cent rate, as handled during the months it has been in use.

ACTION IN SUBURBAN CASE

Prosecuting Attorney Duncan and his assistant, John A. Summers, have advised patrons that the company is within its rights when it demands a 5-cent fare to points beyond the city limits, such as Bexley, Camp Chase and Linden Heights. Franchises granted the company by the Franklin County Commissioners at different times permit the charge of 5 cents, the attorneys said.

Recently the company adopted a system of transfers for these places and all who refuse to pay a 5-cent fare are compelled to leave the cars at the city limits. People boarding the cars outside the limits for points inside the city, are also compelled to pay a 5-cent fare at the city line or leave the cars.

Six Cents on Chicago Elevated

Increase in Fare Is to Continue in Effect Until Dec. 1, 1919, Unless Conditions Change

Authority to put into effect a 6-cent fare was granted to the Elevated Railroads of Chicago on Nov. 19 by the State Public Utilities Commission. The increase was scheduled to go into effect on Nov. 21. The higher fare is to continue until Dec. 1, 1919, unless further investigation shows that the rate should be changed.

COMPANY WANTED SEVEN-CENT FARE

The company had asked for a 7-cent fare, and President Britton I. Budd still insists that this amount will be necessary to meet expenses. About 600,000 persons are hauled daily, and it is expected that a 6-cent fare will increase the revenue about \$1,200,000 annually. This will not be sufficient, according to the company's figures, to pay all charges.

The petition for an increase in fare from 5 cents to 7 cents was filed with the commission on Aug. 30, as outlined in the *ELECTRIC RAILWAY JOURNAL* for Sept. 7, page 436. The hearings were held in Chicago on Sept. 23, Oct. 7, 8 and 9. The Chicago & Oak Park line, included in the system of the Chicago Elevated Railways, has been in the hands of a receiver since 1911. It has never paid any dividends. In the last five years the other three lines included in the system known as the Chicago Elevated Railways, have paid dividends on preferred and common stock of a general average of 3.18 per cent. The valuation of the property of the elevated railways as of June 30, 1916, based on the cost reproduction new less depreciation was \$70,943,020. In referring to this valuation the commission said:

"Since this fair value is the amount upon which a public utility may properly expect a reasonable return it is easily seen that usually its determination is of prime importance in fixing rates. In the present proceeding, however, the greatly increased expense forced upon the petitioners by the recent large wage awards and rising costs of materials renders the value of the property of secondary importance and makes possible the fixing of temporary rates that are proper until the commission may by suitable future investigations make a final determination of the issues involved in the case."

WAGES UP \$1,409,376

The increase in wages effective on Aug. 1 added \$1,409,376 to the annual platform expenses of the company. The total extra requirement imposed by extra costs for labor and materials was estimated by the company at \$2,853,000. Due to an estimated loss in traffic of about 4 per cent the company figured that a 7-cent fare was necessary. In referring to the wage increase the commission said:

"For the transportation services furnished by the petitioners they may

properly expect a reasonable price in excess of its cost and if such cost be increased by causes beyond their control then the roads are entitled to a correspondingly increased selling price. The action of the National War Labor Board placed upon the petitioners a greatly increased financial burden which they have no means of carrying unless they receive correspondingly greater prices for transportation—the only commodity they have to sell—just as does a merchant dealing in other wares who raises his prices when his costs are advanced. The action of the National War Labor Board in thus increasing wages is the direct cause of the higher rates of fare upon the petitioner's lines hereinafter authorized."

EMERGENCY ACTION NECESSARY

The commission further states:

"To make such investigations as would enable the commission fully to consider all possible discriminations would require considerable time and would impose upon the petitioners an unreasonable hardship, hence in this case the commission will place in effect such temporary rates as will provide reasonable immediate relief and reserve to itself the right to make such additional investigations later as shall enable it to determine rates of fare, transfer regulations or other changes necessary to remove as completely as practicable any discriminations that may exist in the present arrangements."

CITY ACTS TO PREVENT INCREASE

In closing the case the commission said:

"This commission expressly retains jurisdiction in this case and reserves to itself the right upon complaint or upon its own motion further to investigate the rates authorized by this order, make findings and issue such additional orders in regard to rates for elevated railroad service furnished in Chicago as may be justified by facts determined at subsequent hearings."

The commission has ordered the company to file a monthly report showing the effect of the advanced rate.

The company has supplied itself with \$100,000 in pennies and as soon as possible will install rapid change-making machines in all stations.

As soon as the decision was made public the States Attorney announced that steps would be taken to enjoin the collection of the higher fare. He asserts that the State commission has no authority to change a rate fixed by franchise contract. A special meeting of the City Council also was called. In the meantime the management of the Chicago Surface Lines is said to be ready to file its petition for relief. The city has been asked to join in this application. It is not thought likely that the commission will make any distinc-

tion between the elevated railways and the surface lines, as a higher rate on one system would drive considerable business to the other and thus offset the effect of an advance.

Commission Has Rate Power

New Jersey's Highest Court Holds that Utility Commission Can Abrogate Rates Fixed by Franchise

The Court of Errors and Appeals of New Jersey on Nov. 18 upheld the power of the Board of Public Utility Commissioners to abrogate franchise agreements in the fixing of rates on the ground that the State is supreme in such matters.

HAS BEARING ON RAILWAY CASES

The ruling is regarded as bearing directly on the Trenton 6-cent fare case and the Public Service Railway's 7-cent fare as it established a precedent by the highest court in the State which must be followed when such cases are finally decided by the State courts.

The decision was rendered in the cases of the Collingswood Sewerage Company against the borough of Collingswood and in the Burlington Sewerage Company against Burlington. The court stood seven to three on the matter. Chancellor Walker and Justice White and Judge Taylor voted against the decision, which affirmed the Supreme Court's ruling reversing the Utility Board's refusal to grant rate increases to the sewerage companies in face of maximum rate franchises. The Supreme Court held that the Utility Board has the power to fix rates, even setting aside franchise agreements on the ground that the power of the State in such matters is supreme. The Court of Errors now sustains the Supreme Court's view on the same ground.

The members of the Court of Errors who upheld the Supreme Court's decision were Chief Justice Gummere, Justices Kalisch, Parker, Bergen, Black, Heppenheimer and Judge Williams. Justices Swayze, Minturn and Trenchard did not vote in the Court of Errors because they sat in the Collingswood case in the Supreme Court and rendered the opinion in the case there.

TRENTON CASE NOW ON APPEAL

In the Trenton 6-cent fare case now pending the Board of Utility Commissioners abrogated the city's agreement with the company requiring the sale of six tickets for a quarter. The commission's right to do this was attacked by the city. The Supreme Court has upheld the commission's power to do this and an appeal has now been taken to the Court of Errors on the point of franchise abrogation.

In the Court of Errors' opinion of Nov. 18 it was stated:

"To hold that by delegating the rate-fixing power to its creature, it (the State) had deprived itself of the right thereafter to modify the rate would be tantamount to declaring that the

creature is greater than the creator."

It was pointed out that it would be strange if the State could not revoke the authority it has granted to municipalities and cancel conditions which it had permitted them to impose.

San Diego Survey Completed

Special Adviser to Railway Submits Facts on Which Commission Will Be Asked to Act

A comprehensive financial and traffic survey of the San Diego (Cal.) Electric Railway has just been completed by E. J. Burns, public utility adviser of the company, and copies have been submitted to the City Attorney and the Chamber of Commerce in order that the general public might have the opportunity of becoming familiar with the affairs of this important public utility.

