

# Electric Railway Journal

Consolidation of Street Railway Journal and Electric Railway Review

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## Chicago Conference Will Teach Several Important Lessons

READING of the announced program of the association's annual mid-year conference will bring vividly to the minds of electric railway executives some of the difficulties which they have confronted in the past few years in trying to keep up the supply of ready money with which to meet current obligations. President Gadsden's personal letter urging executives to attend this conference has elicited many replies which show the vital interest that is taken in this all important subject at the present time.

While the financial condition of the industry is somewhat improved over that existing a year ago, it is nevertheless far from satisfactory. Even now the number of companies in the hands of receivers is larger than at any previous time in the history of the industry. It seems incredible that ninety-one companies, involving 11.2 per cent of the electric railway mileage and \$819,429,294 of securities, in such an essential industry as this are unable to meet fixed charges. These are the facts, however, and they form one basis for the expectation that the lessons to be learned by attendance at Chicago will prove materially helpful in pointing out past pitfalls that are to be avoided in the future.

## Reasons for the Automatic Substation's Growing Popularity

PRACTICING economy has been the favorite indoor sport of electric railway officials since the day when the obsolescence of the nickel fare came to be recognized. Every department of the industry has been diligently searched for the purpose of locating and checking waste and inefficiency. In this connection probably no single development of recent years has been more promising than the application of automatic control to electric railway substations. The history of this development has been traced in numerous articles appearing in this paper during the past few years, and it was brought up to date in the table of recent installations and orders which appeared in the issue of Jan. 22.

The "automatic" has attracted the attention of managers primarily because it promises saving in labor costs, which are reduced to those of inspection and maintenance. But there are numerous other items which are almost equally attractive. Substantial savings in transmission line copper are rendered available, and better voltage distribution follows naturally.

The substantial number of new automatic installations is a tribute to the work of the engineers, who have had to overcome many difficulties in bringing about its present status. The showing is remarkable in the light of the "hard-up" condition of electric railways. In spite of the prevailing tendency to curtail outlay, however, the railways have found means to purchase this money saver on a reasonably large scale, partly because it can be shown in general to have a capacity to finance

itself very promptly. It is extremely unfortunate that on every property this money-saving capacity cannot be demonstrated.

Of course the automatic substation has a well-defined field, and it cannot be expected to furnish the solution of all distribution difficulties, many of which may have been the result of faulty design. It is, however, no longer an experiment. It has made good or, obviously, its adoption would have been neither so rapid nor so widespread.

## Business Men Vote Unanimously for the Electric Railway

EVERY question put by the United States Chamber of Commerce in its Referendum No. 33 has been decided overwhelmingly in favor of the electric railway. This vote was cast during December by the active business men in the various communities throughout the country. They have no interest in electric railway affairs except as they consider the electric railway as a factor in the prosperity and business life of the community. In this vote the electric railway privately owned and operated was judged upon its performance as compared to the jitney bus and what might be expected from the municipal railway. The issue was well defined, and the jury was clearly representative of the best commercial thought of the country. It was the first time that the subject of the treatment to be accorded electric railways by the local authorities had been considered by a group so representative of the intelligence of the country.

What was it that the members of the Chambers of Commerce decided? It was that the electric railway was the most practical agency of city transit on a large scale, at least at present; that it should be kept under private ownership, protected from unfair competition and relieved of burdens not connected with the service performed, and that the effect of changes in operating conditions should receive proper recognition on the part of regulatory authorities. This treatment, they further said, should be met by the company in its turn making available for the public at all times the facts as to the results of operation, and by having resident responsible executives wholly conversant with local requirements.

It is not difficult to imagine the consternation which this vote will bring to the politicians, the Mayor Hylans, and the lesser lights of their ilk. Their stock in trade for years—that is to say, theirs and their predecessors—has been to persecute and oppress the street railways, to add to their taxes, to start opposition bus or trolley lines, to berate the managements and when possible to stop any advance in fares. They have pursued these policies because they thought it a popular thing to do, that it would bring votes. Practically everybody, they argued, disliked the trolley company because it was a monopoly. No abuse was too strong

to use against it, no attack too severe. Now, what can they do? These very things which they have always thought were so popular have been condemned by the business vote of the nation. It is not the first time in real life as in fiction that the ugly duckling has proved to be a swan or the rejected stone has become the head of the corner.

But electric railways cannot simply accept the verdict and do nothing. If the electric railway is to be an important support to the local business structure in each community it must fulfill its duties and live up to its opportunities. If the public accepts the principle that the fare must be raised if necessary to give the railway a reasonable return, the company must be ready to give good service for that fare and reduce it when the return is excessive. If jitney and bus competition is abolished to help the railway, it must be ready to extend its service by bus or car when the traffic to be gained on any route warrants such expansion. If the community demands responsible resident executives in place of distant direction by holding companies or bankers, the owners must be prepared to adopt this policy.

Nevertheless, the report of the United States Chamber of Commerce and the vote upon it should be of the greatest help now to electric railways. It should help greatly to bring about wider recognition of the railways as public servants and as worthy of the esteem of the community. Railway executives cannot do better than to bring this vote to the attention of their communities as a whole. When considered with the report of the Federal Electric Railways Commission it represents the greatest advance in public recognition of the electric railway which has occurred in years.

### How the Camden Section Will Help the Public Service Railway

WHEN Martin Schreiber, chief engineer of the Public Service Railway, was appointed manager of the Southern Division of that property, he immediately decided that one of the first things to be done was to organize a company section with headquarters at Camden. Public Service was one of the pioneers in the company section movement and the results achieved at Newark, the company's main headquarters, showed what could be done at Camden. The activities of the new section were formally inaugurated on Jan. 13 with the enthusiasm which always marks the launching of a new enterprise of this sort. The event is significant because it is nearly three years since a new company section was formed, the latest preceding one being the Rhode Island company section. It is to be hoped that this will precipitate the formation of other sections which have been under discussion for some time, but which had to wait until after the war excitement had died down. Unfortunately, the Southern Division of the Public Service Railway is not large enough to have permitted the formation of a section which could capture the trophy cup presented to the association by the ELECTRIC RAILWAY JOURNAL. The Rhode Island Company section, which holds this cup, started off with such a rush that it secured a remarkably firm hold on the trophy. It is about time, however, that a section should be formed somewhere to lift the cup from its resting place in Providence.

In the meantime the best wishes of the industry will be extended to the infant section at Camden.

### An Opportunity and an Obligation at Chicago

WHAT is to be done at Chicago with reference to President Gadsden's recommendations that the association, speaking for the electric railway industry, take action endorsing, or at least defining its attitude toward, the reports of the Federal Electric Railways Commission and of the special committee of the Chamber of Commerce of the United States? As noted in the Jan. 15 issue of this paper (see page 146), President Gadsden has addressed a letter to executives of member companies on this subject and has appointed a committee to bring in a report with recommendations for action at Chicago on Feb. 10. Believing that a discussion of this subject would tend to crystallize opinion, the editors of this paper have asked several members of the Committee of One Hundred and the chairmen of some of the public service commissions who have most to do with electric railway regulation to comment, in this issue and the next, on the probable effects, good and bad, which would result from the endorsement of, or other action on, these two reports.

The position of ELECTRIC RAILWAY JOURNAL on this question can be expressed in a few words. It is that the endorsement of these reports as bases for the electric railways, individually and collectively, to meet the public and work out the details of individual or collective problems would be the greatest and most important single step which the association could take at this time in the effort to restore the industry to a stable and successful status.

The situation is just this: two disinterested bodies, one appointed by the President of the United States, the other representing organized business of the country, the United States Chamber of Commerce, have fully analyzed and reported on the electric railway industry both as to present situation and as to bases upon which future relations should be founded. These reports represent, probably as accurately as can be ascertained, the intelligent opinion and conclusions of the public regarding electric railways. The electric railways, as an industry, have not spoken with reference to these reports. Are they good or bad? Are the railways ready to meet the public on the bases outlined in these reports? Is not the public entitled to know what the railways believe?

Objection to action endorsing these reports is urged by some because the former report mentions service at cost. Others say they cannot in fairness to their properties and security holders reorganize their capital structures over night. But, upon examination of the reports, there is no definite requirement along either of these lines. What these reports do present are fair analyses of the electric railway problem and recommendations and conclusions as to bases upon which future railway operation, financing, franchises, public relations, legislation, etc., should be based. With these conclusions and recommendations no one can differ fundamentally.

Endorsing action compels no one to modify capitalization over night, though such action may in many cases be advantageous. It compels no railway to adopt service at cost now or tomorrow. It does do this—it says to the public, "You have analyzed the railway situation thus and so as indicated by these reports. We believe these reports are fair and are willing to go along with you in the working out of the problems on the bases of

these reports, relying on you to do your part." Endorsement is the railway's step in the co-operative action. At present the next step is up to the railways in speaking frankly. By endorsement of these reports, by announcement of their own position as being in line with the public's own analysis, and by action in accordance therewith, the railways "put it up" to the public for real action on its part in the common problem.

Local fears, local details, should not be allowed to becloud the main issue, which is the beneficial, psychological and strategic effect of the association's stating its position with reference to these reports.

It is to be hoped, sincerely, that President Gadsden's special committee will recommend action endorsing the reports and that the association will decide that such action is the most frank and sound move which it can now make.

### Governor Miller Takes Up New York City Traction Affairs

GOVERNOR MILLER'S report on traction affairs, sent to the Legislature Monday afternoon, outlines a constructive plan. This is most refreshing after four years of drifting and evasion. Briefly stated, the position of Governor Miller follows:

Owing to an unfortunate division of responsibility in the past between the city and state, the transportation system in New York has been allowed steadily to drift toward disaster. Many roads are in the hands of receivers, many lines have been abandoned, maintenance has been deferred, taxes are unpaid and service has deteriorated, all to the inconvenience and expense of the public and great loss to the city. Yet transportation is a public function, intimately affecting the public welfare, and upward of \$850,000,000 of New York City's traction bonds are held by the public. This includes \$250,000,000 of city bonds. The time has now come for action, and it would be little short of a public calamity if the opportunity thus presented were allowed to pass. The remedy is a unified system with a single fare and with unnecessary duplication of service eliminated. This means the subways will be the backbone of the system, with the elevated, surface lines and buses eventually merely auxiliary. The subway contracts, with their preferential payments, must be revised; the length of leases is too long. Ultimately such a system would be municipally owned. The State has the duty and the power to act in the matter, and a commission of three is recommended to take over the work of the present city commission and to receive such additional power as may be necessary to extricate the situation from its present difficulties and accord exact justice to all.

The situation is well stated, and we are glad also that the Governor sees the necessity of a co-ordinated system in the proposed revised plan for New York. In this way only can the maximum service be given for the minimum cost to the users, although it would be well in this complete revision of existing conditions to see whether some sort of distance fare cannot be introduced. The reference to ultimate municipal own-

ership need not cause alarm. This was the ultimate outcome of the present subway contracts, and the Governor in a later statement declares he is opposed to municipal operation. He simply wishes to have all of the means of transportation on the same basis.

But the companies also must make concessions. The subway contracts, the Governor says, need revision in the public interest as experience has shown that the provisions for preferential payments are unfair to the city. Just how far the concessions requested will extend is impossible to say, but the tone of the message throughout indicates a strong desire to administer justice, and the companies have the assurance that in the Governor's opinion the market value of the outstanding securities is much below the intrinsic value of the properties represented. It will certainly mean a great deal to the companies, just as it will to the city, to rewrite their contracts in the light of the experience of the past ten years. We hope for much from the new commission which the Governor asks authority to appoint to undertake this work and that this commission will have ability and power to reach a correct solution. There is probably no other problem in civic affairs in New York whose correct settlement is so important as this.

### A Wondrous Novel Reason for Re-election

THE ordinary run-of-mine candidate for the Mayoralty of an American municipality generally considers a promise to make the local electric railway suffer to be a positive claim on the votes of the citizenry. Not so the gentleman who has been Mayor of Terre Haute for three years and likes the job well enough to seek another term. Does he threaten dire things to the street railways? No, not he! Mayor Hunter gives as one of his strongest arguments for re-election the fact that during his administration the local railway has given no trouble at all, at all. Listen to this, ye unhappy managers in Hylandized communities:

"Although our people may not realize it, we have as good a street car system as there is to be found in the country, and in the face of raising of fares all over the country our people ride at 5 cents. In other cities the fare has been advanced to 7, 8, 9 and 10 cents for city fares. Our people save thousands of dollars every year on street car fares alone."

This certainly seems like shining in the glory reflected of the able management of Edward M. Walker, but in all due fairness to Mayor Hunter let it be said that as one of the first municipal executives to appreciate the value of safety car service he has not only co-operated to such good effect with the railway of his

home town but has advanced the cause of better service in many other cities through the hearty, unequivocal way in which he has endorsed the principles of Terre Haute operation when questioned by the numerous civic committees that have visited that city to study the safety car. If Mayor Hunter's record in other directions is as good as this, he ought to be re-elected by acclamation.

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### Quotation from the Federal Electric Railways Commission Report

No. 5

THE industry can be restored to a normal basis only by the introduction of economies in operation, improving the tracks, equipment and service and assuring a reasonable return upon the fair value of its property used in the public service when honestly and efficiently managed.

For the purpose of restoring credit, it seems to be the general impression of all witnesses that the first necessity is for the industry to put into effect such economies of operation as will enable it to give good service at the lowest cost.

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# The Public Utilities Commission of the Nutmeg State

The Connecticut Commission Is Restricted as to Jurisdiction Over Rates and Securities — It Follows a Conservative but Broadminded Policy — It Is Particularly Vigorous in Requiring Effective and Safe Operation of Utilities — Grade Crossing Protection Signs Worked Out in Connecticut—This State Apparently Antedates Massachusetts in Utility Regulation

THE State of Connecticut has had some sort of a regulatory commission ever since 1849. In that year the Legislature provided for the appointment of three commissioners for each railroad in the state, each to serve three years. Their duties were to examine the roads each year, to see that the companies observed the laws and the provisions of their charters, to hear the complaints of selectmen of the towns, to adjust land condemnation proceedings, etc.

Massachusetts is usually credited with having started the regulation idea, but she did not establish a commission until 1864, fifteen years later than Connecticut. In 1850 the law of the previous year was amended in such a way as to provide that the individual commissioners should constitute a board; at the same time the duties were somewhat enlarged. Various other amendments in 1853, 1858, 1865, 1874, 1877 and 1888 enlarged and defined the scope of the commission until it had the usual character of jurisdiction over service and operation. Street railways in 1895 came under the regulation of the Railroad Commission.

One of the early amendments required the commission to investigate accidents occurring on the railroads. The first entry in one of the oldest record books of the Railroad Commission existing in the files of the present commission is the following, not quite as precise and formal as those reports received now from the utilities, but probably as effective:

Office—HARTFORD, PROVIDENCE & FISHKILL RAILROAD  
Hartford, 24 June, 1857

Rec'd  
June 26, 1857

Augustus  
Lagerhauser

Killed

H. HAMMOND, Esq.

DEAR SIR: As our evening train was passing Bristol north side last night it ran over a German, injuring him so that he died in course of night. There seem to be various reports as to the cause of it, many thinking it was suicide, and others thinking it was caused by intoxication. I will give you the particulars hereafter.

Yours respectfully,  
SAMUEL NOTT,  
Supt. H., P. & F. R.R.



THE CAPITOL AT HARTFORD IS AN ARTISTIC GILT-DOMED STRUCTURE IN A BEAUTIFUL CITY

A State Inspector of Gas was provided for in 1874 in a law which prescribed standards of gas quality, pressure, candlepower, etc., and this officer, with various local deputies, administered the gas laws until 1911.

In 1911 the Public Utilities Commission superseded both the Railroad Commission and the Inspector of Gas, and at the same time the jurisdiction was extended to include communication, light and power, transportation, and water utilities as well as steam railroads,

street railways and gas companies. Soon afterward the term "common carrier" as employed in the 1911 act was defined by the Legislature in such a way as in effect to exclude from the jurisdiction of the commission steamboat lines, pipe lines, tank and refrigerator service, parlor car service, stage and bus lines, irrigation, warehouses, etc. Municipally owned utilities are also entirely excluded.

At the present time 180 companies report to the commission; their total plant investment is \$1,030,337,207.98, of which some \$350,000,000 represents investment in Connecticut. The total is distributed as follows:

Gas	\$23,479,028.67
Electric	37,372,132.60
Express	33,284,724.07
Railroads	295,622,443.84
Street railways	98,232,660.22
Telegraph	166,957,003.14
Telephone	348,830,167.33
Water	26,559,048.11

Originally the three members were required by law to be respectively a lawyer, a civil engineer and a business man. The 1911 acts did not prescribe this, but subsequent appointments have been so made that each of these three professions has continued to be represented. The present incumbents are Richard T. Higgins, chairman; Charles C. Elwell and Joseph W. Alsop, with professions in the sequence given above. Nominations are made by the Governor for a six-year period; in case the nomination is not confirmed by the Legislature, the appointee serves only until the rising of the next Legislature. The salaries at present are

\$6,000, \$5,000 and \$4,000 respectively, although in the establishing act of 1911 each was fixed at \$5,000. The offices of the commission are in the State Capitol at Hartford.

#### FUNCTIONS OF THE COMMISSION

The duties imposed by law are little different from those performed by other utility commissions, but the exercise of power is relatively limited, as was also noted above in connection with the range of utilities regulated.

1. *Rates.*—The law requires that rate matters shall be taken up only on formal petition alleging the rate to be unreasonable; the commission cannot begin a rate investigation on its own initiative. The law does not even require the utilities to file changes in rates; most companies, however, are conforming to the practice of

successful appeal from its decision is made to the Supreme Court of Errors, which is permitted to rule only on questions of law and not of fact. Trustees or receivers of utility corporations succeed to all the powers, duties and obligations of company officers relative to the commission except in so far as these may be inconsistent with such powers, duties and obligations as agents of the court appointing them. The bearing of this upon the status of the street railway industry in Connecticut will be touched upon later in this article.

#### ORGANIZATION OF THE COMMISSION

The routine work of the commission is conducted through the medium of the following organized departments.

*Secretary's Department.*—Henry F. Billings has been continuously secretary of the Railroad Commission and



CONNECTICUT'S PRESENT COMMISSIONERS, CHARLES C. ELWELL, RICHARD T. HIGGINS, CHAIRMAN, AND JOSEPH W. ALSOP

keeping the commission informed of the promulgation of new rate schedules.

2. *Service.*—The commission is authorized to prescribe standards of service for all utilities. It also has the power to inquire into an allegation of inadequacy of plant or equipment of a utility and make such orders as public necessity seems to require.

3. *Safety of Public and Employees.*—The commission, as was the Railroad Commission soon after its establishment, is charged with the duty of examining into the circumstances and causes of utility accidents, involving personal injury or public safety, recommending, if possible, means whereby similar accidents could be avoided in the future.

4. *Issue of Securities.*—Only in a few minor instances (resulting from amendments of utility charters) does the commission have any control over the issue of new securities.

Any party aggrieved by any order, authorization or decision of the commission may appeal to the Superior Court, and the ruling of that court stands unless suc-

cessful appeal from its decision is made to the Supreme Court of Errors, which is permitted to rule only on questions of law and not of fact. Trustees or receivers of utility corporations succeed to all the powers, duties and obligations of company officers relative to the commission except in so far as these may be inconsistent with such powers, duties and obligations as agents of the court appointing them. The bearing of this upon the status of the street railway industry in Connecticut will be touched upon later in this article.

*Accounting Department.*—Edward Field is statistician and auditor. He examines the financial reports made annually by the utilities, prepares the financial and statistical portions of the annual report of the commission to the Governor, makes special investigations of utility accounts and special statements of utility experience as required from time to time by the commission. The auditor has the aid of one clerk.

*Engineering and Inspection Department.*—The engineering staff consists of three engineers, E. Irvine Rudd, chief engineer; Joseph P. Wadhams, assistant engineer, and A. E. Knowlton, electrical engineer. The engineers



the conditions under which the street railways of the State are operated and to report its findings to the General Assembly at its January session, 1921, together with such recommendations and suggestions with respect to legislation as it may deem proper and advisable in order to place such street railways upon a safe and efficient operating basis." In proceeding to carry out this mandate the commission decided to have made an approximate valuation of the physical properties of each of the systems and also a thorough study of the financial and corporate history of each. Unfortunately the Legislature did not appropriate any special fund for this purpose and it was therefore necessary for the three engineers and the auditor to perform the work themselves, with only occasional technical and clerical assistance. A somewhat novel method of arriving at sufficiently accurate estimates of the various pieces of physical plant was developed and as a result some \$50,000,000 of property was evaluated at a cost to the commission of less than \$10,000, proportions in contrast with the usual cost of such undertakings. The costs to the companies in supplying information and assistance was of the same order of magnitude.

With 80 per cent of the mileage the Connecticut Company attracts the most attention both in Connecticut and outside. This company was formed by the New York, New Haven & Hartford Railroad from many local companies in furtherance of President Charles S. Mellen's scheme to have under one control all the rail and water transportation agencies of New England. Suit brought by the federal government to dissolve this combination as one in restraint of trade led to the court's appointing in 1914 five federal trustees, acting as a board of directors, with a total salary list of \$31,500 annually, of which amount the Connecticut Company pays \$16,500 and the New York, New Haven & Hartford Railroad the balance of \$15,000. There was thus created an annual expense of \$31,500 for such supervision as is usually performed by a board of directors without pay. The trustees were authorized and directed to sell and dispose of the stock of the Connecticut Company, but although nearly seven years have elapsed, no part of the stock has yet been sold and the company and its managerial policies are under the direction of these trustees. Of course, the trustees are not authorized to sell the physical property or any part of it.

STATISTICS OF CONNECTICUT ELECTRIC RAILWAYS

Total revenue .....	\$13,309,736.67
Total operating expenses, including taxes..	12,297,698.56
Net operating revenue .....	1,012,038.11
Income from auxiliary operations.....	357,215.33
	1,369,253.44
Rentals, interest on funded and unfunded debts, etc. ....	1,899,852.07
Total deficit .....	\$530,598.63

This limitation, this provision by the court that only the stock and that none of the physical property of the company may be sold, has made it difficult, in the eyes of the commission, to work out the best policy for the Connecticut Company and the public to pursue in their mutual relations. As noted previously, the trustees are not subject to the commission on matters falling within the duties and obligations imposed by the court appointing them. The commission has felt this to be so great a limitation that it has recommended to the Legislature that the Attorney-General be empowered to request the court to discharge the receivers and return the stock

and management of the company to the New York, New Haven & Hartford Railroad.\*

Until the work of appraising the street railway properties was undertaken the commission had done little more in the line of valuation than was demanded by cases that arose. In general the practice of the commission in these few cases has been to secure a reproduction new figure for so much of the property as is used and useful in serving the public and then consider depreciation deduction along with the so-called intangibles in the light of the company's origin, history, experience and immediate and future needs. The commission, in estimating future operating expenses and revenues, has never imposed specifically either the straight-line or sinking-fund method of depreciation accounting, rather treating each case by itself and generally leaving the details to the corporate management.

Industrial Socialization in Germany

IN A RECENT communication from the Berlin correspondent of this publication there is extended analysis of the present move toward socialization of the industries, particularly the coal mines. The correspondent says in part:

The import of the socialization of the coal mines goes far beyond the immediate result it might have. The present strike will decide which course the country will take with regard to socialist doctrines and the working classes in general. If defeated in this, socialization will be, if not a thing of the past, a matter of a rather remote future. Conditions for radical measures against the coal owners are exceptionally favorable. The control of the mines has passed into the hands of a comparatively few men who have accumulated enormous wealth and influence, of which not always wise use is made. While the impoverished population is made to suffer under the increased cost of fuel, the annual report of the mines openly shows gains of a magnitude before unheard of, with still larger profits hidden behind the screen of intricate accounting. Even the bourgeois class supports the demands of the workers to convey the properties into commonwealth possession.

The position of the mine owners, on the other hand, is shown to be against socialization and they present strong arguments, which go to prove chiefly that private enterprise is indispensable to the present task in Germany. There are several proposals from economists, labor elements and groups of private owners, but the outstanding one is that of Stinnes, an industrial leader of great wealth, power and astuteness.

The process of amalgamation proposed by Stinnes has progressed with surprising speed during the past few months. On this the correspondent says:

Its trend is to link together producers and manufacturers of all lines of goods, from the coal mine up to the finished product. The expression "vertical trust" has been coined here for such combines, intended to indicate that the combine followed the manufacturing process from the lowest stage to the highest, in contradistinction to existing trusts, which combine manufacturers of the same state. Vertical trusts not containing business rivals will not concern themselves with the control of prices. Their chief interest will be economic production whereby the various members will stimulate one another, and each member will be in a position to profit by the experiences of the others. A number of such trusts have lately been formed among the very large works. Noteworthy is the huge combine entered into between the work under Stinnes' control and the Siemens group, in itself a combine of large dimensions.

Trusts of this kind are an entirely new departure and indicate that the trusts and syndicates of former times formed to control prices and to distribute production have been abandoned. This will ultimately end in the fusing together of German manufacturers into groups and in the disappearance of the individual manufacturers.

\*See special report of the Connecticut Public Utilities Commission to the Legislature, ELECTRIC RAILWAY JOURNAL, Jan. 8, 1921, page 95.

## Chamber of Commerce Vote

In Answer to Referendum Sent Out by National Chamber Business Men of the Nation Declare by Practically a Unanimous Voice that the Electric Railway Ought to Be Preserved and Encouraged

THE long-looked-for announcement by the United States Chamber of Commerce in regard to the vote on Referendum No. 33 was made from Washington on Jan. 22. It will be remembered that Referendum No. 33 was sent out by the national chamber to its members on Nov. 29 and it called for a vote on eight points relating to electric railways. The voting closed on Jan. 3, when all ballots were due. The propositions submitted and the vote recorded on them follow:

1. Existing traction facilities should be conserved—for, 1,689; against, none.
2. The attitude now taken toward street railway problems should be based on the present and future needs of the community—for, 1,677; against, none.
3. The attitude which is taken toward street railway problems should contemplate private ownership and operation—for, 1,657; against, 24.
4. Regulation should everywhere be instituted that will follow promptly changes in the situation of the companies rendering services of local transportation—for, 1,666; against, 4.
5. Provision should be made against the consequences of unfair competition—for, 1,653; against, 16.
6. All burdens unrelated to the service performed should be removed from street railways—for, 1,460; against, 167.
7. Official responsibility should be definitely fixed for the application of regulation—for, 1,682; against, 3.
8. Each company should seek to have available for the public at all times the facts as to the results of operation and should have resident responsible executives wholly conversant with local requirements—for, 1,683; against, 1.

The referendum on public utilities is only one of thirty-three which have been taken by the chamber on different public topics. The questions submitted were accompanied by a report of the committee on public utilities which set forth considerations leading up to the recommendations made. There also went out references to arguments in the negative so that members might have the opportunity of obtaining the fullest information with regard to the proposals on which a vote was asked.

### RECOMMENDATIONS BY COMMITTEE

With reference to the first proposition that traction facilities should be conserved the committee declared that the attitude taken by the public should be constructive and not destructive, adding that, "the point of view must be that local transportation is an industry to be fostered and developed, with ample provision for correcting abuses and for preventing any one from taking unfair advantage of the public attitude."

In support of the recommendation that the present attitude should be based on present and future needs of the community, the committee called attention to the widespread belief that in the earlier history of many traction companies there had been financial mismanagement, but pointed out that, "if it be conceded that the public interest is to obtain good service at lowest cost and that street railways are essential and necessary,

then the sensible way to deal with the problem is to permit existing organizations to earn a sufficient sum over their operating expenses to induce investment of capital for extensions and improvements."

Private ownership and operation were recommended by the committee with the declaration that, "a canvass of every consideration that has been brought forward in support of public ownership and operation has resulted in the committee's finding in it no solution for present problems or means of meeting future requirements."

Advocating regulation that will follow promptly changes in the situation of transportation companies, the committee asserted that elasticity was necessary because delays in the application of remedies that bear on a matter of public interest are detrimental to the public itself.

Of unfair competition the committee declared that while local transportation, as it now exists, should not be perpetuated, regardless of advances that may be achieved, a traction company should not be subjected to competition from any other source which is not under corresponding regulation and obligations.

In connection with the proposal that traction companies should be relieved of burdens unrelated to the service performed, the committee said that rates charged for street railway transportation should not be made an indirect method of taxation and that a street railway company should be taxed only on the basis of other comparable taxpayers.

Recommending that official responsibility for the application of regulation should be definitely fixed, the committee expressed the belief that a street railway company should be able to look to a single agency of the public as directly responsible for the application of regulation and that there should be no division of authority that might permit escape from responsibility.

With regard to its recommendation that companies should have available to the public facts as to the results of operation and that they should have resident responsible executives conversant with local requirements, the committee said: "Adequate provision for having the public informed regarding the company and its operations and for having the company acquainted with the needs of the community will serve to prevent controversies that may have little relation to facts and to concentrate attention on the one question which is of paramount importance to the company and to the public—adequate and efficient service at the lowest rates consistent with the maintenance of such service."

These members of the Public Utilities Committee signed the report: Lewis E. Pierson, chairman board of directors Irving National Bank, New York; Henry G. Bradlee, president Stone & Webster, Boston; Arthur W. Brady, president Union Traction Company, Anderson, Ind.; F. B. De Berard, director of research, Merchants' Association, New York; E. K. Hall, vice-president American Telephone & Telegraph Company, New York; Albert W. Harris, president Harris Trust & Savings Bank, Chicago; Charles L. Harrison, president Sinking Fund Trustees, City of Cincinnati; J. W. Lieb, vice-president New York Edison Company, New York; H. L. McCune, of the firm of McCune, Caldwell & Downing, Kansas City; P. N. Myers, president St. Paul Association of Public and Business Affairs, St. Paul, Minn.; John W. Van Allen, of the firm of Wilcox & Van Allen, Buffalo, N. Y.



# Positive Interurban Fare Collection

Northern Ohio Traction & Light Company Adopts Zone Check System for Showing Each Passenger's Destination and Employs Fare Boxes and Zone Check Boxes in Combination Pay-Enter, Pay-Leave Fare-Collection Plan

**D**ISPENSING with the common hat-check system of identifying passengers, the Northern Ohio Traction & Light Company, Akron, Ohio, has substituted a passenger pass-out check or zone check for identifying passengers. This plan has been placed in operation in conjunction with locked fare boxes and a combination pay-enter, pay-leave fare collection system on the Akron-Ravenna and Canton-Massillon divisions. The new plan appears to be very successful in overcoming loss of revenue from over-riding and in bringing all revenue collected into the treasury of the company. The first full month's operation under the new system produced an increase in revenue attributable to the method of collection of at least 14 per cent. The plan was installed on the two divisions

interurban character with a heavy on-and-off movement of passengers all along the route, as well as much through riding, making it difficult for conductors to keep an adequate check on the passengers. The details of the fare collection scheme follow:

The Akron-Kent-Ravenna division is divided into six zones, the fare limits of which are the same as existed prior to the installation of the zone-check system, and the rate of fare is 5 cents for each zone as before. These zones are numbered from 1 to 6 from Akron to Ravenna and the numbers remain the same for both directions of travel. There is also an additional zone numbered 3½, intended to take care of a special condition imposed by a local franchise agreement. Zone checks, 1 in. x 2 in., of different

## New Cars--ZONE FARE COLLECTION

Monday, November First, New Cars will replace those now in service on the Akron-Kent-Ravenna Line.

*ZONE COLLECTION will be inaugurated as follows:*

### Akron to Ravenna and Intermediate Points

**ZONE 1--AKRON TERMINAL TO GORGE.** Passengers boarding cars in Terminal deposit tickets or cash in fare box when leaving car.

**ZONE 2--GORGE TO CUYAHOGA FALLS.** Passengers boarding cars in this zone pay to destination and receive check showing point of destination. This check is deposited in fare box upon leaving car.

**ZONE 3--CUYAHOGA FALLS TO STOWE.** Passengers pay under same plan as in Zone 2.

**ZONE 3½--STOWE TO FISH CREEK.** Passengers pay on boarding as in Zones 2 and 3.

**ZONE 4--FISH CREEK TO KENT.** Pay on boarding

**ZONE 5--KENT TO BRADY LAKE.** Pay on boarding car

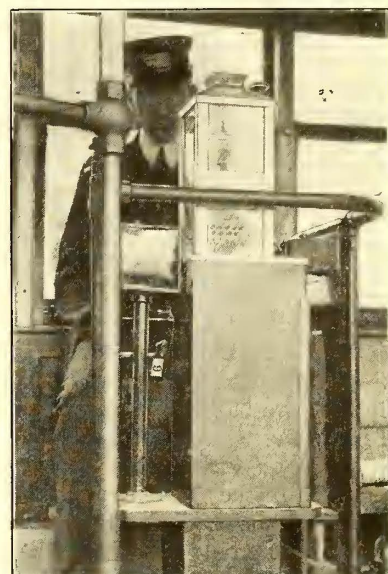
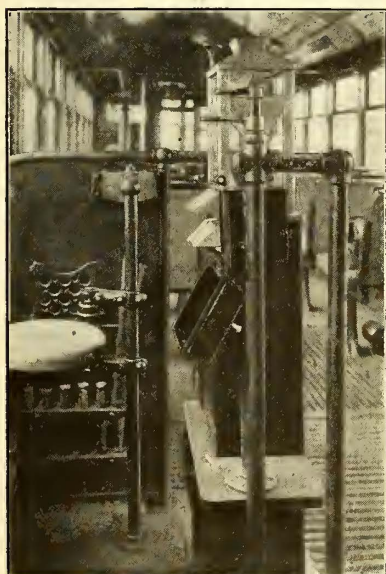
**ZONE 6--BRADY LAKE TO RAVENNA.** Pay on boarding car.

On the westbound trip--Ravenna to Akron and intermediate points--the method of fare collection remains the same except that at **Brady Lake passengers do not pay on boarding cars.**

When paying fare see that your check reads to point of destination. No change in fare. Fares inside all zones--five cents.

**Please drop all fare and zone checks into fare box**

**The Northern Ohio Traction & Light Co.**



LOCATION AND MOUNTING OF FARE BOX AND ZONE-CHECK ISSUING BOX—INCIDENTALLY, NOTE NEAT METHOD OF CARRYING SIGNAL FLAGS AND FUSES. IN CENTER, SAMPLE OF STATION POSTER USED TO INFORM THE PUBLIC OF THE NEW FARE COLLECTION SYSTEM

named simultaneously with the installation of new Peter Witt type cars, equipped with multiple-unit control. Except at the free entrance loading points, later defined, only the center doors of these cars are used for entrance and exit of passengers. The reason for the employment of this type of car on these lines was primarily to keep as far as possible to a standard car, as this simplifies the equipment problem over the system. The multiple-unit equipment of these cars, however, has made it possible for the company to operate the service on the Akron-Kent-Ravenna division with four less men than were formerly required with the older type cars not having multiple-unit control.

The two lines on which the positive system of collection, using zone checks, has been installed are of an

colors for each of the seven zones are supplied to the conductor. On both sides of these checks the zone number is printed in conspicuous figures, together with the zone limits and a serial number. The checks thus have both a color and number identification to aid the conductor.

Passengers enter cars within the city limits of Akron (Zone 1) eastbound, or Brady Lake (Zone 5) westbound, without paying fares or showing tickets, and then pay upon leaving the car. These two zones are called free-entrance zones and entrance is free in them so as to facilitate the very heavy terminal loading which occurs in them. In all other zones passengers pay upon boarding the cars and receive a pass-out check which shows the zone to which they have paid and is deposited in the fare box when they leave the car.

These free-entrance zones need not be at the end of the line, but can be placed anywhere that loading conditions may dictate. For example, in summer there is very heavy travel between Akron and Brady Lake, a popular summer resort for Akron people. These two points are therefore made the eastbound and westbound free-entrance loading points, respectively. But in winter this resort business falls off. So the free-entrance zone both ways has been transferred for the winter months to Kent to favor the factory workers there. No confusion seems to have resulted from the use of the pay-leave system in these free-entrance zones with pay-enter system at all other zones.

For a passenger who boards the car in a free-entrance zone and leaves the car within the same zone the conductor deposits a zone check for that zone in the fare box when the passenger, upon alighting, deposits his nickel fare. A passenger boarding a car in Zone 2, for example, and desiring to ride to a point, say, in Zone 5, drops 20 cents in the fare box and receives a Zone 5 check from the conductor, which is dropped in the fare

B and M, to avoid confusion with the zone checks of the other line. These letters were selected, C for Canton and M for Massillon, and the others to avoid letters that looked alike or might be mistaken by the conductor in a hurried inspection. The zone limits on this division are also the same as the fare limits enforced before the installation of the zone system. Different colored zone checks are used for each zone. The free-entrance zones are in Massillon eastbound and at Canton Square westbound. In all other respects the same procedure is followed on the Canton-Massillon Division that has been described for the Akron-Ravenna Division.

Conductors are instructed to permit the fares deposited in the fare box to lie on the inspection plate long enough for proper inspection and to determine that the correct amount has been inserted for the distance which the passenger states he wishes to travel. When making change for passengers, the conductor returns the full amount to the passenger, who deposits the exact fare in the box. Passes, tickets, zone checks and cash are all deposited in the locked fare box.



FULL-SIZE REPRODUCTION OF ZONE CHECKS USED ON TWO DIVISIONS OF N. O. T. & L. CO.

box as the passenger leaves the car. Likewise, when a car is operating in the other direction, a passenger boarding at Zone 5 and desiring to ride to a point in Zone 2 or 1 will drop his fare of 20 cents or 25 cents in the fare box and receive a zone check for Zone 2 or 1, respectively. Any passenger who is without a zone check upon leaving the car must be one of those who boarded in the free-entrance zone, and the fare collected from him is that covering the number of zones passed, the conductor depositing in the fare box, after the passenger has inserted his fare, the zone check for the zone in which the passenger alights. Notices are posted in the cars to the effect that any passenger not having a pass-out check will be required to pay full fare from the free-entrance zone. Passengers boarding in other zones are therefore more careful to get a check upon paying their fare and not to lose it.

Any passenger boarding a car at any point and depositing 5 cents for a ride entirely within that zone receives a zone check corresponding to the zone in which he boards the car. Should a passenger attempt to override, this fact would be easily shown by the zone check deposited in the fare box as he is about to leave the car. Thus a passenger leaving in Zone 5 and depositing a Zone 4 check (or a Zone 6 check, if the car is running in the other direction) will be required to deposit an additional 5 cents and the conductor will issue a zone check for this one zone and deposit it in the fare box.

The Massillon-Canton-North Canton Division is divided into six zones, which are numbered X, T, O, C,

The issuing of zone checks is greatly facilitated by a new zone-check box equipped with eight ticket slips and installed adjacent to the fare box. These zone boxes are a recent addition to the scheme. They were made by the Cleveland Fare Box Company, which also supplied the fare boxes. The zone ticket boxes are constructed of steel and fitted with a lock. A casting is fastened to the bottom for ready mounting on a pedestal beside the fare box in a convenient position for the conductor. Each conductor turns in on his report sheet the starting and ending serial numbers of each of the zone check stacks, as he

is required to account for all zone checks issued each day. If a car is disabled and taken off a run the zone checks are collected and put in the fare box and hat checks issued to transfer passengers to another car.

If a passenger presents a ticket to any station on another division the conductor drops an "honored but not lifted" coupon into the fare box, pastes the stub on the back of the ticket and punches the ticket, and then when the passenger leaves the car he must show this ticket to the conductor for identification.

The zone checks are used only once, though they are turned back to the office. The additional cost of these checks over that of hat checks is very little and the total cost is not sufficient to warrant the expense of sorting for reuse.

An interesting by-product of the zone-check system is the opportunity afforded for a traffic check. Under the present system the company knows only the destination of passengers and for ordinary purposes it may be assumed that the number of passengers originating at any point is approximately equal to the number leaving the car in that zone. However, an accurate check could very readily be obtained if the zone numbers from 1 to 6 were printed on the side of the checks and then the conductor punched the zone number at which a passenger boards the car. The check issued to a passenger would then show both his destination and boarding point. This scheme could be employed constantly if it were desired to keep a continuous check on traffic, or it could be employed for a periodic check.

# Maintenance on the B., A. & P.

Seven Years of Operation Under Strenuous Conditions Have Demonstrated the Staying Qualities of the Electric Locomotive—Maintenance Costs with This Type of Motive Power Have Been Substantially Less Than with the Steam Engine—A Shop Force of About Thirty Men Suffices for Inspection and Repair Work

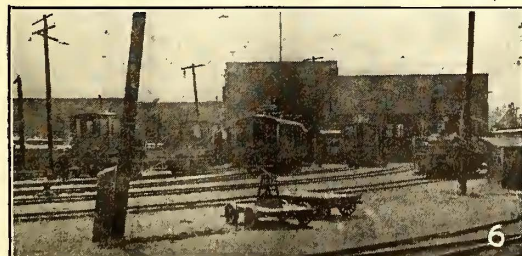
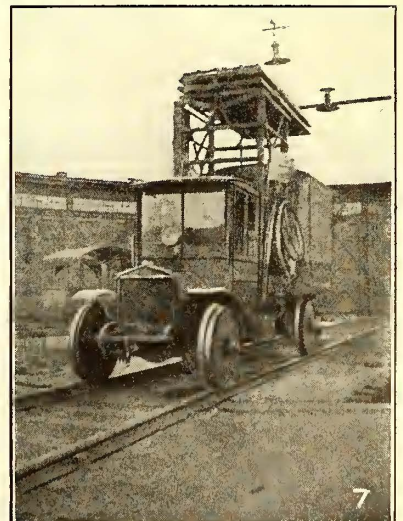
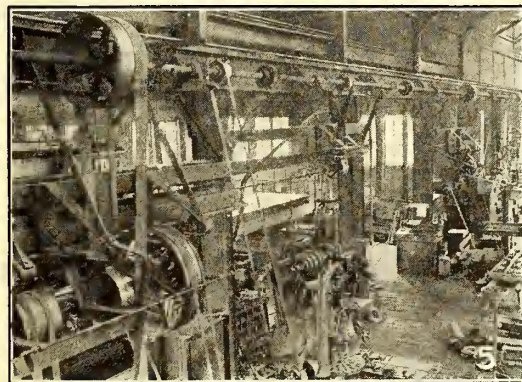
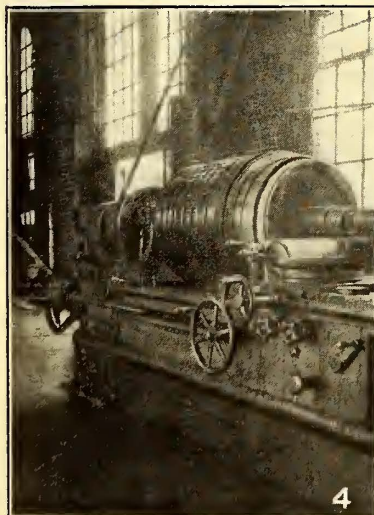
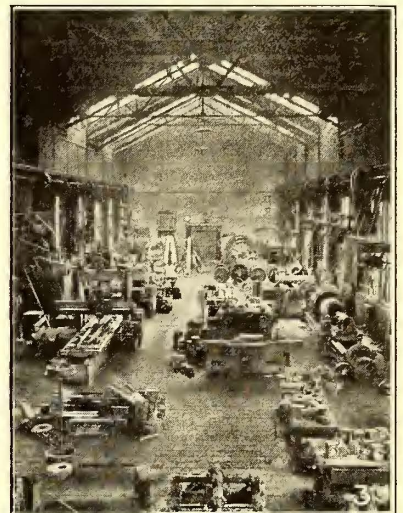
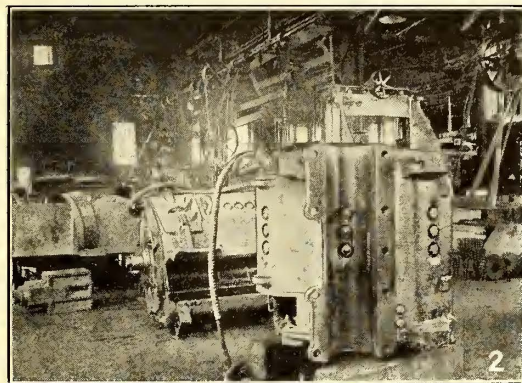
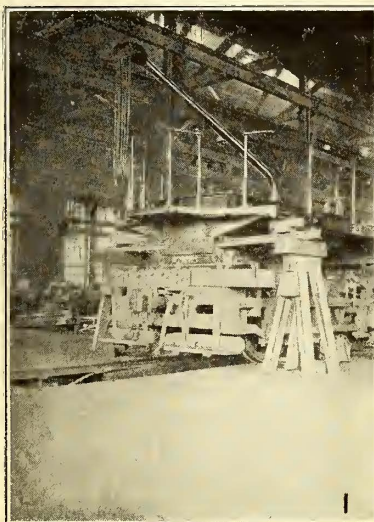
BY F. W. BELLINGER

Electrical Superintendent Butte, Anaconda & Pacific Railway, Anaconda, Mont.

ONE of the steady-going electrically operated railroads, which now attracts little attention because outshaded by the more extensive electrification of the Milwaukee Railway, is the Butte, Anaconda & Pacific, operated mainly between Butte and Anaconda, Mont. One of the editors of the ELECTRIC RAILWAY JOURNAL recently inspected this property and expressed his pleasure at the excellent record it was making as to reasonable expense for maintenance and in furnishing excellent passenger and freight service. He requested the writer to set down the following notes for publication in the paper. The accompanying pictures were taken to show the general layout of the shops in

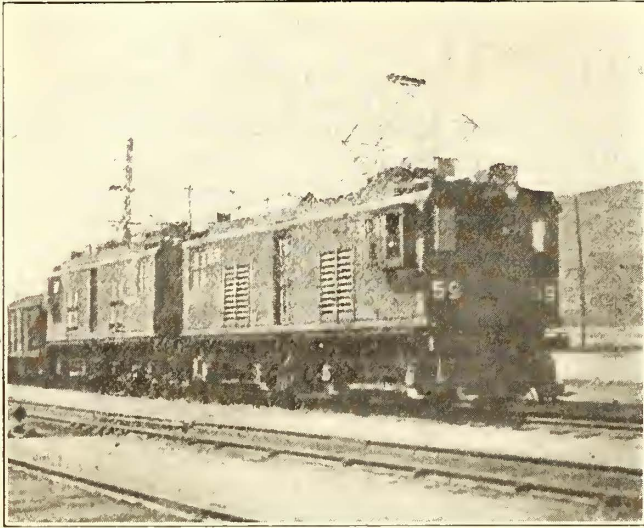
Anaconda, the operating headquarters, and also to give a certain "atmosphere" to this brief account of what is being done here from day to day.

At the Pasadena meeting of the National Electric Light Association, held in May, 1920, the writer furnished a paper, giving the results of experience on the B., A. & P. since its electrification in 1912 and 1913. This paper was abstracted in the issue of the ELECTRIC RAILWAY JOURNAL for May 29, 1920, page 1101. It was repeated at the Atlantic City convention of the American Railroad Association, mechanical section, in June. Supplementing this article it is of interest to note that the railway operates a total of twenty-eight 80-ton General

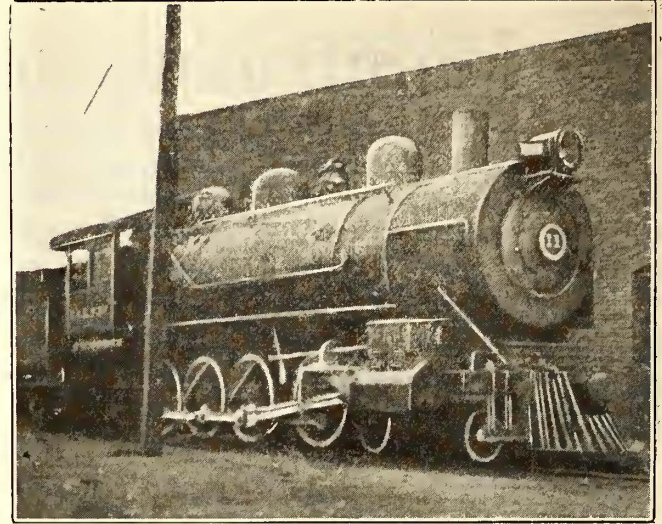


IN AND AROUND THE B., A. & P. SHOPS AT ANACONDA, MONT.

- 1. Tractor used to reinforce the electric locomotive.
- 2. Motor field frame in process of overhaul, axle bearings in foreground.
- 3. This partial view down the shop shows the excellent lighting, conducting to efficient maintenance.
- 4. Armature in the lathe, showing condition after many years of wear.
- 5. A glance across the shop from the crane.
- 6. Group of locomotives in front of the shop.
- 7. The "jitney bus," or line car, ready for business.



TYPE OF ELECTRIC LOCOMOTIVE WHICH IS "GOING STRONG" ON THE B., A. & P.



THE STEAM ENGINE IS OUTNUMBERED AT ANACONDA— ONLY FOUR LEFT

Electric locomotives and three 40-ton tractive trucks, which are used in switching service to give the equivalent of a 120-ton locomotive operating at a speed lower than that of the 80-ton units. A view of one of these tractors in the shops for overhaul is reproduced herewith. The railway also operates four steam locomotives, which are used on a division west of Anaconda and in a sandpit. The company also owns 1,176 steel hopper cars and 295 other freight and passenger cars, all of which, together with the electric and steam locomotives, are maintained in the shops at Anaconda. The change from steam to electric power occasioned no additional shop equipment, with the exception of a tension device which was purchased recently.

#### MAINTENANCE FORCE IS NOT LARGE

In the shops the electrical maintenance force comprises two electricians and the mechanical force includes five machinists, two machinist's apprentices, four helpers, two drillpress men, one wiper, one oiler, one boilermaker and his helper, three blacksmiths and three helpers (working principally upon steel cars), a pipe-fitter and helper, a carpenter and two painters. The electrical men are employed for other work in addition to maintaining the electrical equipment of the locomotives. These additional duties consist of caring for the

car-heating and lighting equipment, the power, heating and lighting of the locomotive and car shops and similar work.

During the seven years which these electric locomotives have been in operation the average cost of repairs as compiled for the Interstate Commerce Commission's records averages approximately 6 cents per locomotive-mile. This compares with 16 cents per locomotive-mile for steam locomotives in the same service during the year 1909. The cost of labor and materials is considerably greater at present than in 1909, so that the ratio of 6 to 16 cents is ultra-conservative.

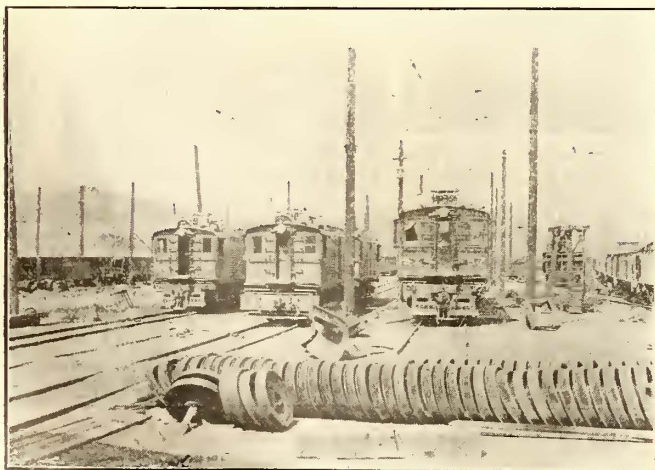
Passenger locomotives are inspected electrically and mechanically every thirty days and freight locomotives every forty days. The maximum time between inspections was seventy-five days in one instance and frequently the periods mentioned above are exceeded by a week or ten days. Locomotives operating at Rocker, twenty-two miles from Anaconda, receive no attention other than oiling and brakeshoe adjustment.

Inspections are made out of doors, over a cinder pit, summer and winter. This out-of-door inspection, especially during winter months, has been found necessary due to sweating which follows the placing of locomotives in and out of heated shops. It has been proved that this procedure has eliminated no small number of armature failures.

A light overhauling of trucks is given when tire wear makes turning or renewal necessary, or after about 25,000 miles running. Flange wear is very heavy due to the curvature of tracks at the mines in Butte and at the smelter at Anaconda. A total of 3,267 deg. of curvature exists between these points, which is equivalent to turning a train approximately nine times.

Overhauling comprises the following: Turning tires, babbitting bearings, when necessary, lining shoes and removing lateral.

The B., A. & P. has had a number of notable life records of parts of its equipment. For example, take the contactor tips. Of these but 21 per cent have had to be renewed after seven years of service. Again, the Grade F pinions have averaged a life of 100,000 miles, while motor brushes have averaged 12,000 miles. So far it has not been necessary to turn any of the main-motor commutators, the wear being only appreciable. The average life of pantograph rollers has been one year.



HERE THE CAMERA CAUGHT A BUNCH OF LOCOMOTIVES IN THE YARD

The rollers are made from Shelby steel tubing 5 in. in diameter and 24 in. long. These are mounted on Hyatt roller bearings, No. 16,410, which in turn are housed in aluminum castings secured in either end of the tubing.

Table I shows the over-all operating and maintenance costs of these electric locomotives during 1919. Recently they operated for twenty-three months without an armature failure of any kind.