NO SPECIFIC ADVANCE ASKED

On May 25, last, the company requested the State Railroad Commission to make an investigation of the rates, charges, rules, regulations and practice of the company with a view of advising the company on what action to take. The survey was made for the purpose of assisting the commission in this investigation and also for the purpose of acquainting the public with the history and financial difficulties experienced by the company in conducting its transportation business. No request was made for a specific advance in rates. In this respect the company's appeal is said to differ from that of any other similar case before the commission.

In a communication to W. Clayton, vice-president and managing director of the company, which accompanied the survey, Mr. Burns writes:

"The investigation reveals no evidence to indicate that the financial structure of the San Diego Electric Railway is weak, but the utility's financial difficulties are due to an inadequate operating income. This condition is not the result of the war, but dates back to the year 1892, when the company began operation. In other words, the universal 5-cent fare now in existence has never been adequate for this community.

"A solution of the company's financial difficulties might possibly be found in the words of Commissioner Loveland, in the Pacific Electric Railway's application No. 3791, for permission to increase passenger fares, C. R. C. petition No. 5731, dated Sept. 4, 1918:

"As the expense of operation grows without corresponding increase in gross revenue, a continual increase in fares cannot be avoided unless assistance is rendered by reduction of taxes and street maintenance charges assessed against transportation companies or by direct financial contributions. In other words, the costs must be paid either by the consumer direct through fares or by the people as a whole through taxation."

Seven-Cent Fare for Ithaca

Newly Organized Company Asked for Ten and Claims Right to Earn Return on Securities—Some Unusual Points Involved

The Public Service Commission of the Second District of New York has authorized the Ithaca Traction Corporation to increase its fares from 6 cents to 7 cents. The company asked to make the rate 10 cents. The decision of the commission is of unusual interest because of the expression by Commissioner Barhite in the opinion accompanying the order to the company to the effect that a policy that dividends must be the first concern in the management of a public service corporation is bound to produce disastrous results. The company has accepted the 7-cent fare, but has taken exception to parts of the opinion of the commission as regards return, for reasons set forth below.

The matter of increased fares in Ithaca came up first in 1917. On Dec. 1 of that year the Ithaca Traction Corporation, pursuant to an order of the Public Service Commission, increased its rate of fare from 5 cents to 6 cents. The increase in the cost of operation, however, demonstrated that a 6-cent fare was inadequate and a subsequent application was made for a further increase to a 10-cent cash fare with six tickets for 50 cents. It was in connection with this appeal that the order dated Nov. 14 was made authorizing the company to increase its fares from 6 cents to 7 cents with eight tickets for 50 cents.

COMMISSION STATES ITS POSITION

The Public Service Commission in granting this further increase, commented upon the fact that in certain years prior to the incorporation of the Ithaca Traction Corporation, dividends had been declared upon the capital stock of the Ithaca Street Railway, the predecessor corporation to the present Traction Corporation. In this connection Commissioner Barhite said:

"There is a limit beyond which trolley fares should not go; in fact, they cannot be advanced beyond a certain point without disastrous results to the company. In these times of heavy burdens the people should not be required to pay an excessive fare. If they are required to pay such fare the result will be detrimental to the corporation itself. It is practically conceded that dividends have been paid in the past when the money so used 'in ordinary prudence' should have been used for rehabilitation of the property.

"If the stockholders in the past have received money which ordinary business sagacity should have applied to maintaining the road properly, no complaint can be made if patrons are not required in these strenuous times to furnish money not alone to make repairs which could have been made in the past but also to pay dividends. In fact the adoption of such a course would be equivalent to a declaration that dividends must be the first concern

in the management of a public service corporation."

The Traction Corporation proposes to put the increase of fare into effect at once, but has communicated to the Public Service Commission that it does not accept and is not bound by the reasoning of the commission referred to in its opinion, stating in substance that it is in no wise responsible for the declaration of payment of such dividends or for any course of conduct of those in control of the former Ithaca Street Railway. The Ithaca Traction Corporation is the successor to the Ithaca Street Railway through purchase under foreclosure of a mortgage made by the old Ithaca Street Railway. Following this purchase the properties of the new corporation were valued and all of its securities were issued upon the approval of the commission.

No dividends have ever been declared by the Ithaca Traction Corporation, and the hearing upon which this last increase to 7 cents was granted proceeded upon the express stipulation and understanding on the part of the Ithaca Traction Corporation that by the increased fare asked for the company sought for nothing other than revenue from which to pay interest upon its mortgage securities authorized and issued with approval of the commission.

Furthermore, the company set forth that under the laws of New York State and the rules governing the Public Service Commission, the company was entitled to a rate of return sufficient to yield reasonable compensation for the services rendered, and in fixing the rates, fares or charges to be demanded, exacted, charged or collected by the Traction Corporation, the Public Service Commission was required by statute to give "due regard among other things to a reasonable average return upon the value of the property actually used in the public service, and to the necessity of making reservation out of income for surplus and contingencies."

In order that there might be no misunderstanding the Ithaca Traction Corporation specifically stated that if the commission in ordering increased rates proceeded upon the theory that the Ithaca Traction Corporation was not entitled to the rights and privileges as outlined in the statute because a predecessor in title had paid dividends "when the money so used in ordinary prudence should have been used for rehabilitation of the property," the commission had proceeded upon an erroneous theory which was not binding upon the Traction Corporation and was repudiated by it. The company further said that the order granting the increase of fare was accepted upon the distinct understanding that this theory was not assented to, accepted or approved by the Traction Corporation.

Des Moines Asks Seven Cents

The Des Moines (Iowa) City Railway and the City Council are at odds. Following the granting of an increased wage to the railway men by the War Labor Board officials of the company announced that they would appeal to the Iowa Conciliation Board for the right to increase fares to 7 cents. Immediately upon the receipt of this announcement by the city officials the city attorney stated that any projected fare increase would be taken into the courts. Accordingly an injunction case has already been started to prevent the increase. The State Board of Conciliation has agreed to hear the appeal on Nov. 20.

Wages were increased by the War Labor Board to 41 cents an hour for the first three months employment, 44 cents for the next three months and 47 cents thereafter. According to E. G. Schmidt, president of the Des Moines City Railway, the increase will cost the company \$200,000 annually.

The Board of Conciliation is a newly-organized body chosen by the Iowa League of Municipalities and the public utilities of the State to provide means for the amicable settlement of difficulties affecting the city and the utilities. The board is made up of five members, but as one of the members has recently removed from the State, the fifth member is to be chosen at a meeting in Des Moines during the week commencing Nov. 25.

The conciliation board grew out of a suggestion made by Judge Martin J. Wade, of the U. S. District Court for the Southern District of Iowa, who found his court docket congested with rate cases. At his suggestion, the League of Iowa Municipalities and representatives from public utility companies of Iowa held a meeting and formulated the plan under which the Des Moines case will now come up. It was decided that this Board of Conciliation serve as arbitrators holding informal hearings, with written arguments and witnesses only where the situation called for the same.

The board has already settled differences between the cities and their utilities in Grinnell, Audubon, Osceola and Chariton, as a result of which the citizens of those places will pay more for their water, power and light.

Dayton Companies Want More

The electric railways operating in Dayton, Ohio, on Nov. 13 petitioned the City Commission for authority to increase fares to 6 cents. The companies assert they cannot meet the advanced wages allowed the employees by the War Labor Board unless this is done. It is suggested that the city modify the franchises if an advance is allowed. This is regarded as opening the way to city control, so far as character of service is concerned.

J. E. Barlow, city manager, and W. S. McConaughy, city attorney, were instructed to consult with Ross

W. Harris, street railway expert, and prepare an ordinance that will afford the roads relief. City officials will insist that service must be improved if an increase in fare is granted. In addition to the local railways, the Dayton, Springfield & Xenia Southern Railway and the Cincinnati & Dayton Traction Company signed the communication to the City Commission.

Transportation News Notes

York Announces Seven-Cent Fare.—The York (Pa.) Railways recently filed notice of a 7-cent fare, effective on Nov. 20, at the office of the Public Service Commission.

Commutation Advance Suspended.—The Public Utilities Commission of Illinois has suspended to March 8, 1919, the proposed advance in commutation fares filed by the East St. Louis & Suburban Railway, East St. Louis, Ill.

Seven Cents in Salisbury.—The Corporation Commission of North Carolina has granted the petition of the Salisbury & Spencer Railway, Salisbury, N. C., for an increase of fare to 7 cents. Four tickets will be sold for 25 cents and seventeen for \$1.

Asks Six Cents for Pueblo.—A straight fare of 6 cents, whether cash or a ticket is used, is asked by the Arkansas Valley Railway, Light & Power Company, Pueblo, Col., in a petition filed on Nov. 5 with the Public Utilities Commission of Colorado.

Wants Seven Cents in Lawrence.—The Kansas Electric Utilities Company, Lawrence, Kan., has filed an application with the Public Utilities Commission for an increase in passenger fares from 5 cents to 7 cents. Recently the City Commission of Lawrence approved such increase.

Wants Ten-Cent Fare Between Cities.—The Urbana & Champaign Railway, Gas & Electric Company, Champaign, Ill., included in the Illinois Traction System, has petitioned the Public Utilities Commission of Illinois for a 10-cent fare between Champaign and Urbana, the business centers of which are 2 miles apart.

Commission Calls for Schenectady Fare Briefs.—The Public Service Commission for the Second District of New York on Nov. 13 continued hearing testimony on the application of the Schenectady Railway for permission to increase its passenger fares, and at the conclusion directed the attorneys for both sides to file briefs.

Cincinnati Fare Attacked.—On Nov. 13 Attorney John C. Rogers, as a taxpayer, filed suit in the Superior Court at Cincinnati, Ohio, attacking the validity of the ordinance passed on Aug. 23

which provides for an increase in the rate of fare. The defendants are the city, the Cincinnati Street Railway and the Cincinnati Traction Company.

Ohio Road Asks Fare Increase.—The Cleveland, Painesville & Eastern Traction Company has asked the County Commissioners of Cuyahoga for authority to increase its basic rate of fare from 2 cents to 3 cents a mile and the minimum fare from 5 cents to 10 cents. Lake and Ashtabula Counties have already approved the proposed schedule.

Increase Denied in Yonkers.—The Yonkers (N. Y.) Railroad, included in the Third Avenue Railway System, New York City, has been denied the right of establishing zone systems by vote of the Aldermen. The system would create two 5-cent zones within and one outside the city limits.

A Fare Ultimatum.—The Sherbrooke Railway & Power Company, Sherbrooke, Que., has notified the City Council that in the event of the Council failing to agree to an increase in the railway fare, service will be discontinued after Nov. 30. As an alternative the company is willing to sell to the city at a price to be fixed by arbitration.

Fare Increase Voted Down.—The people of Spartansburg, S. C., on Nov. 12 were called on to vote on the petition of the Carolina Light, Power & Railways Company to increase its fare to 7 cents, and although only a few voters responded, the sentiment as reflected in the election was against the increase. The vote was 244 against to 84 for the increase.

Eight-Cent Fare Asked.—The Blue Hill Street Railway, Canton, Mass., and the Norfolk & Bristol Street Railway, with which the former line connects at Stoughton, have filed with the Massachusetts Public Service Commission notice of their intention to increase their rates from 7 cents to 8 cents and to make a corresponding increase in the commutation ticket rate.

Eight Cents Cash in Tucson.—An order was entered recently by the Corporation Commission of Arizona, authorizing the Tucson Rapid Transit Company to increase its rates as follows: For each single fare, 8 cents; for two tickets sold to one person at the same time, 15 cents; seven tickets sold to one person at the same time, 50 cents; fifteen tickets sold to one person at the same time \$1.

Ohio Line Raises Fare.—The fares of the Columbus, Urbana & Western Electric Railway, Columbus, Ohio, have been slightly increased on its lines to Casparis and Fishingers Bridge, in accordance with schedules filed with the State commission. The round-trip fare to Fishingers Bridge has been raised from 25 to 30 cents, and the fare to Casparis from 15 to 20 cents. Through the use of books workmen will have the same fares as before.

Rhode Island Fare Appeal Hearing on Dec. 16.—The Rhode Island Supreme

Court on Dec. 16 will hear the appeal of the city of Cranston and other municipalities, from the decision of the Public Utilities Commission granting the Rhode Island Company's petition for an increased fare. Preliminary questions have all been settled at various hearings and the merits of the decision will come up before the court upon the date set.

Patrons Petition for Fare Increase.—Petitions, signed by 200 patrons, were filed with the Hamilton County Commissioners on Nov. 8, asking that the Interurban Railway & Terminal Company be allowed to increase its fares. The petitions stated that the income is not sufficient to pay the operating expenses and that it is necessary to the progress of the territory through which it passes that the road be kept in operation.

Wants Interstate Fare Increase.—The Washington Railway & Electric Company, Washington, D. C., and its affiliated lines have filed an application with the Interstate Commerce Commission asking authority to increase the fares on all their suburban lines in the Maryland jurisdiction. The matter has also been presented to the Public Utilities Commission of Maryland. The petition asks authority to increase the zone rate from 5 to 6 cents.

Trenton Men Want More.—The trainmen of the Trenton & Mercer County Traction Corporation, Trenton, N. J., petitioned the company on Nov. 18 for an increase in wages from 38 to 50 cents an hour, flat rate, and 60 cents an hour for overtime. Wages of the men have been increased three times this year, the last being July 1. The increase now asked for would total an additional \$2,000 a month and the company is loath to ask for an additional increase in fare.

Princeton Fare Case Closed.—The application of the New Jersey & Pennsylvania Traction Company, Trenton, N. J., to increase its passenger and freight rates was heard before the Board of Public Utility Commissioners on Nov. 14. Counsel for the company and the town of Lawrenceville were directed to file briefs and the petition was taken under advisement. The railway seeks to increase its fare from 6 cents to 7 cents in each of the four zones between Trenton and Princeton.

New Connecticut Valley Tariff.—The Connecticut Valley Street Railway, Greenfield, Mass., recently filed a new tariff of fares with the Public Service Commission. Under the proposed schedule, the fare between Turners Falls and Main Street, Greenfield, will be 15 cents, and to the end of the line, 21 cents; from Turners Falls to Millers Falls, 21 cents; from Millers Falls to Lake Pleasant, 6 cents, and to Montague, 12 cents. Books of thirty coupons will be sold for 90 cents, and ninety-coupon books for \$2.25.

2,000,000,000 Passengers a Year.—Travel on the street railroads of New

York City, which includes elevated railroads and subways, has reached the enormous figure of 2,000,000,000 passengers a year, according to estimates prepared at the offices of the Public Service Commission for the First District. Between July 1, 1917, and June 30, 1918, 1,975,482,316 fares were collected, an increase of 56,670,087 over the previous year. If the rate of increase is maintained during 1918, the figures of traffic for 1918-1919 will be well in excess of 2,000,000,000.