TABLE I—OPERATING COST DATA FOR B. A. & P.  
ELECTRIC LOCOMOTIVES

	Cents per Mile
Maintenance of equipment expense, including repairs, supervision, shop machinery tools.....	14.15
Locomotive engineers and firemen.....	11.55
Engine house service.....	2.60
Cost of electric power.....	15.26
Lubrication.....	0.81
Other supplies.....	0.58
<b>Total.....</b>	<b>44.95</b>
Maintenance of equipment expenses (repairs) less supervision, shop machinery tools.....	6.48

Another item of interest is that the air-compressor motors have operated continuously since 1913 without an armature failure. In fact there was but one failure of any kind, and this was due to the breaking of a wire between field coils.

Some idea of the work done by these locomotives can be obtained from the fact that two of them haul sixty-five loaded ore cars, averaging 71 tons per car, up a ruling grade of 0.3 per cent at an average speed of 15 m.p.h.

## Containers the Ultimate Answer

By Their Use in Freight Transportation the Use-Efficiency of the Freight Car and the Motor Truck Will Be Multiplied and Each Will Do the Work for Which It Is Best Adapted

ON JAN. 25 Col. J. C. Bonner presented an address before the Traffic Club, New York, on his "container" system for freight transportation. An abstract follows:

To be universally serviceable and practical containers must have these prerequisites: They must be commodious and mounted fixedly on four wheels, wagon type, for purpose of independent movability in any situation. To be conveniently available as well as sufficiently serviceable, they should be as numerous as flivvers and so alike in appearance and dimension standards as to require reference to numeral insignias for identification, hence from exteriors the sealed contents would be unknown. They should house sufficient light bulk freight to qualify a revenue tonnage load and need, therefore, be graduated to carry either 5 or 8 tons. They should be as light as possible consistent with strength.

In operation they should be loaded and sealed at the warehouse by the shipper's clerks and in due course be delivered directly to the consignee's warehouse whether the route covered is over streets, on water or over rails. They should ever be in readiness to be pulled either by a team or tractor, or to trail or be carried astride auto chassis trucks, chassis steam railroad cars or trolley chassis cars; to be lifted intact to elevation walls of construction work, put in cold storage or down in a vessel hold. Figuratively, a "through container wagon" should be a sealed heavy contained luggage trunk, but a wheeled perambulator all the while.

Any vehicle exclusively patterned for the rail or for highway transportation is not fully scientific for freight

handling, since neither can travel both rail and highway as is generally needed, nor is a vehicle body alone, since it requires crane service at transfers. A "through container" wagon must qualify to undertake a 5-mile or even greater distance haul over a highway that rates but one-twenty-fifth of any comparative means of mobility and then must proceed by rail the longer distance to get such advantage.

Consider now that any number of container wagons can be moved to a position astride lengthwise of a railroad siding and be aligned by following a guide rail. Provided, now, that the wagons have no cross axles, and they are not needed, a locomotive can then back under them a sufficient number of fitting chassis freight cars, capable each of holding three wagon units. Then by the manipulation of train air control the wagons rise so that the wheels clear the rails and the loading is completed and the train ready to move. The unloading of the containers is as instantly done by simple air release of the carried wagon, so that the fixedly mounted wheels again tread the ground.

Some time since, Henry L. Doherty, who has recorded the greatest individual success as an operator, invited a number of executives of railway systems, railway equipment and automobile corporations to a conference at his office. He told them that the interests then present and others of like relation should together expend, if required, a million dollars to develop and demonstrate by operation some means to move freight without the load being rehandled during transit and to attract a greater percentage of freight to the rail, since \$40 worth of electrical energy on rails will equal the tractive work of \$240 worth of gasoline on a highway, and because a ton is moved over rails at one-twenty-fifth the tractive resistance that moves a ton over a highway. Committees of engineers and of executives studied assiduously the matter for a year. All the reports approved it and an organization is now functioning. Systems represented among the signatory member corporations of the group that is now developing the "through container" vehicle system operate upward of 4,000 miles of railways and show assets in excess of two billions of dollars. The group units of the rail wagon system\* consist of the "through container" or rail wagon, a chassis steam railway carrier car, an electric railway chassis car, an auto truck chassis, a railway alignment switch and freight movement terminal building and tracks.

Under the "through container" system, with freight cars continuously mobile, and with auto truck chassis, tractors or teams of horses ready instantly to move the rail wagons from the rail, cars and trucks will not have to wait during the rehandling process and much of the present yard space and tracks can be used otherwise than as terminals. A standard freight car, wastefully idle now twenty-two hours out of twenty-four, will be multiplied in efficiency many times. The 40,000 miles of trolley tracks and the 600-odd short line steam roads will salvage their capital accounts and serve as the very best new feeders and distributors to steam trunk lines and to electric roads as well. The truck will have a correspondingly enlarged field of usefulness and income revenue and can be in mobile action during the twenty-four hours of a day, if necessary. With the ton-mileage of the rail multiplied and the highway ton-mile lessened the life of streets and roads will be prolonged. The trouble with the railroads in the past has been that in

\*See also ELECTRIC RAILWAY JOURNAL for Oct. 12, 1918, page 658.

addition to furnishing transportation (which is their business) they have furnished warehousing (which is not their business), and such warehousing has grown so big that it chokes their terminals, ties up their cars and cripples their systems. A standard freight car is at its full value only when it is on the move. As handicapped and conditioned in the year 1919 it earned a gross average of only \$2.25 per day.

With scientific use of the new auxiliary "through container" neither the standard rail vehicles, steam or electric, or the standard highway vehicle, animal or motor, will be crowded from rightful prerogative. Each will still get all the business it goes after and can execute with profit.

Edward Hungerford, a popular writer on utility topics, also addressed the club. He stated that the salvation of the railroads is dependent on the farsightedness or vision of those now in control as to how the railroads will function in the future. He referred especially to freight terminal facilities, and to the Cincinnati plan, under which, by the use of fifteen special motor-truck chassis and 200 wooden containers, costing only \$400 each, the speed with which freight was transferred from one terminal to another was so increased that some 66,000 freight cars were returned to interline service, and in addition a further saving of from \$1,000 to \$1,500 per day was made in freight-handling costs.

Mr. Hungerford expressed the belief that the use of such containers will grow and that many shippers in the near future will be using them in handling a large part of their shipments. It is impossible for the railroads to finance this new equipment, and unbelievable to think the government will do it, but there seems to be no reason why the necessary cars and containers cannot be built under a car trust and rented, the cars and motor chassis on a mileage basis and the containers on a per diem basis.

### Advantages of Containers in Freight Traffic

AT THE New York Highway Transportation show held recently, F. W. Wenn, secretary motor truck committee of the National Automobile Chamber of Commerce, presented a paper on the use of the motor truck in relieving terminal congestion. In speaking of terminal losses due to congestion as it recently existed at the main distribution centers of the steam road terminals, he stated that if the junction and terminal delays could be eliminated the daily average freight car mileage could be brought up to 37.5 miles per car per day, equivalent to an addition of 1,200,000 cars.

The use of the motor truck with portable container bodies at these vital points—as in Cincinnati—would greatly increase the capacity of revenue produced at these terminals. In this system the freight, when unloaded from the railroad cars, is trucked to the container body, which has previously been carded for the proper distribution point. When loaded, these bodies are sealed, put under telephone order of a joint dispatcher employed by the railroads, and loaded mechanically onto trucks and then routed over the streets to destination. On arrival the container or body is mechanically unloaded and another loaded body put on the truck chassis for return delivery or to another point. This means of handling terminal freight in Cincinnati has reduced the cost of handling 35.2 cents per ton and

has eliminated 300,000 switching movements annually. It has also proved that all widely distributed station facilities can be laced up as a unit without investment cost to the railroads, thereby giving to each the benefits of a union freight station. The speaker estimated that with such a system in effect in New York City, where 50,000 tons of freight are moved daily between the various terminals, a saving of \$45,000,000 would be made annually.

### Toronto Making Huge Investigation

IT IS probable that a large number of American electric railway companies have recently received blank questionnaire forms from the Toronto Transportation Commission. It appears that this commission is making an immense investigation which will enable it to study, as it says, "the changed conditions, as regards expense, value and revenues, which have taken place within the last six years." Companies are requested to furnish complete information for the year 1914, 1916, 1918 and 1920.

The form calls for almost every item of information which any one might wish to know about a railway. The following are some of the subjects upon which information is requested: Name of city, population, population served, route-miles both inside and outside of city, total miles of main track, passenger cars with details, car-miles, power consumption per car-mile, car seat-miles, passengers carried, revenue and transfer, passenger car-hours, passenger earnings, total earnings, operating expenses divided into transportation in detail, maintenance in detail, depreciation and renewals in detail, and upon each of the latter items the total amount and condition per cent at which property is maintained and rate and life allowed are asked; other subjects upon which information is desired are taxes and the investment and present cost of new track and substructure, overhead conduits, cars, carhouses, power equipment, powerhouse buildings, miscellaneous, and estimates of present cost are asked of 1 mile of double track, paved, on heavy traffic streets, exclusive of special work, and also upon 1 mile of overhead.

If replies to this questionnaire are received in any large number, the result will constitute material upon which can be based one of the most comprehensive reports and analyses, from a statistical standpoint, to which the electric railway industry has been subjected.

### The A. S. M. E. Boiler Code

THE boiler code committee of the American Society of Mechanical Engineers and the National Board of Boiler Inspectors will meet in Detroit, Mich., Feb. 2 to 4, for the purpose of planning for a national system of boiler inspection and for an enlargement of the influences set in motion by the A. S. M. E. boiler code. The first edition of this code was printed in 1914. Four years later a revised edition was issued, incorporating interpretations of the rules formulated in response to questions asked during the interim.

As a standard for new construction, the code has been adopted with varying degrees of completeness by the boiler inspection departments of twenty-one states. The standard of Massachusetts, which has its own code, does not differ essentially from the A. S. M. E. code. The remaining states have no boiler inspection departments. Numerous cities provide by ordinance for boiler inspection and eleven cities have adopted the code.

## Selling Trainmen Their Jobs

Pennsylvania Company Conducts a Campaign Among Its Workers and Attempts to Improve Working Conditions by Publishing Stories in the Press on Accidents and Accident Prevention

THE Beaver Valley Traction Company and the Pittsburgh & Beaver Street Railway, operating through the Beaver Valley, Pennsylvania, a short time ago conducted an earnest campaign among their employees to create a better pull-together spirit in the enforcement of the service code for employees issued by W. H. Boyce, general manager of both companies. Extracts from this code were published in the *ELECTRIC RAILWAY JOURNAL*, Sept. 6, 1919, page 503.

Codes are usually dull reading. This code, however, is the exception and a few paragraphs are reprinted herewith to prove it:

The greatest *service* existing in your work is the *service* the passenger gives you. Funny, isn't it? True, though. I said he paid your wages. That's mighty important to you—mine are to me, anyway. So, every *service* you can give the passenger will not be any more than he is entitled to—remember that.

But few of the passengers consider you except in the way you serve them in their transportation needs. Do your duty by every one and when the day comes to a close you can in content spend the evening with the folks at home. Violate the rules and circulate your grouch and things won't be pleasant here nor at home.

Let me tell you that the passengers are more valuable to us than you are. We cannot get along without the passengers. So, put in the background or shelve any idea you may have or had that you are the king pin. You are not—neither am I—the passenger is the important party. Don't forget it.

You represent this company on the cars. From the stockholders down to the smallest official this company is clean, frank and has nothing to conceal. Representing the company, you will understand that cleanliness in person, appearance, language and mind is essential. While the company may be in financial straits, yet you receive your wages regularly. Nothing should prevent you from having well appearing uniforms. Pressing and cleaning will help in appearance. Soap and water is the best eliminator for dirt and germs on hands and face.

### LETTERS AND BULLETINS SENT EMPLOYEES

To keep up the interest among the employees in good service and safety methods, letters accompanied by bulletins were sent by H. O. Allison, safety engineer, to the men at their homes asking for their co-operation in safety-first work and a pull-together spirit with company officials in their daily duties. The letters were personal and to the point, nevertheless they contained cautions regarding careless car operation on slippery rails, violation of the rules as to door operation with car in motion, proper starting and stopping of cars as a means of accident prevention, etc.

Several of these letters are reproduced, as well as the accompanying bulletins, and attention is called to the letter that defines "safety first." These definitions would bear repetition by others that are conducting safety first campaigns. The bulletins issued to the employees dealt with the same topics and pointed out that the interests of the men were identical with those of the company. Co-operation, they said can and will make success for both and nothing else will.

One bulletin outlined what the company wanted to do for the welfare of its employees if only given a chance.

#### Letter Number Four

Oct. 20, 1919.

MR. J. RUPPLE,  
1015 Third Avenue,  
New Brighton, Pa.

MY DEAR RUPPLE: We have heard a great deal lately of "safety first." How many have ever stopped to inquire what it means as applied to street railway employees?

Let us consider just what "safety first" means as applied to ourselves. This is an intensely personal matter and has to do with our every act, especially while in the discharge of our duties.

It means having a clean body and clear mind. No one who has in his care the life, limb and property of others can properly perform his duty unless he is mentally and physically sound. The car man's duties require a clear head, good eye and steady hand.

It means so to perform our duties that our own conscience will acquit us of all blame, should an accident occur. That we should know in our innermost selves that nothing we could have done would possibly have prevented the injury.

It means to depend upon no one else. To do, ourselves, all that lies in human power to prevent injury to the person or property of any one, be he ever so lowly.

It means looking out for the other fellow, looking out all the time, expecting him to do some careless thing.

It means ringing the gong and slowing the car on approaching street crossings and intersections.

It means looking out for children playing in the street; for feeble persons boarding your car; let them get seated before car is started.

It means starting your car carefully and feeding current correctly.

It means knowing that your passengers are safely on or off your car before "go-ahead" signal is given.

It means that the rules should be closely studied and carefully observed.

It means, last, that "safety first" must be first in your mind. That it must be continually in your thoughts and govern your every action where your fellow man is concerned.

IN ALL CASES OF DOUBT TAKE THE SAFE SIDE.

IT IS BETTER TO BE SAFE THAN SORRY.

Yours very truly,

Safety Engineer.

Approved:

Superintendent.

#### Letter Number Five

Oct. 20, 1919.

MR. F. E. THOMPSON,  
R. F. D. No. 3,  
Eastvale, Pa.

MY DEAR THOMPSON: In whatever line of work a man engages he should aim to become a master; not only do his services become more desirable as his efficiency increases, but the mere striving after a high standard of attainment makes the work itself interesting and attractive.

One of the aims of the railway employee who would become a master motorman should be to operate his car smoothly, carefully and safely at all times.

The motorman who runs his car smoothly does more than make travel pleasant as such operation represents safety.

To start a car by feeding current point by point, to bring it to a stop smoothly, mean not only smooth but safe running. On the other hand to attempt to give the car excessive speed at the start by feeding current three or four points at once, to bring it to a sudden stop by jamming brakes mean in many cases not only uncomfortable but unsafe travel.

When a car is started suddenly there is a probability of passengers being thrown to the floor of the car before reaching a seat or even after they are seated. Also by making the stop suddenly passengers on their way to the platform to alight are apt to be thrown.

Whenever a motorman runs on the principle that he will make his stop short not only is there danger of throwing passengers to the floor, but there is added risk that the motorman may miscalculate the distance in which he can bring his car to a stop and a collision with a vehicle or pedestrian is liable to occur.

Whenever a car is started or stopped with a jerk discomfort of passengers always and frequently accidents result. Do not then attempt to start your car at too high a speed, or endeavor to stop suddenly, except, of course, in case of emergency.

When following a vehicle do not crowd it too closely, but sound gong and keep car under control until you know you have attracted the driver's or chauffeur's attention. He may not know that you are behind him and stop quickly or turn suddenly in front of you.

When following another car remember and keep 300 feet behind it as prescribed by rule. Always run your car smoothly when starting, when moving, and when coming to a stop.

If you make your aim at smooth running true enough you will also hit the target of safe running.

Yours very truly,

Safety Engineer.

Approved:

Superintendent.

BULLETIN NUMBER SEVEN  
"WE NEED YOUR HELP"

## He Knew It All He Was a Wise Guy No One Could Tell Him

No indeed! By gosh! He'd seen a controller once. Yep, he knew all about the gosh-darned thing, 'lectricity, track an' everything.

Once upon a time an experienced motorman told another motorman that the rail was greasy and bad on Beaver Hill and for him to watch out and be careful. The experienced motorman was told to run his own car and the By Gosh motorman would run his. *And*

He did. He ran it off the track at the curve--over the bank, and some passengers were sent to the hospital.

**Which One of These Motormen Had the  
PULL TOGETHER SPIRIT?**

THE BEAVER VALLEY TRACTION COMPANY,  
PENNING & HAYES STREET, BAKERSVILLE, W. H. BOYCE, General Manager,  
H. O. ALLISON, Safety Engineer.

PLEASE READ AND CONSIDER

BULLETIN NUMBER SEVEN  
"WE NEED YOUR HELP"

We have just spent \$105,000 on track and new cars to improve your working conditions.

We have offered you an insurance policy that will pay to your family a full year's wages in case of your death from any cause. This policy does not cost you anything.

We have a pension retirement provision. You can retire after a certain length of time in service, and we will pay you up to about \$1,260 a year.

No man now employed here need seek any other position. Do your duty. We'll do ours by you. That's fair, isn't it.

On vacancies that may occur we want you to give your friends a chance. Tell the employment manager about them.

## LET'S ALL PULL TOGETHER

THE BEAVER VALLEY TRACTION COMPANY,  
PENNING & HAYES STREET, BAKERSVILLE, W. H. BOYCE, General Manager,  
H. O. ALLISON, Safety Engineer.

PLEASE READ AND CONSIDER

BULLETIN NUMBER SEVEN  
"WE NEED YOUR HELP"

## How Good Are You? How Much of Your Back-bone Is Wish-bone?

If you are too weak in the back--too narrow between the eyes--if there is a vacuum upward from your mouth, and because of those things you fail to *stand up* for your rights, where is your back-bone? What do you know about your rights?

YOUR RIGHTS ARE COMPANY RIGHTS  
COMPANY RIGHTS ARE YOUR RIGHTS

and its a Pull Together Plan Boys--That's the Thing

THE BEAVER VALLEY TRACTION COMPANY,  
PENNING & HAYES STREET, BAKERSVILLE, W. H. BOYCE, General Manager,  
H. O. ALLISON, Safety Engineer.

PLEASE READ AND CONSIDER

TYPES OF BULLETINS ENCLOSED WITH PERSONAL LETTERS

The pension scheme, which allows a maximum of \$1,260 per year, was likewise given, all with the idea of pointing out that no man now employed need seek other employment. The bulletin further urged present employees to get their friends lined up with the employment manager for any vacancies that may occur in the present ranks.

The bulletins also brought out that the men on the cars represented the company in the eyes of the public and urged them to tidiness in their uniforms, saying: "It is not a slouchy company that you work for—dress right—and introduce your uniform to a flatiron once in a while." "Knockers," a bulletin says, "lose out, for they are not the kind of fellows wanted." "Satisfied workers are wanted"; those not satisfied are urged to move on unless they can go to the company officials and quietly tell the reasons. If that dissatisfaction cannot be wiped out the company is willing to advise as to the best next move.

#### NEWSPAPER CAMPAIGN ON ACCIDENT PREVENTION

As auxiliary to this campaign the company proceeded to improve the working conditions by conducting a safety campaign through the public press.

In November last Mr. Allison began a series of articles in each issue of the *Beaver Daily Times*. A story not too long to fail of being carefully read appeared daily under the caption, "Accidents and Accident Prevention." The series started out by reviewing the number of accidents fatal and otherwise in the United States and the State of Pennsylvania, then gets home to Beaver County, which had thirty-one fatalities during 1919, as well as 480 serious and 1,808 minor accidents reported to the Pennsylvania State Department. This record rates one person out of every forty-three in Beaver County as being injured during the year.

The series then takes up accident prevention, jay walking and safety work with school children and brings out that the cause of most children's accidents is carelessness and fear. Mr. Allison urges that the children be taught caution and safety—not fear—to walk rapidly, but not to run across streets, not to jay walk, but to follow the crosswalks, etc.

The series of articles also makes mention of the National Safety Council and outlines its scope and work. All forms of accidents, industrial, pedestrian,

etc., are spoken of, as well as the traffic rules recently suggested by the United States Bureau of Standards, without making it too pointed that the railway company is really urging pedestrians and auto drivers to use caution and conserve human life.

## Electrification of Staten Island Lines Proposed

Present Rapid Transit Facilities of Staten Island Analyzed and a Comprehensive Plan of Electrification Suggested—Tunnels to Brooklyn Will Soon Be Necessary, Connecting with Existing Rapid Transit Lines

AT A MEETING of the Brooklyn Engineers' Club held on Jan. 13, 1921, R. H. Mitchell read a report compiled by Randolph H. Nexsen, electrical engineer of the New York State Public Service Commission, on Staten Island transportation conditions and the proposed electrification of the rapid transit system. An abstract of this report follows:

The dual subway contracts now approaching completion provide certain rapid transit facilities for four of the five city boroughs according to the plans laid down in 1913. Until recently little or no future planning had been done, but with the development of a comprehensive rapid transit plan it is quite apparent that within a few years Richmond, the fifth borough of the city, will be provided with such facilities, probably by means of a tunnel under the Narrows connecting with the existing Fourth Avenue subway. Such a connection will bring both Brooklyn and Staten Island into closer connection with Manhattan.

Staten Island has an area of about 58 sq. miles and is third of the five city boroughs in size. Its greatest length is about 13 miles and its greatest width about 8 miles. In 1900 Staten Island had a population of 67,021; in 1910, 85,969; in 1915, 98,634, and in 1920, 116,531, or an average density of about 3.2 per acre. The average density of the city of New York is about thirty per acre. The greater part of the population lives on the north and east sections of the island. The south section is moderately settled, while the interior and west sections are sparsely populated.

Exterior means of communication consist of ferries with one exception, the Baltimore & Ohio Railroad



TABLE I—STATEN ISLAND'S FERRY FACILITIES

Line Municipal.....	Route St. George to Battery	Distance Miles	Passengers Carried		Remarks
			1918	1919	
Brooklyn.....	St. George to Sixty-ninth Street, Bay Ridge, Brooklyn	1.69	495,972*	970,384*	Rush hour service, fifteen minutes. Other periods, twenty-three minutes
Tottenville.....	Tottenville to Perth Amboy, N. J.	0.5	1,206,251	1,314,395	Not operated during winter
Linoleumville.....	Linoleumville to Cartaret, N. J.	0.19	.....	.....	Summer months only
Holland Hook.....	Holland Hook to Elizabethport, N. J.	0.16	625,554	628,898	.....
Port Richmond.....	Port Richmond to Bergen Point, N. J.	0.26	1,072,312	1,136,262	.....

\*Nine months

bridge at Perth Amboy, at present used for freight service only.

There are three electric street railway systems operated on the island: Those of the Richmond Light & Railroad Company, 17.29 route miles; the Staten Island Midland Railway, 16.18 route miles, and the Southfield Beach Railroad, 1.57 route miles. The street railways parallel the rapid transit lines for most of their length and also serve a considerable portion of the interior of the island. The rapid transit passenger service is furnished over 23.5 route miles of double-track steam railroad which is also used for freight service; the lines of the Staten Island Rapid Transit Company, 20.81 route miles, and the lines of the Staten Island Railway, 12.65 route miles.

A conservative estimate indicates that 75 per cent of the working population of Staten Island is engaged in business in Manhattan or Brooklyn, most of which is carried on the Municipal Ferry.

The Staten Island Rapid Transit lines carried 4,600,-273 passengers in 1914 and 9,269,902 in 1918, an increase of more than 100 per cent in four years. Under present conditions service seems to be adequate, but during the rush hours an increase is desirable. At present the companies have not a sufficient equipment materially to increase this service and there is also the difficulty resulting from the derangement of passenger schedule due to freight movement.

If serious consideration is to be given to a comprehensive self-contained rapid transit system for Staten Island under existing conditions, the following steps are necessary:

1. An interborough connection, by tunnel or other means, with Brooklyn or Manhattan, preferably Brooklyn, to connect with existing rapid transit city lines.
2. The electrification of the existing rapid transit lines on Staten Island.
3. Additional tracks to be provided on the North and East Shore Divisions of the existing lines.
4. The elimination of grade crossings when additional tracks are provided on the North and East Shore Divisions.
5. The construction of a new terminal at St. George.
6. The construction of a line between Tottenville and Arlington on the west shore and the development of belt-line operation.
7. The extension of trolley or bus lines into the center of the island to act as feeders to the completed belt line system.
8. The construction of a mid-island rapid transit line in a general southwesterly direction from Tompkinsville.

Assuming that the Narrows tunnel as planned and approved by the Public Service Commission in 1912 was constructed and the Staten Island rapid transit lines electrified, a connection would then be provided to Bay Ridge, Brooklyn, and the Fourth Avenue subway. Such a connection would immediately give those within reach of Staten Island lines access to the business sections of

Manhattan and Brooklyn. The express schedule from St. George would be about thirty minutes to the Municipal Building.

In making any comparison it must be kept in mind that the headway would be shorter, the fare would not be so high as the combined railroad and ferry fares, there would be no delays due to water-borne traffic such as are now encountered by the ferries, the running time would compare favorably with that for similar distances on existing rapid transit lines and there would not be the long transfer from the Staten Island rapid transit lines to the ferry. The fare from most stations on the Staten Island rapid transit lines would have to be about 10 cents.

In the construction of any tunnel to connect with the Fourth Avenue subway, the growth of Bay Ridge and other sections must be borne in mind, as this subway is fast approaching its limit of capacity. The introduction of the Staten Island traffic may overload it and postpone this connection until a new subway connecting Brooklyn and Manhattan could be built.

It has been assumed that a maximum of eighty-five or ninety cars operated in multiple-unit trains will be necessary after electrification, as there will probably be an increase in traffic. To handle this increase the car equipment proposed is similar to that of the New York Consolidated Railroad, which has a seating capacity of ninety. This type of equipment has been selected because, at some future time, a physical connection will probably be had by the New York Consolidated Railroad with the roads of Staten Island, and an operating agreement would be to the mutual benefit of both companies, as well as to the traveling public and the city of New York. In general, the physical characteristics of electrical equipment are such that joint operation and the interchange of equipment and power would be possible. Based upon the above condition, the use of 650-volt direct current has been considered. This current is to be taken from a covered third rail supplied from synchronous converter substations, which are tied in with a three-phase 11,000-volt, alternating-current transmission system.

Mr. Nexsen has prepared three estimates, one of \$13,338,662, covering the complete electrification of the existing Staten Island rapid transit lines; another, including the necessary items of electrification, except that power is purchased, of \$8,380,247, and the other, the proposed construction and electrification of the West Shore connection between Arlington and Tottenville, of \$3,947,636. It is his opinion, also, that very much improved service for the same operating expense will result from electrical rather than steam operation and such betterment of service would almost surely result in a rapid acceleration in population growth on Staten Island. This growth would, in turn, make possible increased revenue for the company and better service for the traveling public, to say nothing of the increase in property values.