Asks Increase in Interurban Fares.—The Oklahoma Railway, Oklahoma City, Okla., has applied to the Corporation Commission of that State for permission to advance interurban fares as follows: Between Oklahoma City and Edmond, 30 cents to 35 cents; between Oklahoma City and Guthrie, 60 cents to 75 cents; between Oklahoma City and Yukon, 30 cents to 35 cents; between Oklahoma City and El Reno, 60 cents to 70 cents; between Oklahoma City and Norman, 35 cents to 40 cents. A new schedule of advanced rates between intermediate points in conformity with this general increase also is asked.

Houston Votes Down Increase.—The Houston (Tex.) Electric Company was denied the privilege of charging 6 cents instead of 5 cents for fares in Houston by a vote of the people on Nov. 5. With returns complete from thirty precincts the vote stood 1883 for the ordinance permitting an increase in fares and 3027 against the ordinance. The City Council, after about six months' study of the question, passed the ordinance permitting the increase to 6 cents. A referendum petition was circulated and sufficient signatures of qualified voters were secured to force the ordinance to a referendum vote.

School Fares Increased.—Harrison B. Freeman, receiver of the Hartford & Springfield Street Railway, Warehouse Point, Conn., has found it necessary to raise the fares of school children from half fare to full fare. The company has been carrying such children for the various towns throughout the district for about 1½ cents a mile and in some instances even less than this. Mr. Freeman has also announced that he is trying to work out a general system of fares more nearly equitable to the company and its patrons than is the present system. He has asked suggestions from all persons interested.

Hearing on Eight-Cent Fare.—On Nov. 18 the Board of Public Utility Commissioners of New Jersey heard the application of the Jersey Central Traction Company for permission to charge a flat rate of 8 cents in each of the eight zones of its system. The company is now charging a straight fare of 6 cents in each of its operating zones, serving Matawan, Keyport, Perth Amboy, Atlantic Highlands, Red Bank and surrounding territory. The application was opposed by the authorities of all the municipalities through which the company operates. The commission has reserved decision in the matter.

Memphis Fare Ordinance Progressive.—The ordinance for a 6-cent fare on the Memphis (Tenn.) Street Railway has been passed on second reading and the City Commission has adopted a resolution calling on the board to arrange for a date for the 6-cent fare referendum. A referendum petition must bear the signatures of 500 voters in order to be submitted to the people. The increased fare ordinance provides that the railway shall be authorized to collect an additional cent above the regular 5-cent fare for the duration of the war or not more than two years thereafter. The City Commission, however, will reserve to itself the right to revoke the grants any time after peace is declared.

I. T. S. Adopts Steam Rates.—The Illinois Traction System, Peoria, Ill., announced that, effective on Nov. 15, passenger fares on its lines between points within the State of Illinois would be computed on the same basis as that now used by the steam railways. A 3-cent-per-mile fare accordingly prevails for both ticket and cash fares. Heretofore the company has maintained a 2-cent fare and 2½-cent cash fare on all of its lines. A reduction of 10 per cent is allowed on the purchase of round-trip tickets under the new tariff. Increased cost of production, which compelled the steam railways under government operation to raise passenger fares, is the reason assigned for the new Illinois Traction rates.

Orders Six-Cent Fare Restored.—The Public Service Commission has issued an order and report in the complaint of the borough of Ashland against the Schuylkill Railway, directing that the company cease collecting more than 6 cents a zone in accordance with the commissioner's order of July 2. The company in the spring increased its fares to 7 cents, and the borough complained, with the result that the commission held the increase to be unfair and ordered a 6-cent fare. An application was then filed by the company for a rehearing and the commission was notified that the company was again charging in excess of a 6-cent fare. Pending the disposition of the motion for a new hearing the commission says "the company has no right to charge and collect either 7-cent or 8-cent zone fares."

Fare Appeal Again Rejected.—The City Commission of San Antonio, Tex., on Nov. 8 for the second time in two months denied the plea of the San Antonio Public Service Company for a 6-cent rate or the alternative of eliminating the universal transfer. The commission divided on the question by a vote of three to two. At the first hearing a unanimous vote was cast against the measure. The vote was taken after the company presented evidence that a demand had been made by trainmen for higher wages and that if the demand was voluntarily granted or the employees appealed to the War Labor

Board and obtained their demands, the company would operate at a loss under the present fare.

Board of Trade Favors Increase.—The Board of Trade of Winnipeg, Man., composed of 2000 representative and public-spirited citizens, has voted in favor of the Winnipeg Electric Railway being allowed to increase its fares. The vote of the members was taken by mail, owing to the "flu" ban prohibiting meetings in the city. Some time ago the executive of the Board of Trade considered it a matter of policy to declare itself on the application of the railway to the civic authorities for an increase in fares, and in a questionnaire asked the opinions of the members. The vote was 645 for and 49 against the increase being allowed. As noted briefly in the Nov. 9 issue, the company has been authorized to charge a straight 5-cent fare pending a full investigation.

Court Hearing on New Jersey Case on Nov. 25.—The Court of Errors has fixed Nov. 25 as the day for argument on the appeal from the Supreme Court's decision sustaining the 7-cent fare and 1-cent transfer order of the Board of Public Utilities Commissioners for the Public Service Railway. George L. Record appeared for F. X. O'Brien, of Jersey City, who carried the case to the Court of Errors, the highest court in the State. City Counsel Charles E. Bird, in the Trenton 6-cent fare case, filed a stipulation between counsel dealing with certain parts of the evidence in the case that is to go to the Court of Errors, an appeal having also been taken in this case to the higher court. Inasmuch as the Trenton case involves the same points of law, it is likely that they will be argued together. The decision of the New Jersey Supreme Court, from which the present action is an appeal, was reviewed briefly in the *ELECTRIC RAILWAY JOURNAL* for Oct. 26, page 760.

New York Interurbans Want More.—New rate schedules have been filed with the Public Service Commission for the Second District of New York by the Empire State Railroad Corporation and the Rochester & Syracuse Railroad, proposed as effective on Nov. 24, covering the joint passenger traffic between the two lines. The Rochester & Syracuse road proposes a rate of 3 cents a mile, minimum fare 5 cents, between all stations between the Rochester and the Syracuse city lines; commutation book, fifty single trips, 1½ cents per mile, minimum, \$6 per book; mileage book, 300 miles, 2½ cents per mile. Chartered car rates are also advanced. All joint one-way fares between points on the two roads are increased and there is a corresponding increase in round-trip fares. The increase from Auburn to Weedsport is from 33 cents to 34 cents. Auburn to Rochester from \$1.73 to \$2.01. From Oswego to Rochester the increase is from \$2.85 to \$3.34, while the increase from Baldwinsville to Warner is from 35 cents to 40 cents.

Personal Mention

New Boston Officers

J. Henry Neal Made President and C. D. Emmons General Manager of the Boston Elevated Railway

At a meeting of the board of trustees of the Boston (Mass.) Elevated Railway on Nov. 23, Vice-President J. Henry Neal was elected president of the company, and Charles D. Emmons was elected general manager.

Mr. Neal has been acting as president of the company since the resignation of Matthew C. Brush. He has been connected with the road for thirty years. He began as a boy in the shops and worked up through various positions and departments to the rank of vice-president and general auditor. His

pointed general manager, has been second vice-president and general manager of the Boston & Worcester Street Railway. He is known as an able railway executive who has had a varied and extensive experience in the management and the operation of other companies where he has successfully demonstrated his capacity. By education he is a civil engineer, having received his degree from the University of Pittsburgh in 1892. He was in the engineering department of the Pennsylvania Railroad for nine years and entered the electric railway field in 1901 as superintendent of the Lafayette (Ind.) Street Railway. Later he was successively general manager of the Fort Wayne & Wabash Valley Traction Company of the Chicago, South Bend & Northern Indiana Railway and of the Southern Michigan Railway. He became connected with the Boston & Worcester Street Railway in 1916.



Photo by Marceau, Boston
J. H. NEAL

work has brought him into contact with the activities of every department and branch of the service. He was closely associated with Mr. Brush, chairman of the board of the company and its former president, in all of his undertakings and is in close touch and complete harmony with the personnel of the entire organization.

Mr. Neal was born in Boston forty-six years ago. He is a certified public accountant, and besides the distinction which he enjoys in this field he is familiar with both the mechanical and electrical engineering problems which have had to be met in electric railway work. He has taken out a number of patents, not a few of which are for devices in use in the railway field. Perhaps the best known device of which he is the inventor is the Neal electric headlight. He has been active for many years in association work and has served as president of the New England Street Railway Club, president of the American Electric Railway Accountants' Association and on the executive committee of the American Electric Railway Association.

Mr. Emmons, who has been ap-

Miss Eva Denman has been appointed auditor of the Kankakee & Urbana Traction Company, Urbana, Ill., to succeed C. B. Murphy.

Wendell Williams has been elected vice-president of the Milford & Uxbridge Railway, Milford, Mass., to succeed J. A. Sperry.

H. Hogan has been appointed chief operator of power station of the Keokuk (Iowa) Electric Company, to succeed W. A. Gilbert.

R. B. Cook has been appointed secretary of the Western Ohio Railway, with headquarters at Cleveland, Ohio, to succeed L. B. Webster.

T. J. Head has been appointed purchasing agent of the Vicksburg Light & Traction Company, Vicksburg, Miss., to succeed J. D. Scott.

J. C. Chestnut has been appointed general manager of the Pittsburgh County Railway, McAlester, Okla., to succeed W. H. Vorce.

G. B. Garret has been appointed purchasing agent of the Toledo Railways & Light Company, Toledo, Ohio, to succeed W. H. Terrey.

Frank Lape has been appointed master mechanic of the Connecticut Valley Street Railway, Greenfield, Mass., to succeed C. J. Cameron.

Fred Frost has been appointed master mechanic of the Charles City Western Railway, Charles City, Iowa, to succeed E. A. Everhart.

J. E. Motsiff has been appointed superintendent of the Empire State Railroad Corporation, Syracuse, N. Y., to succeed W. H. Sheehan.

H. J. Bawerfind has been appointed treasurer of the Fort Wayne & Decatur Traction Company, Decatur, Ind., to succeed G. M. Leslie.

C. A. Scheuerman has been appointed auditor of the Buffalo, Lockport & Rochester Railway, Rochester, N. Y., to succeed E. C. Wise.

Brig.-Gen. G. E. Tripp has resigned from the service, and returned to his duties as chairman of the board of the Westinghouse Electric & Manufacturing Company.

Parker Lewis has been appointed superintendent of the Bath division of the Lewiston, Augusta & Waterville Street Railway, Lewiston, Me., to succeed Fred Fuller, resigned.

J. W. Rahilly has taken a position as chief engineer of the power plant of the Illinois Traction System at Peoria, Ill. He has recently been engineer at the plant of the LaSalle (Ill.) Portland Cement Company.

Thomas W. Shelton, who resigned recently as general superintendent of the Kankakee & Urbana Traction Company, Urbana, Ill., has accepted the general superintendency of the Illinois Central Electric Railway, Canton, Ill.

Fred Fuller, for the last nine years superintendent of the Bath division of the Lewiston, Augusta & Waterville Street Railway, Lewiston, Me., has resigned to become manager of the Shaw Auto Company, Lewiston. Mr. Fuller was connected with the railway for twenty-five years.

William B. McKinley, president of the Illinois Traction System, Champaign, Ill., and Congressman from the Eighteenth Illinois District, was host to the editors of the newspapers in his Congressional District recently. The trip to and from St. Louis was made in *The Champaign*, Mr. McKinley's private car.

Hugh L. Scovell has resigned as electrical superintendent of the Alton, Granite & St. Louis Traction Company, Alton, Ill., to enter the service of the government. Mr. Scovell became connected with the company at Alton about fifteen years ago as a helper in the power house. Five years ago he was made electrical superintendent.

A. C. Van Driesen, secretary of the Toledo Railways & Light Company, Toledo, Ohio, has resigned to become assistant treasurer of all properties of Henry L. Doherty & Company in Toledo, in active charge of all financial matters of the company. Mr. Van Driesen's rise in the Toledo company has been rapid. He started as a ticket agent for the Beach road at the Casino and from chief clerk of the accounting department became secretary of the company about a year ago.

George A. Iler has been appointed to the position of superintendent of operation of the Georgia Railway & Power Company, Atlanta, Ga., succeeding E. P. Peck, who resigned to join the Bureau of Standards at Washington. Mr. Iler joined the company at Atlanta some years ago as chief operator at Tallulah Falls. Afterward he was made head of the repair department under

Mr. Peck. Before becoming connected with the company he had had experience as electrician in the navy and as a mining electrician.

H. A. Nicholl general manager of the Union Traction Company of Indiana, Anderson, Ind., was recently appointed by the United States government manager of transportation of the Hampton Roads, Va., district. The position is a new one for the war period and Mr. Nicholl has been granted leave of absence by the Union Traction Company in order that he may assume the duties of the place. Mr. Nicholl will continue as general manager of the Union Traction Company and will be in Anderson from time to time.

Roy R. Hadsell, who was recently appointed superintendent of the New York State Railways, Rochester, N. Y., to succeed E. E. Strong, resigned, entered electric railway work with the International Railway at Buffalo in 1900 as a conductor. He remained in the employ of that company in various



ROY R. HADSELL

capacities until 1903, at which time he left Buffalo to enter the employ of the Schenectady Railway as chief inspector. He remained with the Schenectady Railway until 1913, when he resigned to become superintendent of the Troy division of the United Traction Company at Troy, N. Y. He resigned from the United Traction Company in February, 1917, to become assistant superintendent of the New York State Railways at Rochester, N. Y.

H. L. Mitchell has been made vice-president and general manager of the Wheeling (W. Va.) Traction Company, which operates the Wheeling Traction Company, Pan Handle Traction Company, Steubenville & Wheeling Traction Company and the Steubenville, Wellsburg & Weirton Railway. Mr. Mitchell has grown up in the service of the West Penn properties, of which the Wheeling Traction System is a subsidiary.

V. S. Wright has been appointed general manager, purchasing agent and assistant to the treasurer of the Columbia Railway, Gas & Electric Company,

Columbia, S. C. For twenty-one years up to last June Mr. Wright was connected with the Atlantic Coast Line Railway, serving finally as superintendent of terminals. He entered the service of the old Plant System in 1897 as flagman on the Savannah division. Three years later he was made a conductor and in 1905 general yardmaster at Savannah. In 1907 he was appointed superintendent of terminals at Rocky Mount, N. C., in which capacity he continued until appointed to the company at Columbia.

Obituary

Shirley Onderdonk, forty-six years old, a prominent tunnel builder and contractor, is dead. Mr. Onderdonk was general supervisor of the building of the tunnel from South Ferry to Brooklyn for the New York Subway and the "loop" tunnel at Battery Park. He assisted in building the Soulanges Canal, which connects the Great Lakes and the St. Lawrence River; the Jerome Park reservoir, and held contracts with the Grand Trunk Railroad.

Harry C. Ebeling, mechanical engineer at the Harvard Shops of the Cleveland (Ohio) Railway for nine years, died on Nov. 7 of pneumonia, following an attack of influenza. Mr. Ebeling was thirty years old. He was well known to many street railway officials, particularly those who had occasion to visit the shops of the Cleveland Railway. He was educated at the Case School of Applied Science. He is survived by his widow and one child.