## Opinions Regarding Endorsement by the Association of Reports of Federal Electric Railways Commission and of Chamber of Commerce Committee

Railway Executives and Public Service Commission Members Discuss the Pros and Cons of Action by the Association — A Practical Demonstration of Co-operation, Says One—Action Will Be Disclosure of Average Local Conditions, Says Another

THE question of endorsing, or taking some action with reference to, the reports of the Federal Electric Railways Commission and of the special committee of the Chamber of Commerce United States will be considered at the mid-year conference at Chicago, following President Gadsden's recommendation.

That this is an important move is generally admitted.

Believing that comments from several viewpoints would assist in crystallizing opinion on this subject the editors of the ELECTRIC RAILWAY JOURNAL have sought opinion from the field.

General Guy E. Tripp, chairman of the Board of Directors of the Westinghouse Electric & Manufacturing Company and chairman of the Committee of One Hundred, was asked to give his views. He said:

"The suggestion that the American Electric Railway Association should place itself on record regarding the report of the Federal Electric Railways Commission and the report of the special committee of the Chamber of Commerce of the United States makes the coming Chicago Mid-Winter Conference probably as important a meeting as the association has ever held.

"The suggestion, of course, contemplates an endorsement of the reports in question because the association would hardly go on record as condemning them. The question really is then whether it is wise for the association to approve the principles laid down in these reports in a clear-cut and complete manner.

"There is no doubt that a very interesting discussion will result.

"There are undoubtedly electric railway companies whose troubles cannot be settled upon the principles laid down in these reports without serious results to their outstanding security obligations; for example, a settlement upon these principles might result in some companies being taken over by their bondholders and the capital stock rendered worthless. In these cases the stockholders are naturally endeavoring to find a basis of settlement which shall be fair to the public and which at the same time will not entirely wipe out their stockholdings.

"Such companies may think the proposed action by the association to be harmful to their plans.

"On the other hand, there are companies whose affairs, if adjusted upon the 'cost-of-service' and 'fair-valuation' principles, will be placed upon a sound and healthy basis. Such companies will naturally see a

benefit to them in an endorsement of these principles by the association. However, even the latter may wish to have 'cost of service' more accurately defined and to bring forward some items not popularly envisaged which ought to be included in a 'fair valuation.'

"Each member of the association will doubtless feel that his own situation is controlled to a large extent by local conditions and that local conditions should have large weight in the application of general principles to the solution of his problem. Therefore, if action is taken upon these reports, it will be an illuminating disclosure of the average of local conditions in the electric railway field."



A. W. THOMPSON, president of the Philadelphia Company, owners and operators of the Pittsburgh Railways, is another whose comment on this proposed action was requested. Writing under date of Jan. 24, 1921, Mr. Thompson presents his views as follows:

"While perhaps not unreservedly in agreement with all the opinions and conclusions expressed in the Federal Electric Railways Commission report, I consider it a most important and constructive document upon which electric railway managements may base hopeful efforts to conduct their properties on a sound business foundation.

"In any such comprehensive report, however, there are of necessity some conclusions reached and some opinions expressed which will not harmonize with conditions everywhere, and consequently I doubt the wisdom of an unqualified endorsement of this report.

"The report shows the high ability and intelligence of the street railway and financial representatives on the board and the resultant recommendations more nearly meet the requirements of the situation than was hoped for. If the American Electric Railway Association endorses the report without qualification, however, it will practically become law for the industry. This would establish it in a position which it would seem it was not intended to fill.

"There are a number of principles firmly established on sound economics which are splendidly expressed and should be endorsed by all utility companies. To quote one: 'The first essential is service to the public.'

"In so far as the report follows this principle in

accordance with sound business experience it should be endorsed, but it embodies some conclusions and opinions which may complicate the solution of utility problems in certain localities, not because of fundamental error in the principles on which the report is based, but due to a belief on the part of the public that an endorsement of the principles underlying the report carries with it an endorsement of all conclusions and opinions expressed. There would be no criticism of the value of the report in suggesting that it could not safely be endorsed in its entirety by the street railway industry officially. It would be simply a recognition of the inevitable human element in the commission, the public and our companies.

"With reference to the report of the Chamber of Commerce of the United States' committee on public utilities the scope of the report and the personnel of the committee were limited to the business element and so more nearly represent the viewpoint of private capital which we represent. The endorsement of this report would seem to me to be in order.

"I believe such informal discussion of these reports as your letter should induce will prove to be informative, and as an exchange of views cannot fail to be helpful. The opportunity to participate in it is appreciated."



**R**ICHARD T. HIGGINS, *chairman of the Public Utilities Commission of Connecticut, who has been a student of electric railway problems and has appreciated the public's duty in this whole problem, as well as that of the railways, was asked for his opinion. Mr. Higgins' commission has recently made recommendations to the Legislature embodying many principles of the federal commission report. He said, with reference to action at Chicago:*

"Following important nation-wide investigations, reports, and recommendations pertaining to the street railway industry of the country, the mid-winter meeting of the American Electric Railway Association, to be held in Chicago, Feb. 10, should be one of the most important in the history of that association, and its deliberations will in a measure portend the future history of the industry.

"It is generally recognized and has been clearly demonstrated that the street railway industry as a whole has been and still is in a serious condition. It is confronted by obstacles which threaten its future continuity, efficiency and development. It is impossible to put a finger upon any one cause as the cause producing such condition, or upon any one remedy that will effect a permanent cure. We may be fairly familiar with cause and effect, but at this time we are vitally more interested in such proper remedy or remedies as will give life and vitality to this very important utility service.

"To my mind one of the most important factors in

the resuscitation is honest co-operation between the utility and the public, without which all other remedies will have but partial effect. There is no railway or combination of railways as great or powerful as the public, and if the railway companies do not obtain the sympathy, good will and co-operation of the public which they undertake to serve, no amount of legislation or temporizing concessions will make the business a real success.

"Fair and impartial tribunals, principally the Federal Electric Railways Commission and the special committee of the Chamber of Commerce of the United States, have recently made careful study and investigation of street railway conditions, and have made concrete suggestions, not the least among them being co-operation. The investigations and reports of these tribunals reveal a commendable desire on the part of the public at this time to co-operate with and assist the utility.

"The proffered assistance and co-operation on the part of the public will undoubtedly be demonstrated by the early enactment of remedial legislation, which should afford at least a measure of relief. Mutual assistance and co-operation, however, cannot from their very nature be one-sided. The utility companies themselves must join and should join whole-heartedly in the campaign.

"I believe a practical demonstration of such co-operation on the part of the utility should be developed and crystallized at the forthcoming meeting of the association.

"I do not wish to imply that co-operation is the only thing necessary, but, as stated before, I believe it to be one of the most important links in the chain of practical remedies intended for the benefit and preservation of this necessary public service."



**F**ROM *Minneapolis, Horce Lowry, president of the Twin City Rapid Transit Company, writes as follows in answer to a request for his comments on this question:*

"With reference to my own feeling in regard to the report of the Federal Electric Railways Commission, would state that I believe that this report is one of the best things that has happened in recent years for the interest of the industry.

"My particular reason for stating this is that both this report and the report of the committee on public utilities regarding local transportation of the United States Chamber of Commerce are reports written by men a majority of whom have no direct financial interest in street railway properties, and for this reason their conclusions carry weight where statements from active railway executives are generally discounted by the public."

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# ELECTRIC RAILWAY PUBLICITY

Devoted to How to Tell the Story

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## Railway Advertises City

THE Tacoma Railway & Power Company and its associated companies announced on Dec. 24 a very substantial evidence of its appreciation of the spirit of co-operation shown to it during the last year by the city of Tacoma, its officers, civic associations, business men and citizens generally. This was an arrangement by which the advantages of the city will be advertised twice a week during the coming year in one of the New York daily papers. The announcement, which was published in the Tacoma papers on the day before Christmas, read:

As an expression of our genuine appreciation of the increasing spirit of fairness and co-operation shown toward us during the last year by the city of Tacoma, its officers, civic associations, business men and citizens generally, and as evidence of our mutual interest in this community's vigor and expansion, we have arranged with one of the most widely read daily papers in the United States, the New York Times, to run a two-line advertisement on the front page twice each week for a year, calling attention to Tacoma and its many business and commercial advantages.

It is with a feeling of confidence and optimism for Tacoma's future that we are extending to one and all our best wishes for a Merry Christmas and a Happy New Year.

The idea, which is that of Richard T. Sullivan, general manager of the Tacoma Railway & Power Company, has received general commendation by the Tacoma papers. The *News-Tribune* says: "It is a new and novel conception of a public utility's duty toward the city in which it operates," and the *Ledger* says that "It is bound to be of material benefit to the progress of the community." Mr. Sullivan in a public interview said:

"The idea of the public utility concern doing some directly helpful thing for the city other than the indirect benefit of giving transportation is somewhat unusual and rather original. While there will undoubtedly be differences between the public and the street railway in future, the fact that the company has shown substantial appreciation for fair and honest co-operation in the past will in a measure warrant such treatment in the future."

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## Safety First Alphabet

**A** is for Accident,  
Which you may meet  
If you are careless  
Crossing the street.

**B** is for Best,  
And it's best to take care  
To see you are safe  
When you go anywhere

**C** is for Children,  
And wise children play  
Upon the pavement,  
Out of harm's way.

**D** is for Doubtful.  
It's doubtful if we  
Would ever get hurt  
If careful we'd be.

**E** is for Ears,  
As well as for Eyes.  
Use both for protection  
If you are wise.

**F** is for Foolish,  
And foolish is he  
Who thinks not of safety  
When safe he can be.

**G** is for Gong,  
That the motorman rings.  
"Heed me and be safe,"  
It constantly sings.

**H** is for Hurry,  
The brother of Harm.  
You'd better go slow  
Than lose leg or arm.

**I** is for Injury  
You will invite  
If you're not careful  
When you alight.

NOTE—This alphabet was originated by the United Railways & Electric Company of Baltimore and used successfully in a recent "Safety First" campaign among the public schools.—EDITORS.

**J** is for January,  
Beginning the year.  
To make it real happy  
From danger keep clear.

**K** is for Knowledge  
Or that which we know.  
We should know to be careful  
Wherever we go.

**L** is for Lookout  
To see where we are,  
And not to go running  
In front of a car.

**M** is for Mindful  
Of danger around.  
So always be careful  
Wherever you're bound.

**N** is for Neglect  
Of safety advice.  
Beware then, and let  
This warning suffice.

**O** is for Only.  
There's only one way  
To keep out of harm—  
Be alert all the day.

**P** is for Patience.  
We'd better not go  
With a rush and invite  
Suffering and woe.

**Q** is for Queer.  
It often seems queer,  
People rush into danger  
Without any fear.

**R** is for Railway,  
Doing its best  
To keep you from harm.  
Won't you do the rest?

**S** is for Safety;  
Be on the safe side.  
Let care be our motto,  
And caution our guide.

**T** is for trouble  
Carelessness brings.  
When you are careful  
Danger takes wings.

**U** is for Useful  
And useful advice.  
If you ignore it  
You must pay the price.

**V** is for Victim  
Of unseemly haste.  
Have a care; watch your step  
And no time will you waste.

**W** is for Women.  
They should alight  
Holding with left hand—  
Not with the right.

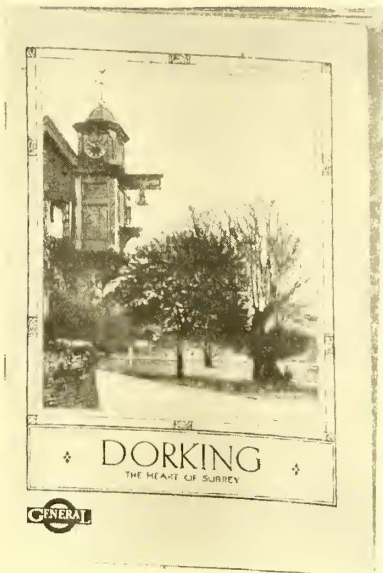
**X** is for Xtra  
(If that you'll allow),  
So be Xtra careful  
Forever—and Now.

**Y** is for Young folks,  
Who sometimes forget.  
Be careful and you will  
Have naught to regret.

**Z** is for Zealous.  
Be zealous in care  
To keep out of danger  
That lurks everywhere.

### London Illustrated Booklets

**I**N LINE with its forward-looking policy of "merchandising transportation" by informing the public and visitors about various things which may be seen on or near the lines of the London General Omnibus Company, the company has issued a series of illustrated booklets, of which those listed below are samples. These booklets show characteristic scenes or views and accompanying these are interesting descriptions of walking tours or sightseeing trips which can be taken from certain stations on the routes. The booklets are actually very instructive and illuminating to a person who has no opportunity to take the trips, but who may be interested in some of the subjects mentioned.



EXAMPLE OF BOOKLETS DISTRIBUTED BY LONDON GENERAL OMNIBUS COMPANY

The following are some of the booklets issued:

- "The Dorking Country," with twelve illustrations and descriptions of parts of the Dorking country.
- "Little Histories." Some notes on the towns and villages near London, with 144 original photographs.
- "Little Walks." Some rambles in the country around London, illustrated with 144 photographs.
- "The Pilgrim's Way in East Surrey." Illustrated with thirteen original photographs and with sketch maps.
- "Epping Forest." Illustrated with thirteen original photographs and a map.
- "The Public Gardens of London." A new account of the gardens of the metropolis illustrated with fourteen original photographs.

- "Memorials of London, No. 1—Naval and Military." Illustrated with fourteen original photographs.
- "Memorials of London, No. 2—Artists and Craftsmen." Illustrated with thirty-four original photographs.
- "Hospitals and Almshouses of London." Illustrated with fourteen original photographs.

The company evidently believes this pays, from its continued program of this sort.

### Modern Trend in Publicity

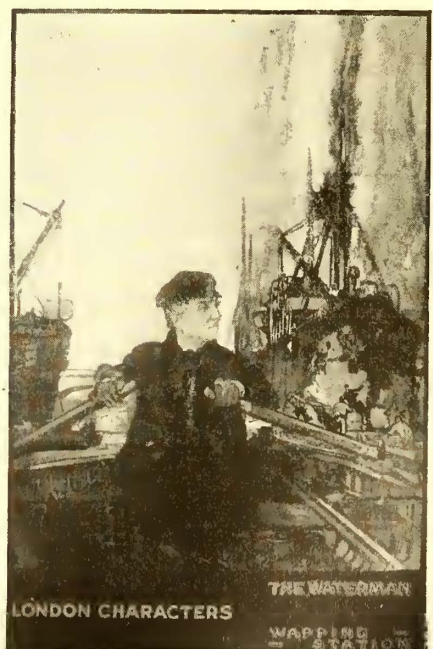
**M**YLES B. LAMBERT reviews the railway situation, particularly the publicity situation, in the January issue of the *Electric Journal* and declares the one biggest nut to crack is that of securing the good will of the public and its representatives. On the need for publicity he says:

Practically all railway executives are alive to the potent force of this abstract thing which we call "publicity." In the past many thought it consisted very largely in having one man write copy for use in the papers or in pamphlets. But they know now that it is a very much bigger thing—a sort of phantom giant force that is susceptible of direction and guidance and, when properly guided, it is capable of producing remarkable results. It becomes really active only when every executive and subordinate officer is thoroughly imbued with the spirit of the game, and then only when it is the job of some strong staff officer or headed up by a manager of public relations, with a staff of copy writers.

### If the Farmers, Why Not the Railways?

**I**T WAS recently announced in Chicago by the secretary of the National Dairy Association that there is now a plan for a nation-wide moving picture educational campaign through which it is hoped to bring the city and the farm closer together and thus solve many of the problems now confronting the farmers of the country.

For this purpose, according to the announcement, the Farmers' Film Corporation has been formed and co-operating with it in the work will be the Federal Department of Agriculture, State Departments of Agriculture and state agricultural colleges, the American Farm Bureau Association, the National Dairy Association, the American Bankers' Association, Grange movements, and co-operative buying and marketing associations throughout the country.

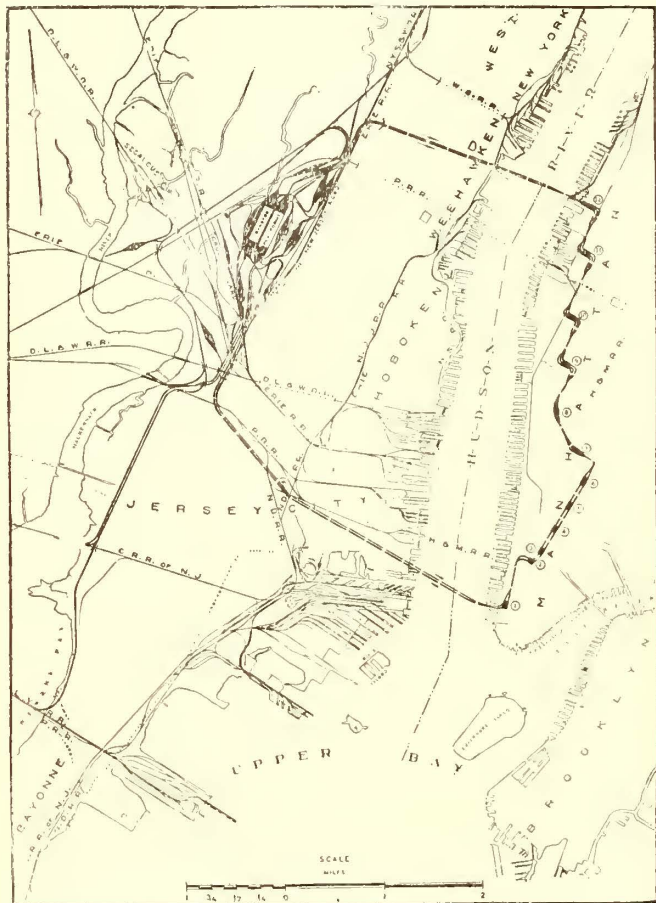


LONDON UNDERGROUND "CHARACTER" POSTERS

## Electric Trains to Cut Terminal Costs

New York-New Jersey Harbor Development Commission Proposes to Solve Port Congestion by More Extensive Use of Belt Line Railroad Facilities with Tunnels and Automatic Electric Trains

A SYSTEM of outer and inner belt lines to bring direct rail connections to the greater part of the water front of New York Harbor and a plan for building an underground "automatic-electric" freight subway loop system for distribution on Manhattan Island are the principal features of the physical plan for the so-



MAP SHOWING INITIAL DEVELOPMENT OF PROPOSED UNDERGROUND ELECTRIC FREIGHT RAILWAY

lution of the New York port problem proposed in the report of the New York-New Jersey Port and Harbor Development Commission addressed to the governors of the two states, Dec. 16, 1920, and made public Jan. 24, 1920. In addition the plan proposes belt line links in New Jersey, Brooklyn, Queens, Staten Island and the Bronx.

In Manhattan, the commission finds that neither a standard underground nor overhead railroad is feasible for distribution and therefore proposes an underground "automatic-electric" system. This is an entirely new form of conveyor railroad, built below two subway levels, which, serving the nine New Jersey trunk lines as well as the New York roads, will carry freight on short trains with special cars, moving without locomotives or train operators, and running between twelve distributing terminal points in Manhattan and the joint yards in New Jersey and toward the upper end of Manhattan Island.

The first stage of the "automatic-electric" development in Manhattan is indicated in the accompanying map. It provides for linking the New York Central Railroad with the New Jersey railroads through a loop from a joint yard in New Jersey and a spur to the New York Central's Sixth Street yard, to "do away with the surface tracks in Tenth and Eleventh Avenues" and provide equal service for each of the ten railroads at twelve union terminals in the lower section of Manhattan.

The commission describes the "automatic-electric" system as a joint railroad where incoming freight is transferred at extensive platforms to trail trucks and hauled by tractors upon special cars. The cars, operated singly in the yard, would be made up into eight-car trains, dispatched on either of two parallel tracks leading to Manhattan. Here there are twelve terminal distributing points, with manufacturing and warehouse floors above, with approach sidings underground. When a dispatcher at the joint yard throws an electric switch the eight-car train would start automatically; speed up to 14 miles per hour and run to the desired terminal, on the approach siding of which it would automatically come to rest. Return trains would start from forwarding sidings at the terminals, when a switch is thrown, and then proceed to the joint yard and come to rest.

Cars then proceed singly, manually controlled, to transfer platforms, their trucks bearing outbound freight are removed and they receive new inbound loads and continue in the cycle. Elevators handle individual cars from the "main line level" to the outbound and inbound terminal floors, where loads are discharged and new loads received.

The estimated cost of the automatic-electric railway with its tunnels, classification yards and terminals is approximately \$200,000,000, of which the cost of the necessary tunnels is \$91,000,000, rolling stock equipment \$9,452,200, electrical installation \$13,600,000, Manhattan terminals \$60,000,000 and the balance to be used for steam road classification yards and connections in New Jersey.

The cost of handling freight on a per ton basis the commission estimates is 43 cents less than with the system now in use. This saving will not only pay a return of 5 per cent on the investment but will even then be 19 per cent less than the present cost of terminal operations covered in the railroad rate.

## New International Association Formed

AT A MEETING in Nuremberg on Nov. 28 to Dec. 1 of the German Street Railway Association plans were completed for the organization of a new international association of street and interurban railways to include the companies in Central Europe, evidently in opposition to the existing international association. Representatives from Denmark, Germany, German-Bohemia, German-Austria, Finland, Holland, Norway, Sweden, Switzerland and Hungary took part in the meeting and these countries will be embraced by the newly formed association.

The president of the society is L. Spängler, director of the Municipal Railway in Vienna, and the vice-president is Dr. Wussow, general manager of the Berlin Street Car System. The board is composed of one representative from each of the countries which are concerned.

## Sample Car Tried in San Francisco

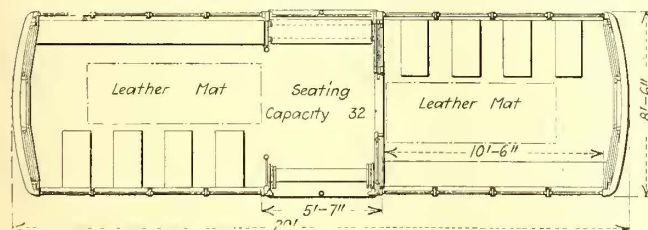
Center-Entrance, Single-Truck Experimental Car for Union Street Line of Municipal Railway in San Francisco Being Tested to Determine Its Suitability for the Severe Service Requirements

**F**OURTEEN per cent grades with sharp curves and fairly heavy traffic, all of which obtain on the Union Street line of the Municipal Railway in San Francisco, were believed to call for something far enough removed from standard practice to warrant the construction of an experimental car before the placing of an order for twenty cars which it is estimated will ultimately be needed to maintain adequate service on this line. A single car which was accordingly built to designs prepared by the city has just been delivered. It is to be put in actual service on the Union Street line and operated until city officials are satisfied that its design is correct, or until the advantage of any changes in design have been worked out and demonstrated in actual service.

The car is 29 ft. long over all and weighs, ready for service, 25,625 lb. It has a seating capacity of thirty-two and will handle from fifty-five to sixty passengers when all standing room is taken. The construction costs were high on a special order of this sort, of course. The total cost, exclusive of development charges, was about \$15,000.

It is equipped with a 12-ft. wheelbase radiax Brill truck on 26-in. wheels, and has two Westinghouse 532-A motors, rated at 50 hp., with a gear ratio of 15:57. The underframe is all steel and the body semi-steel; that is, all steel except posts, floor and roof, which are of wood.

The light cars now operating on the Union Street line are equipped with manually operated track and wheel brakes. It was the purpose, in the design of the new car, to furnish air brakes for normal service and manual track brakes for emergency use, either of which must be able to hold on the steepest grade. Although the track brakes are satisfactory on the old cars, with a 7-ft. wheelbase, the 12-ft. base of the new car was so much longer that the shoes of track brakes require more than twice as much travel in order to avoid interference at the sharp changes of grade. This necessitated a greater throw for the hand lever than it was possible to secure. The air-brake equipment on the new car is therefore being supplemented with a geared



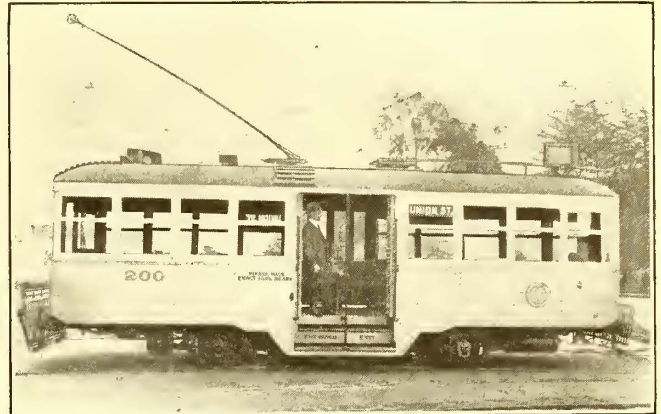
SEATING PLAN OF NEW CAR

brake of the multiplying type operated by a ratchet hand lever.

The controller is the K-36-M General Electric type, in connection with which is used a Westinghouse 264-M-15 line switch operating as a remote-controlled contactor and breaker, the 600-volt circuit being actually broken under the car and not in the motorman's controller. This plan was deemed necessary because of the relatively heavy currents employed over portions of

the route, and where a panic among the passengers on the steep hill might be very disastrous.

The roof of the car is made up of waterproofed three-ply wood, glued together like veneer, and shaped in process of manufacture to the roof curve specified. Full-width sections of the roof were made in 6-ft. lengths and were nested for shipment from the factory at Chicago to San Francisco. As there is no head-lining the underside of this composite roofing is exposed and painted to form the ceiling, while the top is given a slush coat of white lead and then covered with roof canvas according to standard practice. A feature of the car frame, which is believed materially to



NEW CAR READY FOR SERVICE

strengthen it, is the 4-in. steel I-beam which runs from end to end of the car on either side. It passes just inside the riser of the top step at the car entrance.

One end of the car is partitioned off from the conductor's vestibule and is intended for use as a smoking compartment. So far as possible it has been the purpose to keep all equipment provided with the car, such as headlights, fenders, etc., the same as the standard now in use on the larger municipal cars.

The new car was designed and constructed under the supervision of Paul J. Ost, electrical engineer, under the direction of M. M. O'Shaughnessy, city engineer. A. Meister & Sons Company of Sacramento, Cal., built the car under a contract the terms of which were actual cost plus a percentage.

## Research Graduate Assistantships Open

**T**HE Engineering Experiment Station of the University of Illinois, Urbana, Ill., directs attention to the research graduate assistantships which are maintained in the experiment station. With each of these there is an annual stipend of \$600, with freedom from all fees for instruction except matriculation and a final fee.

Two new assistantships, in addition to the previous fourteen, have been established under the patronage of the Illinois Gas Association. The assistantships are open to graduates of approved American and foreign universities and technical schools, and must be accepted for two consecutive college years. At the end of this period, if all requirements have been met, the degree of Master of Science will be conferred.