John Clark, for many years connected with the Seattle (Wash.) Electric Company, which is now controlled by the Puget Sound Traction, Light & Power Company, in various capacities with the railway department, and who rounded out a term of usefulness as one of the company welfare agents two years ago, died in Seattle on Nov. 1, at the age of seventy-two years. At the time of his retirement Mr. Clark was the oldest of the company employees. He is survived by his widow, a son, and three daughters.

Donald I. Hayworth, construction engineer for the Wichita Railroad & Light Company, Wichita, Kan., included in the Illinois Traction System, is dead. He succumbed to an attack of influenza. Mr. Hayworth was thirty years old. He has been with the railway at Wichita since 1907, having had charge of important construction work with the company, and also being called to advise the city on engineering matters. He was born in Garden Plain. After graduating from the Wichita High School he attended the University of Kansas for two years, at the end of which time he entered the employ of the Wichita Railroad & Light Company. Mr. Hayworth is survived by his widow and two children.

Manufactures and the Markets

DISCUSSIONS OF MARKET AND TRADE CONDITIONS FOR THE MANUFACTURER,

SALESMAN AND PURCHASING AGENT

ROLLING STOCK PURCHASES

BUSINESS ANNOUNCEMENTS

Value of Supply Men's Service

Opportunity for Co-operation Between Salesman and Customers Never So Great as in These Times

A recent conference on sales methods as related to the electric railway executive brought out a number of points worth general consideration. In the present state of the equipment market service is a tremendous asset, both to the supply man and to the purchaser. Transportation companies are struggling against heavy odds and are obliged to economize to the limit in the purchase, storage and application of material. The utmost possible use must therefore be gotten out of equipment and accessories, and many practices must be temporarily approved that would not be sanctioned in ordinary times. The cordial co-operation of the sales representative in this work may seem like deliberately cutting down patronage when viewed from a restricted outlook, but in the long run it will pay liberal returns.

From service results the designer and the manufacturer receive invaluable data as to the fitness of their products for a particular installation, the opportunities for changing the amount of material or modifying its quality, and the possibilities of changing designs to permit output to be produced at a lower labor cost, with fewer processes, with shortened factory routine, or with substitute materials. Even though the present day gives comparatively little opportunity for a development work on the part of the designer, it does afford an extraordinary opportunity to study the behavior of supplies and equipment under conditions of stress.

At this conference it was made plain that the old days of basing sales on entertainment and influence are rapidly passing away. The busy railway executive whose duty it is to pass upon the ultimate necessity for material or equipment purchases prefers to assign a stated time for discussing the problem in hand, by appointment or otherwise, with each responsible bidder separately.

In view of the difficulties now experienced by many purchasers in securing deliveries, the sales representative finds himself in a position of unusual authority in many cases, compared with peace times. To many men in the trade, it is most unsatisfactory to be obliged to spend so much time in trying to hasten production, explain failures to complete orders on time,

follow up shipment delays, and in general to act as a pacifier among customers. The relations between buyer and seller to-day in the electric railway field afford an opportunity for sympathetic co-operation which could never have been so quickly developed before the war, and which augur more than well for the future relationships of the consumer and the trade representative who strives to be of maximum service in these great and momentous years.

Electric Railway Market Quiet

Supply Men Feel that Lower Prices Are Necessary to Stimulate Purchasing

The market conditions at present for electric railway equipment are exceedingly quiet and for the time being at least there does not seem to be much probability of any immediate betterment. Stocks on hand are limited and orders few and scattered.

Public utilities are not at this time in the market for new supplies in any quantity, and although there is a disposition shown by some of the largest trolley lines, both here and in other cities, to shop around for future requirements, no actual buying except "hand to mouth" is going on to-day.

One of the largest producers of electric railway motors stated that as far as he knew there was no actual demand and in his opinion the outlook for the future was problematical. In this particular company 1918 railway sales are running about 80 per cent behind those of 1917.

The Housing Corporation and the Emergency Fleet Corporation have done some buying, but as far as can be learned this is now over and inquiries which they had in the market for rolling stock have been cancelled.

Prices are stationary. However, as a straw showing the way the wind blows, it was learned this week that a decision to advance the price of a well-known line of gears and pinions on Jan. 1 has been withdrawn.

Supply men, who have been interviewed, are generally of the opinion that electric railways will still hesitate to purchase at these high prices. Business can be stimulated, it is held, only by lower prices. In view of the fact that the roads have not purchased for so long because of high prices of materials and money it hardly seems logical to suppose that they will come into the market now when both commodities are so extremely high.

Standard T and Girder Rails Still Scarce

Possibility of Small Supply of Former After Jan. 1, But Girder Supply Still Uncertain

An investigation made this week by a representative of the **ELECTRIC RAILWAY JOURNAL** into the market for rails disclosed no change so far. For the time being the situation is entirely under the control of the War Industries Board. Producers of both standard T and girder rails are still working to capacity but on war contracts for sheet steel. This condition, it is understood, will continue until a large reserve supply is built up.

Some rail rolling is going on but the output is immediately allocated by the War Industries Board to France where enormous quantities are needed for rebuilding and constructing new lines for army communication purposes. Practically all the railroads of Belgium and France will have to be retracked and this work must be done immediately in order that the transportation of all kinds of supplies may be rushed through to the allied armies and for other purposes. Captain O. E. Dulieux of the French High Commission stated on Wednesday that immediate French requirements in the steel line, including rails, are 8,000,000 tons. The exports of rail from the port of New York for the month of September amounted to \$892,944.

Electric traction systems have needed quantities of rail for some time. At no time in the history of the industry have cars been operated over rails in such a poor condition. Repairs and makeshifts have been made repeatedly. It has virtually been impossible for most roads to get new rails. Nor do the conditions reported this week seem such that any relief will be found at least before the first of the new year.

Unfilled orders from electric roads for rails extend as far back as 1916. The producers' order books are in the hands of the War Industries Board and if the local situation is serious enough to demand immediate attention then a sufficient shipment of rails to cover immediate requirements will be made.

In speaking to a representative of the **ELECTRIC RAILWAY JOURNAL** this week an official of one of the largest rail producers voiced the opinion that a small tonnage of standard T rails could be supplied for domestic needs after Jan. 1, but that the situation in girder rails was so uncertain that no idea could be given as to delivery date.

Westinghouse Air Brake Business

Unfilled Orders on Nov. 1 Approximated \$11,000,000—Current Shipments Largest on Record

In view of the fact that the change in the fiscal year of the Westinghouse Air Brake Company has postponed until March the issue of the annual report and accompanying financial statements which have heretofore been made public in October, the company has thought it proper to advise stockholders in general terms of the present condition and future outlook of the company's business. This action, the company feels, seems especially pertinent since there is now more or less uncertainty as to the probable effect of the armistice upon the prospects of the larger manufacturing concerns.

Contrary, perhaps, to the general opinion, it is pointed out the company is not now engaged in the execution of any contract or contracts involving munitions or other products used directly or solely for war purposes. The brake equipments and draft-gear now being supplied for application to the cars and locomotives ordered by the United States Railroad Administration include a relatively small number originally intended for use on American lines in France, but the demand for additional locomotives and cars for use in the United States is so great and so insistent that even if the United States government should for any reason decide not to ship additional locomotives and cars to France, there is no doubt, the company feels, that the entire number of equipments on order will be required in the United States as promptly as they can be produced. Again, there is no doubt in the minds of the company's officers but that the assistance that the United States must lend in the rehabilitation of Belgium and France will continue the increasing demand for additional transportation facilities in this country, so that there is no reason to anticipate any reduction in the volume of brake business during 1919.

AIR-BRAKE SHIPMENTS LARGEST ON RECORD

Current monthly shipments of air-brake material and accessories exceed in value the shipments of any corresponding period in the history of the company, and the value of unfilled orders on Nov. 1, 1918, approximated \$11,000,000.

The same statements apply with equal force to the signal business of the Union Switch & Signal Company, which promises to show unusually favorable figures for the fiscal year ending Dec. 31, 1918, with every prospect of their continuance through the year 1919. The war work of that company, it is stated, which has been handled with distinguished success and without any interference with normal activities, will bring the net earnings for the year 1918 much beyond any pre-

viously reported for a similar period. The Switch company's principal contract with the United States government is nearing completion, and the supplementary contracts on which work has been commenced can be cancelled without loss, if the government so elects.

And finally the report concludes with the statement that the business of the company's other subsidiary and associated companies, the National Brake & Electric Company of Milwaukee, the American Brake Company of St. Louis, and the Locomotive Stoker Company of Pittsburgh, has been and continues to be extremely satisfactory.

Work of Fuel Control to Continue

Only Such Activities as Become Unnecessary Under Armistice Conditions to Be Relinquished

The United States Fuel Administration, which will be terminated automatically upon proclamation of peace, will pursue its course with that end in view, relinquishing its various activities as they become unnecessary under armistice conditions, and continuing to function where its services still are required, it was announced on Tuesday in response to inquiries.

Reports of immediate and wholesale dissolution were said to be without foundation. Various subdivisions already are in process of winding up their duties. The mine track committee, and some other sections including several from the oil division, have been released at their request from further service, because the work which they undertook to do has been done.

Whatever machinery is necessary to the continuation of the full discharge of the duties of the administration will be retained until these duties are discharged or until the administration is relieved of them, and continuation of the larger activities of the administration through the winter was said to be the present prospect. The vigorous and careful supervision of anthracite coal was cited as an instance of the kind of work which still must be done.

The proper administration of the zoning system, under which millions of car-miles of haulage were saved and the supply of coal was correspondingly increased, was mentioned as another of the sort of duties which the administration cannot abandon forthwith, and which it will carry forward.

The United States Fuel Administration has not relaxed in any degree its vigorous dealing with mine operators who willfully ignore the regulations laid down for the careful preparation of coal to free it from impurities before placing it on the market for consumers.

Since the Fuel Administration placed the ban on "dirty" coal, a total of 119 mines have been shut down. Of this number twelve have received permission to resume.

Manufacturers May Solicit Business of Any Kind

Qualifications According to Which Producers Are Partially Released from their War Conservation Pledge

A report by the electrical and power equipment section of the War Industries Board dated Nov. 14 and just made public makes a complete statement of the situation as it now exists in regard to priorities and restrictions. This section has been handling stokers, boilers, piping and fittings, engines, compressors, motors, dynamos, supplies, etc.

Its statement says that producers are partially released from their pledges according to the following qualifications:

STATEMENT ISSUED BY BOARD

"(a) In accepting orders of the class heretofore forbidden under this voluntary agreement, such acceptances should be subject to prior delivery of what is essential to that part of our war program which will be carried out, and should also be accepted for secondary consideration as compared with demands incident to reconstruction, which will probably shortly commence to appear. It is due to this last possibility from the point of view of the Allies that the War Industries Board is still holding some measure of restriction on the curtailed industries, and, still further, we may hold some restraint until not only the demands for reconstruction from the Allies can be obtained, but until we can also coordinate the relations between dovetailed industries, if it should be found necessary.

"(b) Restrictions in output were placed upon certain branches and commodities. If the curtailment was 20 per cent, it is now released to 10 per cent; if it was 40 per cent, it is now released to 20 per cent. You are authorized, therefore, to accept orders even on the curtailed industries, though they may be of an entirely non-essential character, up to that basis.

DELIVERIES STILL RESTRICTED

"(c) Delivery, however, must for the present be restricted to such orders (1) as are covered by specific or automatic priorities; (2) as are authorized by circulars or permits as have heretofore been issued by the Priorities Division; (3) as may be authorized by circulars or permits issued hereafter by the Priorities Division, such as Circular No. 57 inclosed herewith; (4) or for purposes or firms embraced within Preference List No. 2.

"We suggest that it is perfectly proper for you to solicit business of any and all classes subject only to reservation that you are not as yet advised as to when production may be undertaken. It is expected that further suggestions or releases will be offered quickly. If so, we will undertake prompt advices, which is one of the purposes of this series of bulletins."

Franchises

Binghamton, N. Y.—The Binghamton Railway has asked the Fenton Town Board for a franchise to construct a line beginning at the northern line of the village of Port Dickinson, through Fenton to the Hires plant at Hiresville.

Lancaster, N. Y.—William B. Cutter, as receiver for the Buffalo & Depew Railway, has made application to the town board of Lancaster for permission to construct a single-track line in Ellicott Avenue, a distance of approximately 0.6 mile. This addition to the Buffalo & Depew Railway is authorized by the United States Housing Corporation of the Bureau of Industrial Housing and Transportation of the Federal Department of Labor. The government is financing the construction of the line. There is no objection to the proposed franchise on the part of the town authorities.

Track and Roadway

San Diego (Cal.) Electric Railway.—It is reported that work has been begun on the construction of an extension to the concrete shipbuilding plant. It is estimated that the cost of the extension will be about \$57,000.

Valdosta (Ga.) Street Railway.—The extension of the Valdosta Street Railway along Forest Street to the new fair grounds has been completed and operation begun.

Kankakee & Urbana Traction Company, Urbana, Ill.—An order has been issued by the Illinois Public Utilities Commission authorizing the Illinois Central Railroad to cross at a grade the tracks of the Kankakee & Urbana Traction Company near Chanute Field, Rantoul, Ill., for its extension to Chanute Field.

New York Municipal Railway, Brooklyn, N. Y.—Travis H. Whitney, of the Public Service Commission, for the First District of New York, announced recently that, owing to the end of hostilities in Europe, much of the work on the dual rapid transit system, temporarily held up by the demand for war materials, may now go forward rapidly. The work thus released will amount to \$25,000,000. In October, 1917, the Priorities Committee agreed to grant certificates for dual contract work except for the Westchester Avenue elevated line, in the Bronx; the Livonia Avenue elevated line in Brooklyn; the Nassau Street subway, in Manhattan; the Queensboro subway extension to Times Square, and for four car storage yards. It is now expected that this work will proceed without hindrance from the government.

Western New York & Pennsylvania Company, Olean, N. Y.—The Western New York & Pennsylvania Traction Company has filed a petition with the Public Service Commission for the Second District of New York, asking for a determination of how an additional main track, now under construction, shall cross a highway 12,790 ft. north of the Panama Station in Sherman Township, Chautauqua County. The company asks that the new track shall cross the highway overhead. There is now one main track across the highway at grade, and a siding, while not crossing the highway, projects into it a short distance at grade. It is proposed to change the present main track from grade to overhead. The petition also asks for a determination that public safety requires the track crossing should be an overhead one, the tracks carried on a bridge over the railroad and an adjacent creek. Immediate action will be taken upon the petition by the commission.

Cincinnati (Ohio) Traction Company.—Street Railroad Director C. W. Culkins of Cincinnati has outlined a number of improvements which the Cincinnati Traction Company is expected to make, following the removal of limitations as to expenditure of money for building and improving railroads and the expected increase in man power due to the release of many young men from military service. Among other things under consideration is the construction of an outside belt line connecting the East End, Hyde Park, Oakley, Norwood, Winton Place and the Spring Grove Avenue district. Work on the extension of the Warsaw Avenue, North Norwood, Sixth Street and McMicken-Main lines will be begun soon. New track will be laid on other lines on which work was held up by war restrictions. Improvements are also to be made in the transmission system which will insure additional power on some of the longer lines.