The General Electric Company is proposing to sell stock to its employees on a basis which will allow them to pay for the stock on the installment plan.

# American Association News

DETAILS OF CHICAGO CONFERENCE ARE NEARING COMPLETION—COMMITTEE WORK IS NOW IN FULL SWING—THIRTEENTH COMPANY SECTION IS ORGANIZED AT NEWARK, N. J.—ASSOCIATION'S REPRESENTATIVES ARE ACTIVE IN NATIONAL AFFAIRS

## Power Distribution Committee Blocks Out Its Work

PRACTICALLY the entire membership of the Engineering Association committee on power distribution was on hand on Jan. 21 at association headquarters for the organization meeting. The list of members was printed in the issue of this paper for Jan. 15, page 147.

The first order of business was the subdivision of the assignments made by the executive committee among a number of subcommittees, as follows: Review of the overhead crossings specification, R. W. Eaton, chairman; F. McVittie and M. B. Rosevear; outline of specifications for catenary overhead construction, C. H. Jones, chairman; C. C. Beck, C. J. Hixson and W. Schaake; continue the study of standard stranding of cables, H. H. Febrey, chairman; A. Ames, A. Schlesinger and F. J. White; continue the study of standard specifications for wires and cables, F. J. White, chairman; A. Ames, H. H. Febrey, and C. A. Harrington; study the subject of composition of trolley wire and limits of economical wear, together with causes contributing to wear, M. B. Rosevear, chairman; C. C. Beck, R. W. Eaton and W. Schaake; report on the present status of direct-current lightning arresters in collaboration with the committee on equipment, F. McVittie, chairman; J. H. Drew, C. A. Harrington and C. J. Hixson; co-operate with the committee on way matters in regard to the preparation of specifications for wood preservation of power transmission poles, A. Schlesinger, chairman; J. H. Drew and C. H. Jones; revise existing specifications (other than those specifically provided for), C. J. Hixson, chairman; C. C. Beck, H. H. Febrey, C. R. Harte, C. H. Jones and M. B. Rosevear.

Contemporaneously with the meeting there was one of the subcommittee of the way and structures committee, having to do with timber preservation. During the session the subcommittee on wood preservation of the power distribution committee conferred with the other subcommittee and before the close of the meeting reported to the power distribution committee on a questionnaire which had been drawn up to secure information regarding results of applying preservative treatment to wood poles. The way and structure committeemen in attendance were H. H. George, Public Service Railway; W. R. Dunham, Jr., the Connecticut Company, and R. C. Cram, Brooklyn Rapid Transit Company.

The program followed during the all-day meeting of the power distribution committee was as follows: Each subcommittee outlined what it proposed to do in preparation of its report and received suggestions from the full committee as to policy and details. The list of topics given above furnishes an outline of this discussion.

The announcement was made that Mr. Harte will represent the association at the meeting of the American Engineering Standards Committee on Feb. 2. The association is now a member of this committee.

A message of congratulation and best wishes was ordered sent to C. L. Cadle, formerly chairman of the committee on power distribution, who was recently appointed Director of Public Works of the State of New York.

The announcement was made by Special Engineer J. W. Welsh that the American Institute of Electrical Engineers had been appointed by the American Engineering Standards Committee as sponsor in the preparation of specifications on conductivity of aluminum conductors.

The committee adjourned without setting a date for the next meeting.

## Association Committee Appointments

The following Accountants' Association committees have been appointed:

*Committee on Standard Classification of Accounts*—H. L. Wilson, Boston (Mass.) Elevated Railway, chairman; W. H. Forse, Jr., Union Traction Company of Indiana, Anderson, Ind.; W. F. Ham, Washington Railways & Electric Company, Washington, D. C.; Robert N. Wallis, Fitchburg & Leominster Street Railway, Fitchburg, Mass.; P. S. Young, Public Service Railway, Newark, N. J.

*Committee to Represent Accountants' Association at Convention of National Association of Railway and Utilities Commissioners*—C. S. Mitchell, Pittsburgh (Pa.) Railways, chairman; B. W. Fernald, San Francisco-Oakland Terminal Railways, San Francisco, Cal.; John M. C. Horn, Illinois Traction System, Champaign, Ill.

## CLAIMS ASSOCIATION

Below are given the Claims Association committee appointments for the current year:

*Executive Committee*—Past-presidents and present officers, together with the following: H. D. Briggs, Public Service Railway, Newark, N. J.; W. G. Fitzpatrick, Detroit (Mich.) United Railway; E. L. Lindemuth, Wilkes-Barre (Pa.) Railway; C. B. Proctor, Memphis (Tenn.) Street Railway.

*Committee on Interchange of Claims Statistics*—H. D. Briggs, Public Service Railway, Newark, N. J., chairman; J. S. Kubu, New York State Railways, Utica, N. Y.; W. F. Weh, Cleveland (Ohio) Railway.

*Committee on Membership*—C. G. Rice, Pittsburgh (Pa.) Railways, chairman; Wallace Muir, Kentucky Traction & Terminal Company, Lexington, Ky.; W. A. Tichenor, Terre Haute, Indianapolis & Eastern Traction Company, Indianapolis, Ind.

*Committee on Resolutions*—A. G. Jack, Wilmington & Philadelphia Traction Company, Chester, Pa., chairman; H. O. Allison, Beaver Valley Traction Company, New Brighton, Pa.; C. A. Glawson, Macon (Ga.) Railway & Light Company.

*Committee on Safety*—R. E. McDougall, New York & Harlem Railroad, New York, N. Y., chairman; H. K. Bennett, Eastern Massachusetts Street Railway, Boston, Mass.; H. V. Drown, Public Service Railway, Newark, N. J.; C. G. Rice, Pittsburgh (Pa.) Railways; W. F. Weh, Cleveland (Ohio) Railway.

*Committee on Subjects*—W. G. Fitzpatrick, Detroit (Mich.) United Railway, chairman; R. E. McDougall, New York & Harlem Railroad, New York, N. Y.; Wm. A. Tichenor, Terre Haute, Indianapolis & Eastern Traction Company, Indianapolis, Ind.; H. G. Winsor, Puget Sound Electric Railway, Tacoma, Wash.



## Last Call for Chicago Conference

Electric Railway Finances to Be the General Subject for Discussion—Reports of the Federal Electric Railways Commission Are to Be Acted Upon—Prominent Speakers Will Address the Banquet

AT THE mid-year conference of the association, to be held at Hotel Drake, Chicago on Feb. 10, two vital subjects will be up for discussion, namely, electric railway financing and the essentiality of the electric railway. To cover the first-named topic in all its phases men who are well versed in its intricacies have been secured.

In addition to the presentation of papers on finance, definite action is to be taken on the recommendations contained in the report of the Federal Electric Railways Commission and in the report of the special committee of the United States Chamber of Commerce on the essentiality of the electric railways. No other utility has had, says President Gadsden, the advantage of two such thorough investigations by impartial bodies and the reports undoubtedly represent the opinion of the American public. Action will also be taken on an amendment to the by-laws of the association to provide for six additional members on the executive committee to be elected at large. It is proposed that these shall be elected to serve for one year and shall not be eligible for re-election for a period of one year from the end of their respective terms of office. The paper on previous methods of electric railway finance, by James F. Fogarty, secretary the North American Company, will summarize the changing methods of financing capital improvements, the influence of low rates of return on such methods, the holding company and its probable future as well as war and post-war financial methods.

Mr. Fogarty has already contributed several important papers at other meetings of the association.

The paper by F. K. Shrader, Halsey, Stuart & Company, Chicago, will cover the present requirements for mortgage securities. He will discuss the relation of cash investment to the amount of the loan, the influence of previous history on electric railway investments, the margin of earnings needed over interest charges, the flexibility of mortgage provisions, the necessity of ample staple earnings as a condition precedent to the re-establishment of credit to be derived from service-at-cost franchises and the characteristics of bonds which

the market is likely to absorb during the next year or two.

"Home-Town Financing or Partial Mutual Ownership" will be discussed by S. B. Way, vice-president and general manager Milwaukee Electric Railway & Light Company. Mr. Way, who has been with the Milwaukee company for many years, has successfully developed a plan of selling the securities of the local company at home. His paper will cover the desirability of having a large local interest held by the car riders, their influence on local regulatory ordinances, the cost of capital procurable by this means and the methods of distribution.

The necessity of financing by the sale of capital shares will be discussed by Chester Corey, vice-president Harris

Trust & Savings Bank, Chicago. Mr. Corey's paper will take up the importance of providing for a return on new capital that will invite new investments and the methods of regulation that will support such plans of financing. The subject of municipal aid in electric railway financing will be presented by Melvin H. Traylor, president First Trust & Savings Bank, Chicago. This paper will define the conditions under which municipal cooperation is required, the establishment of moral support instead of using the street railway as a political issue, the pledge of municipal credit through guarantees and municipal aid for the construction of rapid transit subway and elevated lines. The annual banquet, over which President Philip H. Gadsden will preside, will be held as usual on the evening of the conference. He will also have an important message to deliver to the industry. The principal speaker will be Hon. John W. Weeks, former United States Senator from Massachusetts, and, according

to rumor, a possibility for President-elect Harding's cabinet. Senator Weeks occupies a high position in the national life of the country and his broad knowledge of the problems that confront the industrial world qualify him to convey a message of great value.

Another speaker will be Hon. James H. Wilkerson, formerly chairman Illinois Public Utilities Commission. Mr. Wilkerson's activities have in one way or another been almost continually and vitally associated with public affairs. He recently resigned upon the inauguration of a governor elected on a platform which advocated the abolition of the state public utilities commission, and has since returned to law practice.

Charles A. Leedy, the widely known humorist of the Youngstown *Telegram*, will close the program.

### The Conference

Thursday, February 10

THE DRAKE

President PHILIP H. GADSDEN, *Presiding*

#### MORNING SESSION

AT 9:30

REPORT—Committee on Constitution and By-Laws, Lucius S. Storrs, Chairman.

PAPERS—"Previous Methods of Electric Railway Finance," James F. Fogarty, secretary the North American Company, New York.

"Present Requirements for Mortgage Securities," F. K. Shrader, Halsey, Stuart & Company, Chicago.

"Home Town Financing — Partial Mutual Ownership," S. B. Way, vice-president and general manager the Milwaukee Electric Railway & Light Company, Milwaukee, Wis.

"Necessity of Financing by Sale of Capital Shares," Chester Corey, vice-president Harris Trust & Savings Bank, Chicago.

"Municipal Aid in Electric Railway Financing," Melvin A. Traylor, president First Trust & Savings Bank, Chicago.

#### AFTERNOON SESSION

AT 2

REPORT—Special Committee on Report of Federal Electric Railways Commission and Report of Special Committee on Public Utilities of the Chamber of Commerce of the United States. Walter A. Draper, Chairman.

GENERAL DISCUSSION

ADJOURNMENT

## Important Facts About the Mid-Winter Conference

**H**ARRY L. BROWN, western editor *ELECTRIC RAILWAY JOURNAL*, who recently accepted the chairmanship of the committee on transportation for the Mid-Winter Conference, reports that it has so far succeeded in securing half-fare rate on the return trip for members coming to the conference from points in the Central and Western Association territories. The Southwestern Association will probably grant the same rate, and also the Trunk Line Association. Only 10 per cent reduction will be allowed for points on the Pacific Coast, and probably no reduction will be allowed in New England, Canada and the Southeastern States, but members from these sections can secure the lower rate part way by buying tickets to points in one of the territories granting special rates and buying new tickets from there on, following the same procedure in returning.

Final arrangements for the special dinner for the ladies in attendance at the annual banquet of the American Electric Railway Association in Chicago, Feb. 10, have been completed. The price of the dinner is to be \$4 and tickets may be secured at the time of the meeting at the registration booth at the Drake.

## Utilities Heard at Housing Conference

**A**T A HEARING called by the Chamber of Commerce of the United States in Washington on Jan. 28 on industrial housing, Philip H. Gadsden, president of the association, testified that the public utility companies of the country would require \$852,000,000 to provide proper heat, light, telephone and transportation facilities for the 1,250,000 houses and apartments which the country now needs to help relieve the housing situation. This total is reached by combining the estimates of the most reliable authorities in the public utility field.

## Hearing on Proposed Two-Cent Coin Legislation

**A**S THE RESULT of the appearance of a committee headed by Charles L. Henry, of the American Electric Railway Association, before the House Committee on Coinage, Weights and Measures, a study is to be made of the public need for a 2-cent coin before legislation to authorize its coinage will be pressed. An unusual privilege was granted to the committee of electric railway men in that an informal hearing was granted by the committee on the bill which already had been reported favorably to the House.

Representative Vestal, of Indiana, the chairman of the committee, stated after the hearing that his main idea is to authorize the making of a Roosevelt coin. He does not insist that it be a 2-cent piece. So far as he is concerned, a Roosevelt nickel would be just as satisfactory as a tribute to the late former president. Information has come to his committee, however, that there is public need for a 2-cent piece. Before taking any step to amend the present bill, he expects to investigate the extent of this alleged need. If it develops that there is no necessity or general desire for a 2-cent piece, he states that he will be very glad to propose an amendment making the coin one of standard size, so as not to work a hardship upon street railway and banking companies.

Mr. Henry and his committee pointed out that the proposed 2-cent piece would make necessary very heavy expenditures in altering fareboxes, coin counters and coinholders. The necessary alterations on a farebox would cost \$20 each. In addition, electric railway companies would have to go to the expense of adding a barrel to each of the coin holders worn by the car conductors. The point also was made that there is a possibility of the proposed 2-cent coin making necessary alterations in all 25-cent gas meters.

In addition to Mr. Henry, the committee consisted of Matthew R. Boylan, Newark, N. J.; H. B. Flowers, Baltimore; J. H. Hanna, Washington, D. C., and P. S. Young, Newark, N. J. The committee was accompanied by representatives of the Johnson Farebox Company and the Brandt Manufacturing Company, makers of coin counters.

## Camden Company Section Expeditiously Organized

**A**NOTHER company section has been added to the rolls of the American Electric Railway Association. This time it is on the southern division of the Public Service Railway. The section is the second on that property and its official name is the Camden Company Section of the Public Service Railway.

On Thursday, Jan. 13, an enthusiastic organization meeting took place in the assembly room at the Camden carhouse, and seventy-six charter members were enrolled. This number, however, does not include those who are already members of the Newark section and who are to ask for transfer to the new organization. With nearly 1,000 employees to draw from it is anticipated that the membership will grow rapidly and the work that is planned for accomplishment will become a factor of vital importance in the establishment of better public relations in the territory served.

In order that there might be a better and clearer understanding of the actual workings and aims of a company section three attachés of the association's home office were present and spoke. Secretary E. B. Burritt outlined the purposes and aims of the association work, explained where company sections fitted in and listed the benefits to be derived from membership. Special Engineer J. W. Welsh spoke on the magnitude of the industry, and Henry Surguy, editor of the association's monthly publication, *Aera*, explained the place that the magazine has in the association work. C. W. Stocks, of this paper, also made remarks on the value of co-operative effort and the advantages that can accrue to individuals through membership in company sections. Remarks were also made by Martin Schreiber, Robert A. MacArthur and H. C. Stevenson.

After the speakers had had their say the report of the nominating committee was received and the following were elected: President, C. V. Wallace, superintendent of employment; vice-president, W. H. Wright, superintendent of distribution; secretary, George Stoll, investigator employment department; treasurer, P. A. O'Connor, claim department; directors, William Kille, president of Local 880 of the Amalgamated Association of Street and Electric Railway Employees of America; Robert A. MacArthur, superintendent of transportation, and John Hanf, superintendent of equipment.

The new officers were then installed and a committee appointed to draft a constitution and to prepare a program for the next meeting, to be held on Feb. 10.

# News of the Electric Railways

FINANCIAL AND CORPORATE • TRAFFIC AND TRANSPORTATION

PERSONAL MENTION

## Dallas Wants New Deal

New Franchise Sought With Sliding Rate of Return Dependent on Fare

The city of Dallas, Tex., co-operating with the officials of the Dallas Railway, is framing a new franchise in response to the request of J. F. Strickland, president, and other officials. As noted in the *ELECTRIC RAILWAY JOURNAL* for Jan. 22, page 196, the company represented that it could not operate except at a loss under the present franchise and carry out the commitments made at the time the franchise was granted.

### NEW FRANCHISE BEING FRAMED

A strictly service-at-cost franchise is wanted by the Dallas Railway in lieu of the present franchise, which authorizes a return of 7 per cent on the property valuation, provided the company can earn it. The franchise is being framed at conferences between the city officials and officers of the railway. The request for a new franchise was preceded by a petition for authority to raise fares from 6 cents to 7 cents. This request was peremptorily refused by the City Commission.

It is the opinion of those in the franchise conference that the adoption of amendments to the present grant embodying the desired changes will be preferable to the negotiation of a new franchise. An obstacle to the negotiations is the inability on the part of the company to raise the funds necessary for it to carry out certain improvements and betterments to which it is committed under terms of the franchise granted in 1917.

In order to provide an incentive for good management and to enable the company to attract capital for expansion Richard Meriwether, vice-president and general manager, presented a tentative sliding scale of fares and of permitted return, to be regulated automatically, as a stabilizing fund created for this purpose. The scale was divided into various steps which would permit the return to increase as the fare is lowered or to diminish as the fare is increased.

### NEW FARE SCALE SUGGESTED

Step 1, based on a fare of 5 cents with the sale of tickets at seven for 25 cents, would permit the owners to receive a return of 8½ per cent on their investment. Step 2, based on a 5-cent fare with six tickets for 25 cents, would permit a return of 8½ per cent. Step 3, based on a 5-cent fare with eleven tickets for 50 cents, would permit a return of 8½ per cent. Step 4, based

on a straight 5-cent fare, would permit a return of 8 per cent. Step 5, with a straight 6-cent fare as at present, would permit a return of 7¾ per cent. Step 6, based on a 7-cent fare with the sale of tickets at four for 25 cents, would permit a return of 7½ per cent, and step 7, the last shown, based on an 8-cent fare with the sale of tickets at two for 15 cents, would permit only a 7 per cent return.

In presenting the scale Mr. Meriwether said that it did not contemplate any change in the present free transfer system.

## State Regulation Proposed in Minnesota

Senators W. F. Brooks and Arch Coleman, Minneapolis, have introduced a bill in the Legislature to place regulation of electric railways in Minnesota in the hands of the State Railroad & Warehouse Commission. The rate-making power will be vested in that body if the bill carries, although full control of operation, service and improvements will be retained by the cities, subject to appeal to the commission when such orders would affect the cost of service. It is provided that electric railway franchises may be exchanged for indeterminate permits which are to continue as long as the railway affected obeys the law, or until the city or State shall buy the property. Either city or company may appeal to the courts against unsatisfactory rulings by the state commission.

A bill by Senator George H. Sullivan, Stillwater, places control of operation, routing of interurban lines and similar matters under the jurisdiction of the State Railroad & Warehouse Commission. Still another measure provides that the personal property taxes collected from electric railways shall be paid to the state.

The Council of St. Paul has passed a resolution condemning any action to put control of the local electric railway in the state commission.

In commenting on the Brooks-Coleman bill Horace Lowry, president of the Twin City Rapid Transit Company, said:

Our position is that we feel that this bill should pass, as it is only by such legislation that it will be practically possible for our companies properly to serve the cities in which we operate.

For the past four years we have endeavored in both cities to obtain modifications and extensions of our existing contracts, which would place the property on a sound financial basis but have been unable to do so, and in view of these facts we feel that placing the rate-making power in the hands of an impartial commission, and the extension of our right to operate, subject to good behavior or purchase, would give confidence to the investing public to the extent that we would be able to obtain the necessary funds to improve the property and provide adequate service.

## Subsidy Suggested

Seattle Councilman Would Have City Dip Into General Fund for \$1,500,000 to Help Municipal Line

An ordinance proposed by Councilman John E. Carroll, providing for the payment from the general fund of \$1,500,000 yearly for the benefit of the Seattle (Wash.) Municipal Railway, has been introduced in the Council. No action will be taken on the matter, however, until Mayor Hugh M. Caldwell has completed his report on the municipal railway situation. The Mayor has so far opposed any such suggestions.

### HELP FROM GENERAL FUND

The proposed action of delving into the general fund of the city would increase the tax levy by about 6 mills, it is estimated by City Comptroller Harry W. Carroll. The city, in transferring \$203,909 to the city railway fund on Dec. 23, to provide funds for meeting the railway payroll, made its first inroad into the general fund, raised by taxation.

Redemption and interest payments due on street railway bonds in 1922 will total \$1,705,550, the city comptroller states. A principal payment of \$833,000 on the \$15,000,000 in bonds issued to pay for the car lines is due on March 1, 1922, and \$10,000 additional is the redemption payment due on \$100,000 of bonds issued for divisions A and C of the city lines acquired before the Stone & Webster property was taken over. Interest due on revenue railway bonds in 1922 totals \$926,800 and \$35,750 more is due on general railway bonds. This makes the total amount of redemption and interest falling due in the year 1922 \$1,705,550.

The interest rate on the \$15,000,000 in utility bonds is 5 per cent. The interest is paid in semi-annual installments of \$375,000. Three payments have already been made. Two interest payments will be due in 1921, the first on March 1, and the second on Sept. 1.

### MAYOR'S REPORT AWAITED

The question of whether the railway tax ordinance, providing for payment of municipal railway operation expenses from the general fund, shall be submitted to the voters on March 8, has been discussed in the Council, but as stated previously, it has been decided to defer action on this point until the Mayor's report on the railway is received.

Councilman Bolton expressed the opinion in Council that the only solution of the question is for the city to get back to the 5-cent fare, and eliminate transfers.

## Unified System with Single Fare Suggested

Chief Executive of New York in Special Message to Legislature Says Greater City's Transit Franchises Must Be Revised

Nathan L. Miller, Governor of New York, in a special message to the Legislature on Jan. 24 invited prompt consideration by members of that body of needed changes in the law for the regulation of public utilities. He said the most urgent condition was that presented by the transit situation in the city of New York. The Governor's view is that sufficient facts are known to enable the Legislature to determine what action it ought to take. He favors complete unified operation in New York City with a single fare.

THE Governor surveyed New York City's traction history, past and present, and condemned those who laid the foundations for ample fortunes by dishonest manipulation of traction securities as well as those who seek to benefit politically from the misdeeds of the early promoters. After reviewing the history of regulation in New York the Governor said:

There are now three agencies dealing with transit in New York City—the Public Service Commissioner, the Transit Construction Commissioner, and the Board of Estimate and Apportionment, and the powers of each are in dispute. It is not strange that an apparently hopeless tangle results.

With respect to surface lines an equally hopeless tangle of authority exists. It was obviously intended to confer upon the Public Service Commission complete regulatory power over them. But the Court of Appeals decided that it would not infer from the language of the act an intention to do that in cases where local consents had imposed conditions as to rates of fare. That decision, however, has been limited to such consents granted between 1875 and 1907. The result is that the Public Service Commission has jurisdiction over some lines and different sections of the same line and a divided authority with the Board of Estimate and Apportionment over other lines or sections of the same line. In consequence the transportation problem in the city of New York has steadily drifted toward disaster.

While the present drifting policy in a crisis daily becoming more distressingly acute is plainly due to the unwise division of authority and responsibility already referred to, the cause of the difficulty lies deeper. The present problem has a background of crooked financing, which now subjects it to popular distrust and prejudice easily aroused by the wiles of the demagogue. The time has come to protect it from the sinister designs of selfish financiers and politicians. It will not be difficult to eliminate the baneful influence of the former. The market value of outstanding securities is undoubtedly much below the intrinsic value of the properties represented.

### UNIFIED SYSTEM ESSENTIAL

The ultimate solution of the problem must be maximum service with minimum cost for the benefit of the users of the public transportation facilities, the majority of whom have no other means of transportation. The public are now in a position to escape from the consequences of past misdeeds or mistakes if, instead of utilizing them for sinister purposes to breed disorder in the public mind, advantage is taken of the present opportunity to lay the solid foundations for a forward looking constructive policy.

In the past capital has been attracted too much by the chance of speculative profits. Necessarily those profits are made at the expense of the investor and the traveling public. Poor and costly service and loss to the innocent holder of securities are the inevitable results. Certainty of a fair return must be the attraction to capital in the future, and that, I am sure, the public will readily accord for adequate service.

The public are now in a state of mind to take nothing for granted. Their past experience has been such that they now will rightly insist upon being satisfied that the actual facts justify any measures adopted. Some agency, having public confidence, impartially to ascertain the facts and courageously to apply the remedy appears to be demanded to extricate the problem from its present difficulties.

I think it plain that the foundations should now be laid for a completely uni-

fied system of transportation in the City of New York, and I believe any open-minded person who studies the subject at all will be forced to that conclusion. The single-fare plan appears to me to be important to the future development of the city and the relief of congestion with its manifold problems, housing, and the like.

Extensions should precede rather than lag behind demand. That means that profitable parts of the system must maintain the unprofitable. In order to give the public efficient and cheap service every possible economy in operation and management must be effected and every unnecessary duplication of service eliminated. Necessarily the subways will form the backbone of the system. The elevated, surface lines and buses will eventually be merely auxiliary. If, however, the most efficient service is to be rendered at the lowest cost competition must be eliminated and the particular service which is best suited to each particular situation must be adopted.

The foregoing and other considerations all point to one completely unified system, and if that premise be granted it necessarily leads to the conclusion that ultimately such a system must be municipally owned. That was settled when the city decided upon municipally owned subways. A unified system of operation will be difficult with both public and private ownership of ways and structures. Of course the ultimate result cannot be accomplished in a day. The time, however, is ripe to lay the foundations, and to lay them properly we must commandeer the services of men of proved ability, in whom must be vested all the authority that can constitutionally be given, and such men must be selected utterly regardless of politics.

The subways contracts three and four lay at the threshold of any solution of the problem. They must be revised if the problem is to be solved. I have not studied them sufficiently to assert with dogmatic assurance precisely how they should be revised and am only referring to the matter sufficiently to indicate the problem with which we have to deal. Experience has demonstrated that the provisions for preferential payments are unfair to the city. The people who ride in the subways do not realize that in addition to their fares they are paying to maintain \$200,000,000 of subway bonds.

In my opinion the term of the leases is too long. That would not be so vital if the provision for recapture would not penalize the city in case it should exercise its option before the expiration of the term. That also would appear to need revision in the interest of the city.

### LOOSE TALK ABOUT HOME RULE

Experience has already demonstrated the unwisdom of separating the regulatory powers of the Public Service Commissioner from the powers under the Rapid Transit Act now vested in the Transit Construction Commissioner. Increased expense and uncertainty of authority have resulted.

To my mind the conclusion is irresistible that the authority and responsibility to deal with this problem must be completely centered in some single agency. A Public Service Commission with all the power under the Rapid Transit Act and all the power necessary to deal with the problem, reserving to the city the power to give the constitutional consent to routes and, of course, to pledge the credit of the city, appears to me to be the manifest solution.

The vital thing to do at the moment is to create the agency to deal with the problem with ample and undivided authority and responsibility. That agency when created must work out a plan from the ascertained facts in the public interest.

There is a good deal of loose talk about home rule in connection with this subject. I believe in the greatest exercise of home rule, compatible with good government, but the public interest must always be kept paramount, and when state power can be

effectively exercised only by the state it ought not to be delegated to municipalities.

The deplorable condition of transportation in the city of New York precludes the thought that either the Legislature or the Governor should evade or seek to shift their responsibility.

I recommend that all public utilities be placed under the jurisdiction of one state commission, except that a commission be created for the First District with complete jurisdiction over the single subject of transit in that district.

I recommend that a commission of three be created with complete jurisdiction over the subject of transit in the First District, that the powers under the Public Service Commissions Law and the Rapid Transit Act be transferred to it with such amendment as further study may suggest and that the former independence of municipal control be restored regardless of the provisions of local consents or prior contracts. I further recommend that jurisdiction over all other public utilities in the state be conferred on the present commission for the Second District. Five commissioners for that work may be necessary.

I also recommend that the Public Service Commissions Law be amended so as to make the rules uniform as to all public utilities, including the power to suspend rates pending a hearing and determination. In view of the time required for some rate determinations there should doubtless be power to prescribe temporary rates pending such determination, with such safeguards as may be prescribed by the commission, and complete power should expressly be vested in the commission regardless of local consents or contracts.

It is impossible to exaggerate the importance and the value to the people, if well done, of the work of the Public Service Commission. That body should be elevated to the dignity and the standing of a court and should be removed from political influence. If a commission of five is retained I recommend that the terms be so arranged as to expire at intervals of three years, the ultimate term of the commissioners to be appointed upon the expiration of the terms of the present incumbents to be fifteen years.

The commissioners should not be burdened with administration. Instead of increasing the appropriations for the department over \$180,000, as is requested, I have no doubt that it will be found possible to effect decreases by more efficient organization. How that should be done I submit to your consideration.

## Governors Indorse Utility Regulation

The Governor of Arkansas has made public thirty-eight statements from thirty-eight Governors indorsing state regulation of utilities. He asked forty-three Governors for their views, and learned that practically nowhere in American commonwealth leadership is their sentiment for abolition of the public utility commission system.

According to the messages received by Governor Brough from the Governors of these states, no state with a corporation or public utility commission would consider such a "backward step" as abolition of state regulation of utilities. Several point out that there has been some criticism of the law due to increases in rates made necessary by abnormally high operating costs in the last few years, but predict that the commissions will be found reducing rates as soon as conditions permit. The Governors all declare that state regulation is the best method of controlling the utilities and protecting the public.

Of the forty-three states heard from, thirty-eight indorse commission regulation; secretaries of two report the Governors away from home; while three Governors advise that their states are without commissions. One of these, Texas, will probably consider establishment of a utility commission at the current session of the Legislature.

## Wages Reduced 25 Per Cent in Albany

### Vice-President of United Traction Company, Following Unfavorable Decision in Rate Case, Announces Cut in Pay

Wages of the trainmen in the employ of the United Traction Company, Albany, N. Y., are to be reduced 25 per cent, effective Jan. 28. Announcement to this effect was made over the signature of H. B. Weatherwax, vice-president of the company, in a notice to the men made public on Jan. 24 but dated Jan. 22. The new fares, referred to elsewhere in this issue, and the reduced wage scale become effective the same day.

**T**HE company at Albany has an agreement with the Amalgamated Association. Union officials at first refused to discuss the matter. Later it was announced that a conference would be held at once with officials of the Hudson Valley Railway, Glens Falls, included in the system of the United Traction Company, and that meetings of the Albany and Troy unions would be held on Jan. 29.

The proposed 25 per cent reduction brings the wages of employees back to the rate of 45 cents an hour in effect last June, but which was increased to 60 cents by an agreement July 1, 1920. This agreement was to expire Nov. 1, 1920, but was extended.

The statement of Mr. Weatherwax follows:

During the month of June, 1920, the representatives of the Amalgamated Association presented demands to this company for an increase in wages from 45 cents to 85 cents an hour (for motormen and conductors, other employees to be increased proportionately) to take effect July 1, 1920, at which time the wage and working agreement with the association then in force expired. The previous rates of wages, subject to overtime payments at the rate of time-and-one-half had been as follows:

July 1, 1914, to June 30, 1916, 28 cents an hour; July 1, 1916, to Jan. 31, 1918, 30 cents an hour; Feb. 1, 1918 to June 2, 1918, 31 cents an hour; June 3, 1918, to June 30, 1919, 40 cents an hour; July 1, 1919, to July 1, 1920, 45 cents an hour.

#### DEFICIT OF \$420,671

At the time the demands were presented, the company had accumulated a deficit incurred as follows:

1915 .....	\$88,766
1916 .....	14,077
1917 .....	95,704
1918 .....	132,734
1919 .....	178,561
1920, 6 months .....	102,750

Total deficit .....

Surplus, Jan. 1, 1915 .....

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## End of Surface Cars in New York Predicted

Although They Carry Now 40 per Cent of All Passengers, Street Congestion May Force Them from Main Thoroughfares

In his report to the Legislature of New York John H. Delaney, Transit Construction Commissioner with jurisdiction in Greater New York, points out that the new transit plan advanced by him a few months ago takes into consideration the fact that vehicular and pedestrian traffic in New York City is increasing to such an extent that it will soon be regarded as inadvisable to continue surface car operation either on the main arteries of travel or on the main cross-streets of Manhattan Borough, and that passenger transportation at present handled on the surface will in the future have to be diverted to crosstown subway "tie-lines" operated on a moving platform device or shuttle cars, or by omnibuses.

**B**ECAUSE of the fact that the congested section of Manhattan has only eleven north and south through traffic arteries to serve more than 150 cross-streets, Mr. Delaney says it will be necessary to resort to "double-deck" subway trunk lines in the central traffic arteries of the city that remain available for transit lines.

During the fiscal year ending June 30, 1920, says the report, there was an unprecedented increase in the traffic of the rapid transit and street car lines operating in the city of New York. The number of passengers in 1920 as compared with those of the preceding year were as follows:

	1920	1919
*Rapid transit railroads . . .	1,424,166,581	1,204,266,664
Surface lines . . .	940,608,486	875,676,340
Total . . . . .	2,364,775,067	2,079,943,004
Increase . . . . .	284,832,063	104,430,815

\*Including Hudson & Manhattan tubes.

These figures disclose that there was an increase of approximately 220,000,000 passengers in the rapid transit traffic during the fiscal year just ended, of which all but 9,000,000 of the increase was carried in the subway and elevated lines, making up the Dual System in which the city has a large financial interest. Mr. Delaney said:

With an annual increase in traffic exceeding 10 per cent it is obvious that provision must be made without delay for extension of local transit facilities for all sections of the city. When the Dual Contracts were signed in 1913 the rapid transit lines, carried 810,000,000 passengers for the twelve months immediately preceding the adoption of the new program. There has been an increase of approximately 615,000,000 passengers, or 76 per cent in the intervening seven years, and the new trunk lines are already showing congestion.

### \$350,000,000 NEEDED FOR NEW LINES

Intensive study has been made of the rapid transit needs of the future since the creation of the Transit Construction Commissioner's office and in August a report was made on a comprehensive plan intended to meet the requirements of the various boroughs of the city during the next twenty-five years. The plan was so laid out as to encourage municipal growth in every direction and to prevent abnormal and congested conditions in certain sections and stragulation of growth in other areas. As laid down it is intended that the transit plan and the general city plan for new thoroughfares and highway improvement shall be co-ordinated in order that the best results may accrue to the general public. The growth of traffic per annum has been constantly in excess of the annual per capita growth of the city.

The enlarged system as laid out to care for the city's needs during the next twenty-five years would provide for an annual traffic of 5,000,000,000 passengers. Projected lines and extensions to the existing lines, wherever they may originate in outlying boroughs are planned to enter and traverse the heart of the city which, from the transit viewpoint, is the area in Manhattan

south of Central Park between Second and Tenth Avenues.

No close estimate of the cost of construction of the enlarged transit system is possible at present and it is not intended that the comprehensive scheme as laid out in its entirety will be undertaken at once, but that it should be proceeded with methodically and continually. At pre-war prices it is estimated that the lines contemplated in the suggested program for the next twenty-five years would cost approximately \$175,000,000 for construction. At present prices, however, this cost would amount to close to \$350,000,000, exclusive of equipment, interest during construction, engineering and superintendence. For proper facilities and equipment an additional \$200,000,000 would probably be required at once.

## Right to Open Wage Matter to Be Arbitrated

Judge Edward J. Jeffries has been appointed as arbitrator to represent the men in the controversy relative to the 20 per cent reduction in wages proposed by the Detroit (Mich.) United Railway. Judge Jeffries will act with John A. Russell, appointed to represent the company. They will select the third arbitrator. The men maintain that the company had no right to break the wage contract now existing by opening the question before the expiration of the contract agreement. In the event the present board should decide that the wage agreement can be opened the next step will probably be the arbitration of the wages, although there seems to be some doubt as to what action will be taken next.

The men refused to appoint an arbitrator until advised by the company that it was ready to accept the condition that the only question to be arbitrated now is whether or not the subject of wage adjustment can be opened at this time without the union's consent.

In advising the officials of the union of its acceptance of their view regarding the matter the company cited the fact that the situation is urgent and requested the men to name their representative without delay.

The differences to be arbitrated are set forth as (1) the right of the parties or either of them to open the agreement and (2) the foregoing having been decided affirmatively, to proceed then forthwith to arbitrate sections of the existing agreement dealing with working conditions and wages.

In concluding their reply to the company's communication officials of Division 26 of the Amalgamated Association said:

We are compelled to inform you that until the subject which is to be arbitrated

is mutually agreed on, in accordance with our agreement, we must decline to name our arbitrator and will await any further suggestions that you have to make on this matter.

## Cities Urge Electrification

Municipalities along the lines of the London, Huron & Bruce and the Stratford-St. Mary's branches of the Grand Trunk Railway in Western Ontario are organizing a campaign for the electrification of both lines.

The London, Huron & Bruce line runs northward from London to Wingham, a distance of about 50 miles along the shore of Lake Huron, and the Stratford-St. Mary's branch from London to Stratford, about 40 miles. Each railway taps a very rich farming country, but the service on the steam lines is infrequent and unsatisfactory.

The government of the Dominion of Canada having taken over the Grand Trunk Railway the municipalities believe electrification will be secured without difficulty. If the scheme is carried out the electrified lines will be linked up with the London & Port Stanley Railway, which is owned by the city of London and is operated between that city and Port Stanley, an important harbor on Lake Erie. The system of the London & Port Stanley Railway consists of 35 miles of railway.

## \$550,000 Forfeit Bond Refused

The General Electric Company has offered to pay the city of Dallas, Tex., \$550,000 in cash, the amount of the two bonds which the company executed in 1917 as a guarantee that it would build two interurban lines, each at least 30 miles in length, if the city in turn would relieve the company from all obligation in connection with the building of the lines which are proposed.

The City Commissioners at a meeting on Jan. 15 declined to accept the payment of the forfeit, but in lieu thereof extended the time in which the General Electric Company, owner of the Dallas Railway, is to comply with the terms of its commitments. The company now has sixty days from Jan. 15 to begin work on the first interurban and eighteen months to begin work on the second. The first interurban must be begun by March 15, 1921, and the second interurban by Sept. 15, 1922.

The General Electric Company said:

So confident are the petitioners that the building of these roads in the near future will entail upon them an unreasonable loss that the General Electric Company interests would be grateful to the city if it will permit them to pay to it now the amount of said two bonds, to wit, \$550,000 in cash.

It was declared, however, in the petition that if the city is unwilling voluntarily to accept the forfeit as tendered "it is not the purpose of petitioners to compel it so to do by putting the city to the enforcement of its legal rights, but it is their purpose to perform the promise made by the said Hobson and carry out and fulfill same in good faith."

## Near the End

### Period Drawing to a Close in Which to Complete Toledo Settlement—Commission Reported Selected

Less than a week remained on Jan. 26 to put the cost-of-service plan at Toledo into operation. The ordinance provides that the railway shall be turned over to the new Community Traction Company, "free from all mortgage encumbrances." To bring this about the Doherty interests would have to raise \$1,900,000 cash in addition to the cash required to place the ordinance in operation.

Henry L. Doherty asked all Toledo banks to participate in a loan of \$2,700,000 to take care of this item, the operating finance and equipment liens. He offered them the \$8,000,000 of bonds of the Community Traction Company, as collateral and agreed to pay 12 per cent interest for the money. The deal would be made with the expectation that the whole proposition could be refinanced later in the year.

Toledo bankers have said many times they would not be able to help in the situation because such a large amount of cash was involved and the loans of most of the larger banks are up to their legal limits and the limits imposed by the Federal Reserve Bank.

#### MORTGAGES TO BE CONTINUED

To the end that the plan put before the city by the Doherty interests last week might become effective so that the ordinance could begin to operate on Feb. 1, James Martin of the city legal department and George Welles, attorney for the company, began work on an agreement between the city and the Toledo Railways & Light Company, by which the mortgage encumbrance could run on for a few months and to protect the city interests all the bonds of the traction property would be held in trust by the sinking fund trustees of the city. This would not allow the company any return on the property until the mortgage was lifted.

The city officials have agreed to waive the exact wording of the ordinance in order to put the cost-of-service plan into effect. It is also desired to get the approval of the City Council. There is some question, however, about the legality of the scheme which might endanger the plan at some future time. It was doubted whether such an agreement would be ready for submission to Council on Monday.

Charles A. Frueauff, counsel for Henry L. Doherty, was expected in Toledo on Jan. 24 to approve a final agreement to make the ordinance effective.

The Public Utilities Commission has agreed to let the Community Traction Company, originally incorporated for \$100, proceed to issue \$10,000,000 in common stock, \$2,000,000 in preferred stock, and \$8,000,000 in twenty-five-year first mortgage bonds. It also gave its approval to the transfer of the Rail-Light property over to the Community Traction Company.

When the new ordinance goes into effect fares will be reduced from 7 to 6 cents and transfers from 2 to 1 cent.

It is understood that the street railway board of control has selected a man for commissioner of transportation under the new grant but that the board is withholding the name until the operation of the cost-of-service ordinance is assured.

### Deferred Repairs Cost City of Seattle \$1,500,000

In a public speech recently D. W. Henderson, superintendent of the Seattle (Wash.) Municipal Railway, reviewed the problems of municipal ownership, stating that the railway lines would have gone into the hands of a receiver had the Stone-Webster Company not sold them to the city for \$15,000,000. Mr. Henderson was for many years superintendent of transportation of the lines at Seattle when they were under private operation.

He said the private company had made only  $\frac{1}{2}$  of 1 per cent annually on the lines during the last five years of their operation and that the city officials "no doubt failed to study details of cost" of the lines before they purchased them, erroneously believing that the company "was making all kinds of money on a 5-cent fare." He expressed the belief that if the city on taking over the lines had immediately increased the fares it would be reducing fares now instead of increasing them.

In explaining mounting costs, Mr. Henderson pointed to two wage increases. These, he said, were unavoidable. He also stated that the Puget Sound Traction, Light & Power Company suspended all repairs the moment the city began to talk seriously about taking over the lines and that the city has been forced to spend \$1,500,000, when labor was highest, on repairs alone. He stated that operating costs had been reduced 4.2 per cent in the last year.

### Construction Abandoned — Construction Proposed

The construction of the proposed interurban railway from Dallas, Tex., to Wichita Falls, a distance of approximately 110 miles, has been temporarily abandoned, due to inability to finance the line successfully. The negotiations have been dropped until the financial conditions are improved.

In the meantime the Dallas (Tex.) Railway has been given to understand by the city of Dallas that it must carry out its commitments to build the two interurban lines, each at least 30 miles in length, and in return J. F. Strickland, president of the Dallas Railway, has revived interest in the proposed line to Terrell. Mr. Strickland announces that his company is now carrying on negotiations with Terrell and intervening towns with a view to building this line first, and that after it is built he will turn his attention to construction of the other line.

## Commissioners Disagree

### Judge Reed, Kansas, Against Theory of Need for One Body to Hear Wage and Rate Cases

Judge Clyde M. Reed of the Kansas Industrial Court refused recently to sign the biennial report of the court to the Governor. Instead he sent to the Governor a special letter calling attention to errors in the report as submitted by Judges Huggins and Wark relating to the work of the court.

#### WAGES AND RATES COUPLED

In the letter of Judges Huggins and Wark appears this statement:

After several wage cases had been brought on the industrial side, it was discovered that a shorter and cheaper way to arrive at the matter of increased wages was to try the wage question out at the same time as the rate increase application by the utilities.

There was not, according to Judge Reed, any substantial basis for a statement of this kind. On the other hand Judge Read said:

If any such practice has been followed I am ignorant of it. It is true that wages are operating expenses and the operating expense is an important factor in the adjustment of rates to a public utility, but following that line of analogy every public service commission would be an industrial court, including the public utilities commission, which was the predecessor of the present Kansas Court of Industrial Relations. It will not be seriously contended that this is the case.

There has been some insistence on the part of some of the utilities companies that the question of wages and rates must be tried together. The court has not accepted that theory as a governing rule and in only one instance have these questions been considered together in an industrial case.

Sound public policy, in my judgment, requires that the matter of wages and rates be considered separately. There is a relation between wages as an operating cost and the rates of common carriers and public utilities, but they are separate factors, each of which should be considered on its merits.

Judges Huggins and Wark in their statement said:

We have attempted in this report to outline our industrial and utility activities separately, but the two phases of the work are, and have been, so closely related that it has been quite impossible accurately to separate them. Some of the cases that have been docketed and heard on the industrial side have involved utility problems, and, on the other hand, some cases filed on the utility side have involved industrial questions.

#### JUDGE REED DISSENTS

Judge Read did not agree with the sentiments so expressed. In his letter he said:

In the discussion now current as to the best method of organizing the court for future work, it may be accepted as a statement that the industrial and utility work is so closely interwoven that it cannot be separated. That such a conclusion would be unjustified is evident from an analysis of the cases which have been filed on the industrial side and heard by this court. Since the court was established twenty-eight industrial cases have been filed, of which five are still pending.

An analysis of the industrial cases heard by the court would reveal the fact that in but one case, that of the Topeka Railway, was the question of rates and wages brought into the same case for consideration by the court. The question of wages and rates was present in the Wichita Railway case, but the court had no direct jurisdiction over the question of rates and that was settled by the City Commission of Wichita.

An analysis of the cases heard to date gives no support whatever to the theory that there is any vital necessity for considering wage and rate cases by one body. This is a matter to be determined on general policy.

### Colonel Kealy Among His Men

Incident to the luncheon to Col. Philip J. Kealy upon his retirement from active supervision of the management of the Kansas City (Mo.) Railways the employees assembled before the offices of the company for the group picture shown in the accompanying illustration. Colonel Kealy appears in the center of the group of his co-workers, only some of whom are shown in the reproduction on account of space limitations.

Some of the remarks by Colonel Kealy to the men were included in the account of the luncheon which was published in the issue of the *ELECTRIC RAILWAY JOURNAL* for Jan. 15. Among statements not recorded previously was the response of Colonel Kealy showing appreciation of the evidence on the part of the men that his work at Kansas City had resulted in substantial and continuing loyalty of service to the community and to the utility.

I hoped the company would be ready and able to pay early in the year 1921.

It will take at the present rate of earning until about May 1 to get the million dollars owing to the men, and that is about what it amounts to with interest from November. It will take all that we can earn after paying the necessary bills up to May 1 to save that amount, but I am very glad to tell you that through an arrangement which we have been able to make with Mr. Stotesbury's bank we shall pay you in full with interest on Feb. 1.

### Transportation District Plan Approved

Mayor Thompson's traction plan for Chicago which provides for 5-cent fares and the creation of an independent taxing body to be known as the Transportation District, which would own and operate the surface street railways, was approved by a vote of eight to two by the Local Transportation Committee of the City Council on Jan. 17.

The vote was taken very unexpectedly with eight Aldermen absent and without waiting to hear various civic organizations which had given notice

### Franchise Settlement Plan Started

Initiative petitions for the passage of a city ordinance providing for the service-at-cost plan of street railway transportation proposed by the Detroit (Mich.) United Railway have been filed with the city clerk. More than 8,000 signatures have been secured for the petition, it is reported, a number greatly in excess of that required by the city charter.

If the proposed ordinance is laid on the table or meets with adverse action on the part of the Mayor or the City Council the proposition will be submitted to the voters for decision at a coming election.

A printed copy of the ordinance will be sent by the Detroit United Railway to each of the 320,000 registered voters of Detroit to afford them an opportunity to study the ordinance provisions prior to the election.

Articles of incorporation for the Detroit-Service-at-Cost Railway, accord-



COLONEL KEALY THE CENTRAL FIGURE AMONG A GROUP OF HIS EMPLOYEES

He said that the good judgment of the men in adopting the co-operative plan had been vindicated, for under it there had been great improvement of service to the public and material benefit to the employees. Moreover, employees elsewhere, more particularly in the East, were finding the plan as installed at Kansas City to be almost an ideal application of the general principle of participation toward which employers and employees were more and more tending.

### Back Pay Obligations Anticipated by P. R. T.

Payment of back wages of \$1,000,000 to the trainmen of the Philadelphia Rapid Transit Company will be made on Feb. 1. This announcement was made by President Thomas E. Mitten of the company to the men at the annual meeting of the members of the Co-operative Welfare Association, to which reference was made in the *ELECTRIC RAILWAY JOURNAL* of Jan. 22, page 187. Mr. Mitten is quoted as follows:

You remember, and I have no doubt you remember well, that when I last talked to you here and you agreed to await the payment of your back wages until the company could earn the money I then said

that they wished to be heard. It was expected that the matter would be placed before the City Council on Jan. 19 for expected approval of that body and then sent to the State Legislature without alteration.

### Know Your Employees!

The January issue of *Sparks*, published by the Toledo Railways & Light Company, which is controlled by H. L. Doherty & Company, printed in full the paper on "Labor Efficiency" read by Frank R. Coates at the Doherty managers' meeting in New York. Mr. Coates believes in welfare work but not in a bonus system. He has suggested seven ways of obtaining greater efficiency in operating Doherty interests. They are as follows:

1. Know your employees.
2. Have your employees know you.
3. Have your workers and co-workers contented.
4. Treat them all fairly and squarely.
5. Let them know by practical examples that their future depends entirely upon themselves.
6. So educate all in your employ that they respect and revere the American flag, and that they know for a certainty that the same principles that the flag symbolizes are the underlying principles in your business.
7. Lastly, have all in our great organization follow out to the fullest extent, our slogan: "Pride of Workmanship" and "Pride of Service."

ing to the plans of the Detroit United Railway, have been filed with the Secretary of State at Lansing. The Public Utilities Commission has been asked for permission to start such a project.

The stockholders are Frank W. Brooks, A. F. Edwards and A. A. Peters. They are respectively the president, vice-president and treasurer, and secretary of the Detroit United Railway. The authorized capital of the new company is stated as \$25,000, a nominal sum.

The new company proposes to acquire, own and operate street railways in the city of Detroit, within the boundaries of the city as the same may from time to time exist, and in the city of Highland Park and the village of Hamtramck.

### Bill for Franchise Readjustment

There has been introduced in the Ohio Senate a bill designed to terminate perpetual franchises held by the Columbus Railway, Power & Light Company on fifteen Columbus streets. The bill is the result of prolonged dissension between the company and the city over adequacy of service.

The rate of fare until a little more



than a year ago was eight tickets for 25 cents. Repeated attempts to get a higher fare during the war failed, but eventually Council granted a fare of 6 cents cash, with five tickets for 25 cents, the understanding being that certain betterments would be carried out.

It is argued by the Columbus Street Railway Home Rule Association and others interested that with the termination of the perpetual franchises the city will be in a much better position when it makes a new contract for service. The blanket franchise ends on April 29, 1926, and under the bill introduced in the Senate the perpetual franchises would be ended at the same time. Nine of the principal streets in Columbus are occupied by lines under the perpetual franchises, while other important streets are under the same certain betterments would be made.

### Ordinance Would Permit Cleveland Railway to Sell Stock

Following a letter of John J. Stanley, president of the Cleveland (Ohio) Railway, to Fielder Sanders, City Street Railway Commissioner, in which it was pointed out that the company needed funds for improvements and extensions, an ordinance has been introduced in Cleveland City Council by Councilman Dittrick authorizing the sale of \$3,000,000 of capital stock of the Cleveland Railway at less than par. The ordinance amends the Tayler service-at-cost franchise. It follows:

Be it ordained by the Council of the city of Cleveland, State of Ohio:

Section 1. That the Cleveland Railway be, and it is hereby, authorized to issue and sell \$3,000,000, and no more, of its capital stock at not less than \$80 per share, a discount that will yield not more than 7½ per cent interest per annum to the purchasers of said \$3,000,000 of stock, said issue to be subject to approval by the Public Utilities Commission of Ohio; the proceeds of the sale of said stock to be used to pay or reduce the company's floating indebtedness, to pay for such extensions, betterments and permanent improvements as have been or hereafter may be authorized by the City Council of Cleveland and for any other purpose or purposes for which such proceeds may be lawfully used under the provisions of ordinance No. 48,845-A as amended by ordinance No. 49,970, the difference between the par of said capital stock and the amount realized from its sale to be amortized from earnings within two years after its issue; that the company be, and it is hereby, directed to charge to a stock discount account as the stock is sold said difference between par and the selling price and to deposit in bank the sum of \$25,000 per month as a sinking fund for the amortization of said difference, crediting said sums from month to month to said stock discount account until said account is extinguished, and that thereupon the company use said sinking fund to reduce the amount of the then outstanding bonds or capital stock of the company or to pay for extensions, betterments and permanent improvements; that said monthly sums may from time to time, with the express approval of the Council, be invested in securities or used to retire stock or bonds or to pay floating debt or to pay for extensions, betterments or permanent improvements instead of being deposited in bank until the extinguishment of said stock discount account; that the rate of interest upon the present outstanding bonds and stock of the company shall not be increased by this permission to sell additional stock.

Sec. 2. This ordinance shall take effect and be in force from and after its passage and legal publication.

Mr. Stanley's letter to Mr. Sanders stating the company's needs was published in the ELECTRIC RAILWAY JOURNAL for Jan. 22.

## News Notes

**Thirty-three per Cent Increase for Power.**—The Cleveland (Ohio) Railway has announced that the Cleveland Electric Illuminating Company has asked the State Public Utilities Commission to approve a 33 per cent increase for current supplied to the railway.

**Home Rule Appeal in Indiana.**—Mayor Benjamin Bosse of Evansville, Ind., and the City Council have appealed to the Legislature to repeal the law creating the Indiana Public Service Commission and to restore power to regulate public utilities to the cities of Indiana.