Cleveland (Ohio) Railway.—John J. Stanley, president of the Cleveland Railway, stated to the ELECTRIC RAILWAY JOURNAL correspondent that its program is ready now to proceed with its program of improvement, which was made before the entrance of this country into the conflict and delayed by the government's policy of spending as little money as possible in that way while heavy drafts were being made for war funds. The company had the money to make the proposed improvements and part of it is now invested in Liberty Bonds. The plans contemplate largely improvements in tracks and the complete renewal of some of them. Some time ago work was resumed on the new tracks in East Cleveland and it is hoped to have them completed within a short time.

Dallas (Tex.) Railway.—Work on the Second Avenue extension of the Dallas Railway has been completed and operation of the line will be begun shortly.

Seattle (Wash.) Municipal Railway.—Work on the municipal elevated railway in Seattle is proceeding rapidly, and the city will shortly call for bids for the necessary construction work at each end of the road. Preliminary plans are now being prepared by Structural Engineer F. A. Rapp of the city engineer's staff, covering the construction of the elevated trestle on the west side of the west waterway, where it will turn south. At the point where the turn south starts, a trestle will continue 700 ft. west and then drop to the surface level of the Puget Sound Traction tracks on a 6 per cent grade. Bids on the trestle work west of the bridge will be called for by the city in a few weeks.

Tacoma (Wash.) Municipal Railway.—City Engineer Manley is completing plans for the double-tracking of the municipal trolley car line, so that bids may be asked for next week. The work is estimated to cost \$250,000 and will include two loading platform stations on Tenth and A Streets. To carry the increased trackage across the viaduct spanning the Milwaukee yards, two 52-ft. and five 42-ft. spans will be put in, and the easterly incline on the north side will be widened for another track. Over the Wapato waterway, two trusses about 600 ft. long will replace the bridge now spanning the creek.

Power Houses, Shops and Buildings

Montgomery Light & Traction Company, Montgomery, Ala.—It is reported that the Montgomery Light & Traction Company will build a new electric lighting plant at a cost of \$250,000.

Shore Line Electric Railway, Norwich, Conn.—The Shore Line Electric Railway has petitioned the War Department for permission to erect a high-tension electric transmission line across Winthrop Cove and the railroad bridge.

Winona Interurban Railway, Warsaw, Ind.—New coal-handling devices are being placed in the main power station of the Winona Interurban Railway at Winona Lake, Ind., which will deliver coal into stoker hoppers.

Atlantic Coast Electric Railway, Asbury Park, N. J.—Improvements have recently been completed by the Atlantic Coast Electric Railway in the boiler equipment at its plant to increase the capacity. It is understood that a quantity of new electrical equipment will also be installed.

Toronto & York Radial Railway, Toronto, Ont.—The construction of a small carhouse for its Scarborough division is contemplated by the Toronto & York Radial Railway.

Pennsylvania Railroad, Philadelphia, Pa.—Plans are being made by the Pennsylvania Railroad to enlarge its shops at Altoona and Juniata, for which authorization has been received from the United States Railroad Administration. The plans provide for additional electric and steam power for both the Altoona and Juniata shops, and new equipment to be purchased will include turbines, rotaries, transformers, switches and transmission lines. New stokers will be installed under the present boilers at the Altoona machine shop. An extension, 240 ft., will be built to the Juniata erecting shop, and other changes will be made to increase the output of locomotives. The cost of the work is estimated at \$2,000,000.

Virginia Railway & Power Company, Richmond, Va.—A new battery of boilers has been ordered by the Virginia Railway & Power Company for its Reeves Street power plant and it is expected that they will be delivered by Jan. 1. When they have been installed the capacity of the plant will be increased more than 30 per cent.

Rolling Stock

Grays Harbor Railway & Light Company, Aberdeen, Wash., has recently received and put into operation six new Birney safety cars.

Cincinnati (Ohio) Traction Company will probably remodel about 150 of the present double-truck cars into prepayment cars with increased seating capacity. C. W. Culkins, street railway director, Cincinnati, hopes to see lighter cars with larger seating capacity put in service. Plans for such a car are now under consideration.

Newport News & Hampton Railway, Gas & Electric Company, Hampton, Va., furnishes the following equipment memorandum on the ten cars which were mentioned in this section of the ELECTRIC RAILWAY JOURNAL for Oct. 19.

Number of cars ordered.....	10
Name of road.....	Newport News & Hampton Railway, Gas & Electric Co.
Date order was placed.....	Oct. 15
Date of delivery.....	March, 1919
Builder of car body.....	J. G. Brill Co.
Type of car.....	Semi-convertible
Seating capacity.....	52
Weight:	
Car body.....	21,000 lb.
Trucks.....	12,000 lb.
Equipment.....	11,000 lb.
Total.....	44,000 lb.
Bolster centers, length.....	21 ft. 6 in.
Length over all.....	46 ft. 0 in.
Truck, wheelbase.....	4 ft. 6 in.
Width over all.....	8 ft. 5 in.
Height, rail to trolley base.....	11 ft. 9 in.
Body.....	Semi-steel
Interior trim.....	Cherry
Headlining.....	Agasote
Roof.....	Monitor
Air brakes.....	Westinghouse S. M. E.
Bumpers.....	Brill
Car signal system.....	Faraday
Center and side bearings.....	Hartmans center bearings, Perry side bearings
Control.....	P. C.
Couplers.....	Tomlinson
Curtain fixtures.....	Curtain Supply Co.
Curtain material.....	Pantasote
Designation signs.....	Hunter
Door-operating mechanism.....	Brill
Fenders or wheelguards.....	H. E. lifeguards
Gear and pinions.....	G. E. heat treated
Hand brakes.....	Ackley
Heater equipment.....	Consolidated
Headlights.....	Golden Glow
Journal boxes.....	Brill
Lightning arresters.....	Westinghouse K3
Motors.....	Quad. G. E. 247, outside hung
Registers.....	Ohmer
Sanders.....	Ohio Brass
Sash fixtures.....	Brill
Seats.....	Brill
Seating material.....	Cherry slat seats
Slack adjuster.....	American
Step treads.....	Universal
Trolley catchers or retrievers.....	Ohio Brass catcher
Trolley base.....	Ohio Brass
Trolley wheels or shoes.....	Kalamazoo wheels
Trucks.....	Brill 76 E
Wheels.....	.33 in. cast iron

Trade Notes

C. R. Horrell, who was formerly with Electric Appliance Company at Chicago, has been made assistant sales manager of the Sangamo Electric Company, Springfield, Ill.

J. W. Weinland, formerly district engineer at Chicago for the Liberty Steel Products Company, has been appointed assistant to the president of the company and will be located at the general offices in the Woolworth Building, New York City. S. W. Midgley, formerly in charge of railroad sales at Chicago, has been appointed Chicago district manager of the company, with offices in the McCormick Building.

New Advertising Literature

Allis-Chalmers Manufacturing Company, Milwaukee, Wis.: Folder descriptive of type C engineers' valve for air brakes. This valve employs poppet valves in place of the metal-sliding seats with ground joints generally used. A number of advantages are claimed.

Austin Comp^{ny}, Cleveland, Ohio: Folder descriptive of standard wood buildings. So long as the steel shortage exists, the company explains that other equally serviceable building materials must be utilized, and it has prepared a series of ten designs for wood construction for manufacturing purposes and repair shops.