**Rehearing Asked in Freight Case.**—The Milwaukee Electric Railway & Light Company, Milwaukee, Wis., has filed with the Wisconsin Supreme Court a motion for rehearing on that section of the recent decision of the court in the interurban franchise case dealing with the transportation of freight. The company asks that the injunction against carrying freight on the Milwaukee-Waukesha line of the company be limited to that portion of the line east of the west line of Layton Boulevard in the city of Milwaukee. The case was reported in the ELECTRIC RAILWAY JOURNAL of Dec. 25, 1920, page 1307.

**Employees Fully Informed.**—The Jan. 15 issue of *Trolley Topics* contains a full reprint of the letter delivered by J. P. Barnes, president of the Louisville (Ky.) Railway, to each Councilman and Alderman previous to the aldermanic meeting of Jan. 4, replying to the report of the Railroad Committee of the General Council. It was the desire of Mr. Barnes through *Trolley Topics* to acquaint all employees of the Louisville Railway with facts about the railway's financial condition and to point out certain wrong deductions in the report of the Railroad Committee to the Board of Councilmen submitted on Dec. 28 last.

**Public Service Is the Railway's Function.**—E. F. Sweet, former congressman and at present assistant secretary of commerce at Washington, D. C., recently reiterated the findings of the Federal Electric Railways Commission at the twelfth annual banquet of the Jackson (Mich.) Chamber of Commerce. Mr. Sweet remarked that one of the first things upon which the members of the commission agreed was the idea that the function of railroads was public service and not private profit. An account of Mr. Sweet's review of the commission's work was published in the ELECTRIC RAILWAY JOURNAL for Jan. 22, page 171.

**Ambitious Auto Proposal in Portland.**—The City Council of Portland,

Ore., has been asked to consider an application for franchise to operate a bus line between Portland and Linnton, with large automobile buses, and with a 10-cent fare. W. H. Hyatt, who applies for the franchise, states that he has succeeded in interesting representative business men of Portland and that he is certain he can succeed in the organization of such a company. He was given thirty days in which to make a report to the Council. Several applications have been submitted by other bus operators, but residents of Linnton have urged that no extensive franchises be granted to present operators as the service and charge have been unsatisfactory.

**Paving Suit Suspended.**—The City of Dallas, Tex., will suspend all suits and litigation in preparation of being filed against the Dallas Railway to compel the company to carry out certain improvement projects, with special reference to paving between its tracks and for a specified distance outside of each track on streets which the city is improving. Action looking to this end was taken by the Board of City Commissioners after a committee of the directors of the traction company had called on the board and had agreed to accede to the city's order for paving certain streets and making other improvements. The company has agreed to set aside all revenue after paying operating expenses, including taxes, maintenance and accident reserves, all interest and fixed charges, including payments on car trust certificates for a period of five months from Dec. 1, 1920, to May 1, 1921.

### Program of Meeting

#### Canadian Electric Railway Association

The complete program of the annual convention of the Canadian Electric Railway Association, which is to be held at the Chateau Laurier, Ottawa, Jan. 31 and Feb. 1, has been made public. The meeting will be called to order at 10 a. m. on Jan. 31 when the president will address the meeting and association business will be discussed. On the afternoon of Jan. 31 the following papers will be read:

"Practical Operation of a Service-at-Cost Contract," by J. E. Hutcheson, manager of the Montreal Tramways.

"The Safety Car," by J. C. McCune, Safety Car Devices Company, New York.

"Adaptability of the Safety Car to Canadian Snowy Climate," by H. E. Weyman, manager of the Levis County Railway.

On Feb. 1, prior to an address by H. B. Morley, general manager of the Ontario Safety League, the following papers will be read:

"Publicity," by A. W. McLimont, vice-president and general manager of the Winnipeg Electric Company.

"Accident Prevention Everybody's Business," by R. Mayne Reid, superintendent of the Quebec Railway.

The meeting will be concluded with the election of officers.

# Financial and Corporate

## Steps Toward Reorganization

Representatives of Holders of Securities of Rhode Island Company Proceeding With Plans

The first real step looking to the reorganization of the electric railways in Rhode Island which remain as a part of the old Rhode Island Company system was taken during the week ended Jan. 22 when the United Electric Railways came into actual existence.

This corporation was created by act of the Rhode Island General Assembly nearly two years ago to take over the properties operated by the Rhode Island Company. The incorporators were former Governor R. Livingston Beeckman, Bank Commissioner George H. Newhall and Zenas W. Bliss, one of the three receivers of the Rhode Island Company. Acting for his associates, Mr. Bliss has paid into the State Treasury the free required under the act and has received the charter. The incorporators plan within a few days to organize the new company.

### \$1,000,000 OF NEW CAPITAL

The decision to take out the charter was reached at a meeting of the joint reorganization committee, composed of Samuel P. Colt, Stephen O. Melcalf and Michael F. Dooley. At this meeting the agreement and plans of reorganization were passed upon by the representatives of the three protective committees representing the various groups of holders of the securities of the underlying properties of the Rhode Island Company. Provision for raising the \$1,000,000 of new capital required under the reorganization is understood to have been made.

Following the organization of the new company, copies of plans and the agreement will be sent to the individual security holders who will be granted thirty days in which to examine and return them with their approval or disapproval.

The United Electric Railways, under its charter, is authorized to issue a capital stock of \$22,000,000 with which to acquire the properties.

There was introduced in the Legislature on Jan. 20 an act amending the charter of the United Electric Railways so as to relieve it from any and all state and city franchise tax payments of the companies that it may acquire.

Taxes of this character amounting to more than \$750,000 have accrued and are now owed by the Rhode Island Company to the city of Providence and the state and city franchise tax payments act was passed designed to relieve the new company from assuming any of these obligations. Certain ambiguities in this act, however, have raised a doubt as to whether the object sought has

been accomplished. In order that there may be no question about the matter in the future the recent act is presented to clarify the previous enactments of the Legislature.

The United Electric Railways on Jan. 25 organized temporarily to advance the reorganization. Officers were elected as follows: President, Zenas W. Bliss; secretary and treasurer, George H. Newhall; directors, Preston H. Gardner, J. Cunliff Bullock, Francis F. Bales, George H. Newhall and Zenas W. Bliss. Permanent organization of the corporation will probably be brought about at a meeting to be held in February. The personnel of the permanent organization will be decided at conferences with committees of security holders.

At the meeting on Jan. 25 the charter of the new corporation was accepted and \$5,000 of stock was subscribed. These steps were necessary before the incorporators could have the status of stockholders and proceed with the temporary organization.

## Receivers Named for Ohio Electric Railway

B. J. Jones, Columbus, former general manager of the Ohio Electric Railway, Lima, Ohio, was appointed receiver for that company on Jan. 25 by Federal Judge John M. Killits. His bond was fixed at \$50,000. At the same time Henry C. Paul, Fort Wayne, Ind., was appointed receiver for the Fort Wayne division and J. Harvey McClure, Lima, was made receiver for the Indiana,

Columbus & Eastern Railroad. Messrs. Paul and McClure, however, will work under the direction of Mr. Jones.

The appointment of the receivers was the first step in foreclosure proceeding begun by the Fidelity Trust Company, Philadelphia, Pa., representing the holders of bonds secured by mortgages on all the properties. Three semi-annual interest payments on the bonds are in default. Other subsidiary companies affected are the light and power plants at Lima and railroad lines to Defiance and from Lima to Toledo.

Paul C. Martin, Springfield, general counsel for the railroad, said that no changes in the organization are planned at this time. The operation of the lines will continue as heretofore. Mr. Martin said the need for the appointment of receivers arose because of "inability to obtain increased passenger rates, added expense due to war prices and the development of the automobile."

## Seven-Cent Fare Increasing P. R. T. Income

The 7-cent fare in Philadelphia is having a noticeable effect upon the net income of the Philadelphia (Pa.) Rapid Transit Company, as shown by its December statement. In December, 1919, the company showed a net income of \$33,127, which in one year's time was increased to \$427,494. After deducting \$125,000 for a 5 per cent return on Philadelphia Rapid Transit stock a surplus remains of \$302,494. An evidence of what the 7-cent fare is doing for the financial condition is seen in the net income for the year just ended, amounting to \$382,065, and for one month amounting to \$427,494. However, more than 2,000,000 fewer revenue passengers were carried during December, 1920, than in the same month of 1919.

STATEMENT OF EARNINGS OF PHILADELPHIA RAPID TRANSIT COMPANY

Month Ended Dec. 31, 1920	1920	1919	Percentage Change Over 1919
Operating revenue.....	\$3,889,911	\$3,141,534	23.8
Operation and taxes.....	2,696,979	2,493,810	8.2
Operating income.....	\$1,192,932	\$647,723	84.3
Non-operating income.....	61,740	197,706	-68.8
Gross income.....	\$1,254,672	\$845,430	48.4
Fixed charges.....	827,177	\$812,302	1.8
Net income.....	\$427,494	\$33,127	1,190.0
5 per cent return on P. R. T. paid in capital—one month.....	125,000		
Surplus.....	\$302,494		

Year ended Dec. 31, 1920	1920	1919	Percentage Change Over 1919
Operating revenue.....	\$38,807,354	\$35,358,471	9.8
Operation and taxes.....	29,195,165	24,587,991	18.8
Operating income.....	\$9,612,188	\$10,770,480	-10.8
Non-operating income.....	592,986	681,048	-12.9
Gross income.....	\$10,205,175	\$11,451,528	-10.9
Fixed charges.....	9,823,110	9,735,651	0.9
Net income.....	\$382,065	\$1,715,876	-77.9
5 per cent return on P. R. T. paid in capital—year.....	1,500,000		

Amount by which gross revenues are insufficient to provide for operating expenses, taxes, fixed charges, and the 5 per cent return upon P. R. T. stock..... \$1,117,934

COMMENT.—Deferred wages formerly shown as an adjustment to net income are now included in the income account for the year ended Dec. 31, 1920. This deferred wage, amounting in total to \$949,766, has been made possible of payment to the men as at Feb. 1, 1921, through arrangements with Messrs. Drexel & Company, the company's bankers.

# Ten Cents Permanent Chicago Fare

**\$86,250,000 Fixed as Value of Chicago Elevated Lines—7.5 per Cent Return Allowed—Estimated Earnings for 1921 Only 4.23 per Cent**

In an order made a few days before they retired from office, the Illinois Public Utilities Commissioners entered a permanent order as to the value of the elevated railway properties in Chicago, for rate-making purposes, and the rate of fare, in a case which originated before the commission on Sept. 2, 1918. The commission fixed the fare at 10 cents. As of Jan. 4, 1921, it found the value of the properties for rate-making purposes to be \$86,250,000.

**T**HE commission found the original cost of the used and useful property of the four elevated companies to be \$71,500,000; the original cost less accrued depreciation, \$60,775,000; the cost of reproduction

Side Elevated Railway, the Northwestern Elevated Railroad, the South Side Elevated Railroad and the Chicago & Oak Park Elevated Railroad, the commission, as previously stated reached the opinion and found that the fair rate-making value of these properties combined is \$86,250,000, as of the date of the order, Jan. 4, 1921.

As in the permanent order covering the case of the Chicago Surface Lines, the commission specified that the elevated lines should be entitled to a return of 7.5 per cent upon the above value. The rate of fare established by the commission as permanent will not, however, earn this surplus by a considerable amount, according to its own computations.

On July 31, 1920, the commission ordered the rate of fare to be placed at 10 cents cash with four tickets for 35 cents. In this permanent order, as of Jan. 4, 1921, the commission stated that these same rates should be continued in effect. At these rates, the commission estimates that the companies will earn during the year 1921, including revenues from sources other than transportation of passengers, approximately \$18,400,000. The estimate of the total operating expenses is \$14,285,000, including an allowance of \$468,000 fixed in this order for depreciation. Deducting these expenses, \$3,647,000 remains to provide for return upon the investment. This is only 4.23 per cent on the established valuation of the properties.

In justifying these rates of fare, the commission took into consideration the downward trend of prices. It also calls

attention to the competitive situation existing between the elevated and surface lines. In 1919, there were 13,000,000 fewer revenue passengers on the elevated than in 1918, when the fare was 5 cents, and in 1920 about 7,000,000 fewer passengers were carried than in 1918. The commission then says that "when it is considered that for all except a small part of their business, the elevated lines must actively compete with the Chicago Surface Lines, steam railroads and other transportation agencies, it seems plain that a differential greater than that now in effect would cause a substantial loss of business." The differential referred to as now existing is 0.75 cents, if tickets are purchased on the elevated and 2 cents where a cash fare is paid, the fare on the Chicago Surface Lines being 8 cents flat.

The commission also makes note that the operating expenses of the companies were approximately \$7,616,000 greater in 1920 than in 1916, while the revenues were about \$8,534,000 greater. Hence, under the rates now in force, the companies have increased their net earnings about \$918,000 over 1916. This, the commission says, compares favorably with the average results for the five years from 1913 to 1917, inclusive, wherein the companies had a net return on the average \$1,140,255 less than is estimated will accrue to them in the year 1921 under the rate authorized.

In the report is included the accompanying summary of the outstanding obligations of the elevated companies. From this it is seen that the total outstanding securities amount to \$113,193,049 and the total bonded and floating indebtedness \$66,995,503. The estimated surplus of \$3,647,000 for 1921 will thus provide an average interest earning of 5.4 per cent on the funded debt, as it existed as of Dec. 31, 1919.

In the accompanying table of the consolidated income statement of the four elevated railways, there is shown the average fare received during each of the several years covered in the statement. Throughout the period of

## STATISTICS OF SECURITIES CHICAGO ELEVATED RAILWAYS

(As of Dec. 31, 1919.)

Security	Total	Annual Interest
<b>Stocks—</b>		
Preferred.....	\$13,651,900	.....
Common.....	32,545,646	.....
<b>Total.....</b>	<b>\$46,197,546</b>	<b>.....</b>
<b>Bonds—</b>		
1st mortgage—1938.....	\$10,000,000	\$400,000
Extension—1938.....	5,000,000	200,000
1st mortgage—1936.....	453,000	22,650
1st mortgage—1941.....	12,500,000	625,000
1st mortgage—1941.....	12,500,000	.....
1st mortgage—1945.....	4,472,000	223,600
1st mortgage—1924.....	8,000,000	360,000
1st mortgage—1928.....	4,432,000	221,600
Income.....	987,000	49,350
Scrip.....	12,500	625
<b>Total.....</b>	<b>\$58,356,500</b>	<b>\$2,102,825</b>
<b>Notes—</b>		
Joint equipment.....	\$1,985,000	\$99,250
Car.....	172,000	9,920
Receiver certificate.....	1,645,000	98,700
Mortgage.....	6,863	347
Borrowed.....	154,000	7,700
Chicago Elevated Railways.....	4,060,763	212,232
N. W. E. R. R.....	482,402	24,120
Central Union Telegraph Company.....	132,975	6,648
<b>Total.....</b>	<b>\$8,639,003</b>	<b>\$458,917</b>
<b>Grand total.....</b>	<b>\$113,193,049</b>	<b>\$2,561,742</b>

new, \$95,000,000; the cost of reproduction new less accrued depreciation, \$80,750,000; the amount of the element of going value, \$6,000,000, and cash working capital and materials and supplies, \$1,000,000. After considering all of these elements of the value of the properties of the Metropolitan West

## CONSOLIDATED INCOME STATEMENT CHICAGO ELEVATED RAILWAYS

(Year Ended Dec. 31.)

Item	1913	1914	1915	1916	1917	1918	1919	1920*
Revenue passengers.....	164,164,225	165,770,161	164,673,516	180,654,632	193,120,173	197,440,107	184,663,025	190,630,210
Average fare.....	5.152e	5.164c	5.161c	5.156c	5.155c	5.285c	6.976c	8.388c
<b>Revenues:</b>								
Passenger.....	\$8,459,940	\$8,560,492	\$8,499,170	\$9,314,348	\$9,970,869	\$10,434,815	\$12,881,311	\$15,990,702
Other transportation.....	467,373	444,822	432,414	453,774	484,859	521,396	602,247	754,250
Non-operating.....	250,042	97,367	37,506	97,965	84,911	74,451	82,831	100,221
<b>Total.....</b>	<b>\$9,177,355</b>	<b>\$9,102,681</b>	<b>\$8,969,090</b>	<b>\$9,865,987</b>	<b>\$10,540,639</b>	<b>\$11,030,662</b>	<b>\$13,566,389</b>	<b>\$16,845,173</b>
<b>Expenses:</b>								
Way and structures.....	\$235,701	\$230,073	\$230,883	\$290,221	\$341,179	\$497,923	\$1,036,480	\$1,736,382
Equipment.....	293,490	353,638	473,180	537,481	641,989	724,323	1,032,497	1,401,621
Power.....	1,147,904	1,130,617	1,111,693	1,240,144	1,370,908	1,297,969	1,376,159	1,491,123
Conducting transportation and traffic.....	2,400,481	2,514,811	2,553,767	2,783,447	3,055,827	3,748,681	5,117,296	6,991,518
General and miscellaneous.....	343,214	363,000	339,710	348,896	450,425	416,535	730,002	788,879
<b>Total.....</b>	<b>\$4,420,790</b>	<b>\$4,592,139</b>	<b>\$4,709,233</b>	<b>\$5,200,189</b>	<b>\$5,860,328</b>	<b>\$6,685,431</b>	<b>\$9,292,434</b>	<b>\$12,409,523</b>
<b>Operating Expenses:</b>								
Taxes, car licenses, etc.....	\$787,537	\$781,082	\$784,690	\$876,211	\$971,130	\$1,079,323	\$908,057	\$1,089,376
Rentals.....	233,705	271,350	253,551	289,862	314,174	294,347	342,673	363,870
<b>Total.....</b>	<b>\$5,442,032</b>	<b>\$5,644,571</b>	<b>\$5,747,474</b>	<b>\$6,366,262</b>	<b>\$7,145,632</b>	<b>\$8,059,101</b>	<b>\$10,543,164</b>	<b>\$13,862,769</b>
Available for depreciation and return on investment.....	\$3,735,323	\$3,458,110	\$3,221,616	\$3,499,725	\$3,395,007	\$2,971,561	\$3,023,225	\$2,982,404
Rehabilitation not included in above figures.....	\$696,339	\$704,102	\$404,077	\$302,616	\$328,919	\$71,222	.....	.....
Available for depreciation and return on investment after deducting rehabilitation.....	\$3,038,984	\$2,754,008	\$2,817,539	\$3,197,109	\$3,066,088	\$2,900,339	\$3,023,225	\$2,982,404
Note A—The above statement excludes following amounts of replacement reserve.....							\$195,339	\$781,357

\* First eleven months actual results; estimated for December.

SUMMARY OF APPRAISALS, CHICAGO ELEVATED RAILWAYS

Submitted By	Appraisal	Basis	Cost—New	Cost—New Less Depreciation
Company	June 30, 1919	Reproduction; prices as of the first six months of 1919: Owned lines.....	\$133,958,284	\$115,879,643
Company	June 30, 1919	Reproduction; prices average 1916-1920, inclusive: Owned lines.....	\$133,170,108	\$114,989,053
Company	June 30, 1919	Reproduction; prices average 1913-1919, inclusive: Owned lines.....	\$112,887,664	\$98,337,464
Company	June 30, 1919	Reproduction; prices average 1906-1915, inclusive: Owned lines.....	\$95,676,254	\$84,463,620
City	June 30, 1919	Reproduction; prices as of the first six months of 1919: Owned lines.....	\$91,470,852	\$74,946,882
Arthur Young & Company—Book costs to June 30, 1919.....				
Commission Chief Accountant: Book costs to Dec. 31, 1919.....				
				* \$84,790,677

\* Includes purchase price of Union Elevated Railroad (Union Loop) \$10,916,000; actual cost of construction (Commission Exhibit 8), was \$4,408,854.

Note A.—The cost of reproduction of physical property as above set forth embodies, for prices as of the first six months of 1919, all changes in specific accounts together with changes in overheads to conform. Costs of reproduction on price bases as of 1916 to 1920, 1913 to 1919, 1906 to 1915, embody only changes in specific accounts, the overheads not having been recomputed. The recomputation of overheads would tend to increase the figures in these three cases slightly.

Note B.—Above appraisals do not include the following amounts for working capital and development cost.

Prices as of	1st 6 mos, 1919	1916-1920	1913-1919	1906-1915	Book Cost
For working capital.....	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000
For development cost.....	12,460,000	11,800,000	11,800,000	11,800,000	11,801,754
Total.....	\$14,460,000	\$13,800,000	\$13,800,000	\$13,800,000	\$13,801,754

the three years ended June 30, 1916, 1917 and 1918 the 5-cent flat fare was collected by the company and the higher than 5-cent average fare is accounted for by the second fare paid by Evanston passengers. A straight 6-cent fare became effective Nov. 22, 1918, and in the nine months ended July 31, 1919, the average fare collected thereunder was 6.113 cents. A straight 8-cent fare became effective on Aug. 8, 1919, and during the six months ended Jan. 31, 1920, the average fare received thereunder was 8.110 cents. An 8-cent cash fare with two tickets for 15 cents, which became effective Feb. 1, 1920, resulted in an average fare during the six months ended July 31, 1920, of 7.745 cents. The 10-cent cash fare with four tickets for 35 cents, which became effective Aug. 4, 1920, resulted in an average fare during September, October and November, 1920, of 9.267 cents. The average fare shown in the table referred to is, of course, the average for

the year, which in some cases involves a change in the rate.

In establishing \$468,000 as the amount that would be allowed annually to provide for the depreciation accruing in the properties which is not cared for in operating expenses, the commission accepted the per centage rates of depreciation determined by the company and shown in an accompanying table, but the commission applied these rates to the original costs of the various classes of property instead of to the cost-of-reproduction new figures used by the company and appearing in this table. On the basis of computation used by the companies, the annual amount necessary was \$883,393, as against \$468,000 allowed by the commission, including \$14,600 for depreciation on leased lines which the companies are obliged to maintain under their contracts.

In presenting its case to the commission, the Chicago Elevated Railways submitted reproduction cost

values and the book value of the properties. The city submitted one valuation and the chief accountant of the commission submitted a separate estimate of the book costs. These appear in an accompanying tabulation, from which it is seen that the valuation of \$86,250,000 allowed by the commission as of Jan. 4, 1921, is among the lowest figures submitted.

## Financial News Notes

**Discontinuance of Line Authorized.**—In the Superior Court at Westerly, R. I., recently Judge Chester W. Barrows granted the petition of Robert W. Perkins, ancillary receiver of the Shore Line Electric Railway, Norwich, Conn., for leave to discontinue service on the lines operated from Westerly to Watch Hill, Pleasant View and Ashaway. The receiver testified that the lines were operated during the past year at a substantial loss. After hearing the testimony Judge Barrows granted the petition and the receiver in his discretion may discontinue the operation of these lines.

**Adrian Road Being Operated Independently.**—The annual meeting of the stockholders of the Adrian (Mich.) Street Railway resulted in the divorcing of the control of the property from the Toledo & Western Railroad, which has lately gone into hands of receivers. Frank R. Coates was elected president, Morton Seeley, vice-president, A. C. Van Driesen, treasurer and Henry Ledbetter, secretary. These men are also directors. Steps to place the Adrian system on a more efficient basis were also taken. The system is the terminal for the Toledo & Western line and has been operated by the Doherty interests for a number of years. It is barely paying its way and is for sale. Recently the city was considering buying the lines.

**Ownership of Road Established.**—The suit instituted in New York by Harry K. Johnson, organizer and first president of the Orleans-Kenner Electric Railway, New Orleans, La., to decide the ownership of the road has been settled out of court, according to advice received by Mr. Johnson at New Orleans. This announcement was made on a recent visit to Paul Maloney, Commissioner of Public Utilities, for the purpose of staying action of the Commission Council to remove the spur track of the Orleans-Kenner road at its present terminus in South Rampart Unit, near Coral. Mr. Johnson promised to provide the road with another terminal inside of sixty days after he obtained possession of the railway. The Orleans-Kenner road operates between New Orleans, in Orleans Parish, and Kenner, in Jefferson Parish.

CHICAGO ELEVATED RAILWAYS — ESTIMATED ANNUAL RESERVE REQUIRED FOR REPLACEMENTS EXCLUSIVE OF THOSE CARED FOR BY MAINTENANCE CHARGES AND REFLECTED IN OPERATING EXPENSES, IN ACCORDANCE WITH ACCOUNTING PRACTICE OF COMPANIES. OWNED LINES ONLY

Item	Cost New of Reproduction	Annual Per Cent Depreciation	Amount
<b>Way and structures:</b>			
Engineering and superintendence.....	\$2,761,436	0 55	\$15,188
Paving.....	384,330	2 50	9,608
Elevated structures and foundations.....	25,022,032	0 71	177,656
Bridges, trestles and culverts.....	1,451,873	0 81	11,760
Signals and inter. apparatus.....	947,905	3 33	31,565
Telephone and telegraph lines.....	127,679	6 13	7,827
Poles and fixtures.....	80,711	3 33	2,688
Underground conduits.....	128,319	1 05	1,347
Shops and car houses.....	1,148,068	1 01	11,595
Stations, miscellaneous buildings.....	4,980,220	1 05	52,292
Total.....	\$37,032,573	0 87	\$321,526
<b>Equipment:</b>			
Passenger and combination cars.....	\$17,447,529	1 58	\$275,671
Service equipment.....	154,709	1 55	2,398
Electrical equipment of cars.....	6,577,687	1 50	98,665
Shop equipment.....	264,026	4 00	10,561
Furniture.....	108,076	2 00	2,162
Miscellaneous equipment.....	3,923	10 00	392
Total.....	\$24,555,950	1 59	\$389,849
<b>Power:</b>			
Power plant buildings.....	\$2,987,422	1 00	\$29,874
Sub-station buildings.....	391,056	1 00	3,924
Power plant equipment.....	4,491,708	2 33	104,657
Substation equipment.....	1,046,347	3 20	33,483
Transmission system.....	2,792	2 88	80
Total.....	\$8,919,325	1 93	\$172,018
Total.....	\$70,507,848	1 25	\$883,393

# Traffic and Transportation

## Consent Unanimous

All Factions in Boulder, Col., Back Railway's Petition for Rate Increase—New Fare 10 cents

A spirit of co-operation between city and railway marked an increase in fare in Boulder, Col., on Jan. 7. The city authorities after a thorough investigation of the local traction situation authorized the Western Light & Power Company to raise the fare from 5 cents to 10 cents for adults and from 3 cents to 5 cents for children. In so doing they took occasion to commend the railway for the quality of service furnished on its Boulder lines.

### BUSINESSLIKE PROCEDURE

The city of Boulder in under the city manager form of government. It is one of the six home-rule cities of Colorado, which, by a recent decision of the State Supreme Court, have jurisdiction over rates charged by the public utilities operating within their limits. Scott Mitchell, the City Manager, is a civil engineer by profession, and before taking his present position engaged in engineering work for a number of years.

The railway petitioned the Mayor and the City Council to be allowed to raise its rate. It submitted a valuation of its railway property, the revenues of the same, and the cost of operation for a period of five years, showing a considerable loss from the operation of the railway department. The valuation was referred to City Manager Mitchell. After a close examination of the data, Mr. Mitchell approved the valuation and report as submitted and recommended to the Mayor and the City Council that the higher fare be granted. Mr. Mitchell also commended the company for the excellent manner in which it presented its case.

At a meeting of the Council early last December the petition was read and an ordinance initiated by the city attorney granting the fare sought by the company and repealing the nickel rate then in effect. The ordinance was passed unanimously and according to law was published for ten days in the newspapers to give time to any person who wished to protest against the proposed increase. No protests being made, the Council at its next meeting gave its final approval to the fare increase.

### NEWSPAPERS BACK RAILWAY

The ordinance was then published for thirty days, according to law, so that any persons who wished to initiate a referendum might do so. This time passed without anyone protesting or preparing a referendum petition, and at the end of the thirty days, on Jan. 7, the measure took effect. At the time of the final passage by the City Council

a similar petition for increase in fare was filed by the company with the Public Utilities Commission of Colorado, which gave its approval of the increase as a matter of course.

The two Boulder daily newspapers indorsed the increase in rates editorially, and also asked the people to patronize the railway under the new schedule. The newspapers also requested automobile owners not to pick up potential railway riders and carry them free of charge. Editorials in the dailies pointed out that the community could not expect the railway to continue operating if it did not receive a fair return on its investment.

In asking higher fares the railway showed that there was a pleasure automobile to every six inhabitants of the city and that as the streets were always good for travel by the automobiles there was not so much necessity for the operation of the railway as there had been previous to the coming of motor transportation. It pointed out that the great increase in the number of automobiles had made serious inroads upon its revenue. The electric light and power and the railway franchises are combined, but the company explained that it considered it unfair to have the users of electric light and power bear the burdens of the deficit in the railway department.

## Eight-Cent Fare Denied in Raleigh

An application of the Carolina Power & Light Company, Raleigh, N. C., for permission to charge an 8-cent cash fare with four tickets for 30 cents on the Raleigh city lines, has been dismissed by the North Carolina Corporation Commission. The commission points out that the tendency of operating costs is now downward and that it does not deem it wise at this time to grant the increased rate demanded. The commission directs the company to furnish to the Mayor of Raleigh on the first day of February, March, April and May of this year a detailed statement of operating revenues and costs and orders the city of Raleigh to show cause on May 3 next, before the Corporation Commission why an order increasing the present rate should not be made. At present the fare is 7 cents with four tickets for 25 cents.

The commission's order reads in part:

It appears to the commission that the petitioner is not now receiving a sufficient income from passenger fares to provide a reasonable profit on the investment made and that even at a rate of 8 cents it could not earn at the present cost of operation, over 3 per cent. However, our commission is bound to take judicial notice of the fact that the tendency of operating costs is downward, and it does not deem it wise at this time to grant the increased rate demanded.

## Weekly Pass in Kenosha

Success of Racine Experiment Prompts Extension of Idea of Unlimited Weekly Rides for \$1

The Wisconsin Gas & Electric Company, operating the local railway in Kenosha, Wis., announced that beginning Jan. 20, 1921, its patrons would be able to buy a transferable "weekly pass" for \$1. The pass will be good for an unlimited number of rides during the seven days beginning each Monday. Only one person will be permitted to use the pass at a time. The cash fare on the Kenosha lines is 7 cents, with four rides for 25 cents. These rates took effect Oct. 30 last.

### BIG AID TO CAR OPERATORS

A passenger upon boarding a car will merely show the pass to the conductor and proceed inside. This will eliminate the necessity of making change or the giving of transfers. Incidentally it is expected that the use of the pass will help speed up the service. Kenosha is an industrial city of some 40,000 population. The base service is now being rendered by one-man cars. The passes will be on sale by the conductors or at the headquarters of the railway in the Public Service Building. They will be of pasteboard, of the usual pass size and form, will be dated and numbered and will bear appropriate wording.

Kenosha is the second city in the United States to have the "weekly pass." The plan was originally introduced in August, 1919, in Racine, Wis., by the Milwaukee Electric Railway & Light Company, which operates the railway in Racine. It proved a big success and the Racine City Council has urged that it be continued there permanently. The Wisconsin Gas & Electric Company and the Milwaukee Electric Railway & Light Company are both subsidiaries of the North American Company.

### "EVERYBODY'S RIDIN'"

In its announcement introducing the "weekly pass," the Wisconsin Gas & Electric Company points out that the use of the passes will save the public time and money in that it will enable people to use the street cars for all traveling about the city without extra expense. The announcement by the company, in pointing out the advantages of the scheme, says:

The theory of the Weekly \$ Pass is that the regular customers of the car lines should be entitled to lower rates than others.

No one who lives in Kenosha needs to pay a 7-cent fare. If you ride only eight times a year you can buy eight tickets for 50 cents. If you or members of your family ride every day the Weekly \$ Pass will give you the cheapest possible fare and unlimited use of the cars.

You will soon get the habit of using your pass to ride two or three blocks. When it is raining, cold, slushy or snowing—what a boon the Weekly \$ Pass is then. Your family will get more than \$1 worth of rides on weekdays. Your extra daily rides and your evening and Sunday trips are really free. There will be no need to stay downtown for lunch. With the Weekly \$ Pass in your possession it will be cheaper to go home than to eat downtown. If you are not using your pass loan it to a friend. It is transferable.

## Dime Fare Refused as Prices Fall

New York Commission Holds 10-Cent Rate Unjustified in Albany, but Allows 8-Cent Fare—No Increase in Troy

Basing its stand on the assumption that the peak of operating costs has been passed and that expenditures for wages and maintenance and supplies will recede on the average 15 per cent during the present year, the Public Service Commission for the Second District on Jan. 21 refused to allow the United Traction Company, Albany, N. Y., to raise the fare on its lines in Albany from 7 cents to 10 cents. An 8-cent cash fare with four tickets or tokens for 30 cents was authorized for the Albany lines. The commission denied the application for an increase in the Troy zone, where a 7-cent fare is now charged, and fixed 5 cents as the rate for local rides in the city of Rensselaer and 6 cents for rides between that city and the Plaza in Albany. The new rates take effect Jan. 29.

**T**HE commission discusses the prospective decline in operating costs as follows:

It appears that wages have increased enormously during the war reconstruction period. We do not believe the commission can assume that the present scale is to continue. It is evident the company is unwilling to continue it under the present rates of fare, and the existing agreement seems to assume that unless the fares are increased the present scale will not continue. The rate increases granted by the commission in 1918 and 1920 have been more than absorbed by the increased wage scales. In substance, therefore, the commission in the last two rate orders as well as in the order about to be made has been and is dealing not with return on the company's investment but with wages of the employees.

It is a matter of general knowledge, of which the commission may properly take notice, that the costs of both labor and materials, which have so sharply advanced within a brief period, have begun to decline. The apex seems clearly to have been passed. In view of this condition and of the terms of the last wage agreement of this company we do not feel justified in fixing rates upon the assumption that the present wage scale of the company will continue any considerable time. It may be that wages will not decline as rapidly as they have advanced, but it seems clear that they cannot remain at the present point when the general cost list is receding.

The same may be said of operating and material costs in general. It is a serious proposition to increase rates of fare in the face of declining costs of other commodities. It may be asserted that the subjects adverted to are for the consideration only of the directors of the corporation and that the sole province of the commission is to award a rate which will pay a reasonable return on investment based on proven costs. We think, however, that this is too narrow a view. The commission's powers are not exclusively judicial. They are also administrative and quasi-legislative. They must needs be administered with these truths in view by reason of the extremely practical problems which are presented to it for determination. Under the circumstances we think we must assume, in arriving at an estimate of expense for the coming year, that the trend of wages and other expenses will be downward.

### REASONS FOR 8-CENT FARE

The commission's opinion, after citing estimates of operating expenses, says:

Assuming these computations to be correct and that the commission's estimate of operating expenses on the average during the period covered by the order to be made is justified, no increase in the Albany zone should be made.

The result arrived at, however, is deduced from many estimates and allocations and the tracks in the town of Colonie have been treated as incidental to the Albany property. It is realized also that the treatment of the Rensselaer traffic ignores the part of the traffic west of the Albany Plaza. Furthermore, the commission need not limit the rate of return 8 per cent.

An increase in the cash fare in the Albany zone, including passengers between Albany and Rensselaer who travel in either direction west of the Plaza in Albany, from 7 cents to 8 cents, with the option to the rider of purchasing from conductors on the cars four tickets for 30 cents will yield the company somewhat over 7½ cents per passenger. Assuming a slight

falling off in traffic this increase will amount to, say, \$120,000. This seems a reasonable solution of the problem in the Albany zone.

The refusal of the commission to grant any increase for Troy and Rensselaer was based on franchise agreements which these cities have with the company, limiting the fare to 5 cents. The city of Troy had agreed to increase the fare to 6 cents and later to 7 cents, but the Common Council refused to agree to any further advance. The city of Rensselaer agreed to a 7-cent fare for a period expiring this month. The commission therefore ordered a reduction to 5 cents within the limits of the latter city and to 6 cents in the Rensselaer-Albany zone.

In applying for relief the company stated that for the first eight months of the year 1920 its revenues and expenses, exclusive of the operation of the Hudson Valley Railway, were as follows: Railway operating revenues, \$2,129,729; expenses and taxes, \$2,111,072; operating income, \$18,657. A substantial wage increase took effect on July 1 last, so that from that time forward the showing was even worse. The company's estimate for the last four months of 1920 indicated an operating deficit of \$128,721, or a total deficit for the year of \$11,064. None of these figures include charges for interest or return on investment.

### Worcester's Need Urgent

The Massachusetts Department of Public Utilities on Jan. 20 heard arguments on the application of the Worcester Consolidated Street Railway for a straight 10-cent fare with free transfers, instead of the present 7-cent zone system, on its Worcester city lines. The company also asks an increase on its suburban lines from 6 cents to 7 cents in each zone. Bentley W. Warren, counsel for the railway, opposed the continuation of the zone principle in Worcester. Mr. Warren said:

In Worcester we have tried the five-and-five-cent fare, the six-and-six, and finally the seven-and-seven-cent fare now in operation, and none of them has produced the money necessary to operate the road and keep it up in repair as any road should be kept up. \* \* \*

So far the Worcester Consolidated has hardly been able to exist, its problem having been an endeavor to keep up with the band wagon which has been driven by its employees.

I do not maintain that the increased fare we ask is due entirely to the added burdens which have been placed upon us by

reason of the constantly increased wages which have been granted, but that item has been a big factor. Another increase in wages goes into effect in July and the road simply must have the revenue to meet its running expenses or it must be given up. \* \* \*

It is not a question of continuing the present seven-cent fare but rather a question of increasing the annual operating revenue by at least 500,000.

The last dividend paid by the road was in 1917 and since that time it has been receiving barely enough revenue to enable it to meet its interest and tax bills.

Mr. Warren stated it is estimated the passenger revenue would be increased under the new fare schedule \$769,876 during the next twelve months. Referring again to the wage question he stated the pay roll for 1921 based on the same amounts for operation as last year, will exceed \$2,600,000. An increase of more than \$219,000 over last year is due to the increase in wages.

### Louisville Increase Again Refused

The City Council of Louisville, Ky., on Jan. 25 rejected by a vote of 18 to 2 an ordinance granting the Louisville Railway an increase in fare from 5 cents to 7 cents. The Council took this action regardless of the fact that the Board of Alderman had previously passed the measure. The defeat of the higher fare proposition followed closely the reading of a protest from the local carpenters' union against increasing the rate. This protest stated that the carpenters of Louisville had decided not to ask for an increase in wages and quoted a statement of the Employers' Association of Louisville relative to a general decline in commodity prices.

This protest was greeted by the spectators at the Council meeting with vigorous applause. When the ordinance came up the Council was in no mood to consider it favorably. Officials of the Louisville Railway stated on Jan. 26 that their next move had not been decided upon but would probably be announced in a day or so. It is improbable that any further effort will be made at this time to get another ordinance through the Council. One official of the company declared recently that if the ordinance failed of passage service would undoubtedly be curtailed, since it would be utterly impossible to continue to furnish the present service at a nickel fare.

### Dime Fare Made Permanent

The Illinois Public Utilities Commission has issued an order making permanent a fare advance to 10 cents on the lines of the Chicago Elevated Railways with the continuation of the sale of four tickets for 35 cents.

The order disclosed a fixed valuation for the company's property of \$86,250,000, which contrasts with a total funded and floating debt of \$66,732,500. The commission estimates the earnings on that property valuation as \$3,647,000, or 4.23 per cent, although it admitted that the percentage return ought to be as high as 7½ per cent. The commission's findings are discussed at greater length on page 241 of this issue.

## Transportation News Notes

**Dime Fare in St. John.**—The New Brunswick Power Company, St. John, N. B., on Jan. 3 raised the cash fare on its St. John lines from 6 to 10 cents. Three tickets are sold for 25 cents.

**Tokens in Wilmington.**—Metal tokens have replaced strip tickets on the lines of the Wilmington & Philadelphia Traction Company, Wilmington, Del. The outstanding paper tickets will be redeemed at the company's office.

**Six Cents in Newark.**—The City Council of Newark, Ohio, has passed an ordinance authorizing the Ohio Electric Railway, Springfield, to charge a 6-cent fare on its Newark lines. The new rate is to continue until Jan. 1, 1922. The fare has been 5 cents.

**Eight Cents in Las Vegas.**—The Las Vegas (N. M.) Transit Company on Jan. 1 raised its fare from 6 cents to 8 cents. The increase was authorized by the State Corporation Commission. The company in requesting an increase showed that it had been operating at a considerable financial loss.

**Six Cents in Decatur.**—The Decatur Railway & Light Company, Decatur, Ill., has been authorized by the State Public Utilities Commission to charge a 6-cent fare on its Decatur lines. The fare has been 5 cents. The city authorities have announced their intention to appeal to the courts from the commission's rate ruling.

**Ten Cents in Ardmore.**—The Oklahoma Corporation Commission has authorized the Ardmore Railway to raise its cash fare within the Ardmore city limits to 10 cents. Testimony at hearings before the commission showed that the company was losing between \$100 and \$400 a month. The new rate is to take effect at once.

**Seven Cents in La Crosse.**—The Wisconsin Railway, Light & Power Company, La Crosse, Wis., has raised the fare from 6 cents to 7 cents on its La Crosse lines under authority of an order issued by the Wisconsin Railroad Commission. The company has raised the price of monthly ticket books good for fifty rides from \$2.75 to \$3.

**No Increase in Wichita Falls.**—The City Council of Wichita Falls, Texas, has refused to grant a petition of the Wichita Falls Traction Company for a 7-cent fare. The railway raised its fare last October from 5 cents to 6 cents. The Council considered a further increase unnecessary in view of recent recessions in the prices of supplies.

**Alabama Road Charges Eight Cents.**—An order has been issued by the Alabama Public Service Commission permitting the North Alabama Trac-

tion Company to increase its fares in Albany and Decatur to 8 cents. A tentative increase was allowed the company some time ago pending the submission of all facts.

**Patrons Approve Higher Rate.**—The patrons of the Nahant & Lynn Street Railway, Lynn, Mass., have approved an increase of 3 cents in the fare charged by the company. The new rates will be 13 cents for a single trip and 25 cents for a return trip, with nine rides for \$1. The company sought a 15-cent rate. The fare has been 10 cents.

**Seven Cents in Tulsa.**—The Tulsa (Okla.) Street Railway on Jan. 10 raised its cash fare from 5 cents to 7 cents by authority of the State Corporation Commission. Four tickets are sold for 25 cents. The company is directed to take immediate steps to improve its service. The city of Tulsa contests the right of the commission to grant the higher rates.

**Hearing of Trenton Case Put Off.**—The New Jersey Board of Public Utility Commissioners has indefinitely postponed hearings on the application of the Trenton & Mercer County Traction Corporation, Trenton, for an increase in fare. This step is taken because of the uncertainty regarding the status of the present members of the board. The company is seeking to raise its fare from 7 cents to 10 cents.

**Zone Fare Eight Cents.**—The Public Service Commission for the Second District on Jan. 18 authorized the Troy & New England Railway, Troy, N. Y., to raise the fare in each of the three zones into which its line is divided from 6 cents to 8 cents. The railway showed a deficit of more than \$4,600 in 1920. The company has never paid a dividend and its total deficit now amounts to upward of \$32,000.

**Three Cents a Mile Asked.**—A new rate schedule of 3 cents a mile in the place of the present one of 2½ cents, has been filed with the State Board of Public Utility Commissioners by the Public Service Railroad, Newark, N. J., which operates the "Fast Line" between Newark and Perth Amboy and between Milltown and Trenton, with branches to Chrome, Sewaren and other communities. The road is a subsidiary of the Public Service Corporation.

**Seven Cents in Colorado Springs.**—Fares on the city and suburban lines of the Colorado Springs & Interurban Railway, Colorado Springs, Col., were raised from 6 cents to 7 cents on Jan. 6 as the result of an order issued by the State Public Utilities Commission. The railway was directed to sell eight tickets for 50 cents instead of nine for 50 cents. The increase in fare was authorized several months ago by the City Council.

**Needs More in Mansfield.**—The Richland Public Service Company, Mansfield, Ohio, has made application to the local City Council for an increase in fares from 7 cents cash, four tickets for 25 cents to 10 cents cash, four tickets

for 35 cents. On the present rate the company is not making expenses. According to a provision of the franchise, if an agreement is not reached between the city and the company within forty-five days, the new rate of fare goes into effect automatically.

**Would Charge 10 Cents.**—The Choctaw Power & Light Company, which owns and operates the electric railway system in McAlester, Okla., has made application to the Oklahoma Corporation Commission for authority to increase fares from 5 cents to 10 cents. It is claimed in the petition that the 5-cent rate is entirely inadequate and that the company faces curtailment of service or bankruptcy if this fare is imposed. The commission has taken the application under advisement.

**Court Sustains Indiana Commission.**—The Circuit Court sitting at Hartford City, Ind., has dismissed a suit of the Board of Commissioners of Grant County, Ind., against the Indiana Public Service Commission. The board sought an order to set aside a ruling of the commission fixing rates of the Union Traction Company, Anderson, between Marion and Jonesboro, Ind. The court's ruling followed a decision of the Indiana Supreme Court holding that the commission had authority to abrogate local franchises.

**No Sunday Cars in Brantford.**—By a vote of 2,725 to 2,534 the ratepayers of Brantford, Ont., have defeated a proposal to have Sunday cars operated on the municipally-owned railway system. Many of the ratepayers opposed the innovation because of the extra expense involved. St. Thomas, Ont., recently voted for Sunday cars. The system is municipally owned but has never been a paying venture. The ratepayers of Peterboro have approved a by-law providing for Sunday operation of the cars of the Peterboro Radial Railway.

**Riders Resent Rate Plea.**—Patrons of the Poughkeepsie & Wappinger Falls Railway, Poughkeepsie, N. Y., have adopted the slogan, "We Walk," as a protest against the action of the railway in petitioning the Public Service Commission for the Second District for an increase in fare from 7 cents to 10 cents. Under direction of Charles H. Case, Alderman from the First Ward, walking clubs have been organized in every ward in the city, as well as at the other points outside the city served by the company. Buttons bearing the slogan of the clubs have been ordered, and a general strike against the railway is said to be contemplated.

**Bill for Five-Cent Fares.**—A bill fixing the rate of fare on the railway lines in Milwaukee, Wis., at 5 cents has been introduced in the Wisconsin Legislature by Assemblyman M. M. Higgins. The bill deprives the Wisconsin Railroad Commission of authority to fix rates in Milwaukee. Mayor Daniel V. Hoan of Milwaukee is reported to have commented as follows upon the bill: "The people of Milwaukee can get a 5-cent fare only through municipal ownership of the

railway lines and it might not come immediately even in that way, as it would have to depend upon the cost of operating the lines."

**Nickel Now in Nelson.**—After operating for eight months at a 4-cent fare the Nelson (B. C.) Street Railway has returned to the former nickel rate. The 4-cent fare experiment resulted in an increase in the number of passengers carried of 45,000 over the same period a year ago. The receipts also showed a gain of about \$1,000. The City Council has directed a return to the 5-cent fare to see if the traffic will be affected. The railway is municipally owned and operated and serves a community of about 4,500 persons. Mrs. W. G. Foster, a member of the Board of Aldermen, is chairman of the street railway committee, and was the sponsor of the 4-cent fare.

**Traffic Survey for the City of Nashville.**—The City Commissioners of Nashville, Tenn., have engaged the services of Ross W. Harris as traffic expert to make a survey of the railway conditions of the Nashville Railway & Light Company in accordance with the order of Tennessee Railroad & Public Utilities Commission. The survey will be started at once. The streets in the business district of the city are exceptionally narrow and become very congested during the rush hours. One-way traffic laws are in effect on many streets for railway and vehicular traffic. It is thought that there is some method by which traffic congestion can be avoided or at least mitigated by widening the streets or by rearranging the traffic.

**Mayor Vetoes Lima Fare Bill.**—Mayor F. A. Burkhardt, of Lima, Ohio, has vetoed an ordinance passed by the City Council on Jan. 3 authorizing the Ohio Electric Railway to continue to charge a 7-cent cash fare within the Lima city limits for a period of six months after Feb. 1. The 7-cent fare took effect on Sept. 1 last. The company has been selling nine tickets for 50 cents. In his veto measure Mayor Burkhardt points out that the temporary franchise granting a six months' extension did not provide for improvement in the service. He urges the Council and the company to get together in working out a permanent franchise, so that improvements in the service will be assured.

**Seven Cents Asked in Dallas.**—A straight 7-cent fare to become effective immediately and to remain in effect until a new service-at-cost franchise is granted or the accumulated deficit is wiped out, has been asked of the Board of Commissioners of Dallas, Texas, by Richard Meriwether, general manager of the Dallas Railway. If the fare is granted the company makes a commitment to borrow \$138,000 from local banks with which to carry out the South Lamar Street-track rebuilding and paving project and expresses the belief that the increased fare will re-establish the credit of the company to such an extent that it will be able to secure the loan. The railway is now charging a

fare of 6 cents. Mr. Meriwether's letter to the City Commission was published in detail on page 196 of last week's issue.

**Court Stays Rate Action.**—Judge K. Rockwell recently handed down an order staying all proceedings against the Detroit (Mich.) United Railway by the townships and communities which began a suit to compel return to franchise rates of fare, in spite of increased allowances under the so-called Smith act. The action is on motion by the Detroit United Railway and in accordance with a suggestion of Prosecutor G. C. Gillespie, who informed the court he could in that way take the matter direct to the State Supreme Court or the United States Supreme Court, if the latter step were necessary. The Smith act allows interurban railroads earning less than \$8,000 a mile to charge a rate of 2.5 cents a mile. Under the terms of the law the Detroit United some time ago raised the fare on several of its interurban lines to a basis of 2 cents a mile.

**Nine Cents in Rock Island.**—Fares on the Illinois side of the Mississippi River on lines operated by the Tri-City Railway were increased on Jan. 12 from 8 cents to 9 cents. The new rate affects Rock Island, Moline and East Moline and several adjacent villages. Last July the company applied to the State Public Utilities Commission for an increase from 7 cents to 10 cents. The 8-cent fare was granted temporarily by the commission. After the court decision had allowed the company a nine-cent fare on the Iowa side of the river (Davenport and adjacent towns) a hearing was held by the commission in September. Commutation tickets, giving the passenger a ride from any part of the Illinois territory to any part of the Iowa territory served by the company are now 18 cents, as compared to 16 cents formerly. School children are carried for 4 cents each.

**Street Collection in Dallas.**—The Dallas (Texas) Railway has stationed fare collectors on the sidewalk near the safety zones in the downtown section of the city. During the morning and evening rush hours the company has additional collectors within the safety zones as a means of further speeding up traffic. The collectors on the sidewalk receive fares and issue receipts which are taken up by the collectors within the safety zones. This practice enables passengers to purchase receipts during off-peak hours and to board the cars without loss of time. Under the former systems the fare collector within the safety zone was sometimes swamped when a number of persons sought to board a car at the same time. The company has placed metal tokens on sale at the inspectors' booths in the downtown business section. The price of each token is 6 cents, the same as the cash fare.

**A Splendid Safety Record.**—Though rails were slippery and consequently cars would bump, the record of the Michigan Railway during its "No

Accident Week" will go down in history. With but single exception the railway company was 100 per cent perfect on safety from Jan. 1 to Jan. 7 inclusive. At Battle Creek the fatal accident occurred—fatal in the sense that a record was marred though no life was lost. The powers that be proclaim that bumping cars constitute a serious mishap. But if rails are slippery who is to blame? The vice-president and general manager of the company doesn't blame anyone at all, but has sent a letter to local employees in Jackson in which he extends the management's appreciation to all employees and the public in general who co-operated in the accident prevention campaign, and expresses the hope that this campaign has been the means of bringing caution more emphatically to the attention of the public.

**Six Cents in Charleston.**—The Charleston-Dunbar Traction Company, Charleston, W. Va., has been authorized by the West Virginia Public Service Commission to raise its fare within the Charleston city limits and between Charleston and Dunbar. Increases in operating expenses and taxes were among the reasons cited by the commission in granting the higher rates. It was stated that the railway's operating costs had been increased \$7,200 a year by a wage increase allowed employees last July. The company declared that it would require an income of \$7,500 a year greater than in 1920. The new rates, which will remain in effect until Jan. 1, 1922, are as follows: In the city of Charleston, 6 cents; between the city limits and Lock Six, 6 cents; between Lock Six and Dunbar, 6 cents; between Charleston and Dunbar, 18 cents; nine tickets in strip for 50 cents; commutation tickets, 14 cents each in strips of ten or multiples thereof, good between Charleston and Dunbar; commutation tickets good between Charleston and Lock Six, 10 cents each; school tickets, forty for \$1.20.

**Would Charge 10 Cents in Utica.**—The New York State Railways, Syracuse, has filed an application with the Public Service Commission, Second District, for a rate of fare of at least 10 cents instead of the present rate of 6 cents on its lines in Utica. The company, in its application, refers to the 33½ per cent increase in wages under an award on July 1, retroactive to May 1, claiming that prior to making this award the rate of fare was not adequate to meet the cost of operation and provide the company with a fair return. The company alleges that if the present rate of fare and the present wage schedules were applicable for the year Oct. 31, 1919, to Oct. 31, 1920, the operating loss to the company would be \$146,784. For the six months ending Oct. 31, 1920, the operating loss was \$87,095. For the year ending Dec. 31, 1919, the first full year of the 6-cent fare, the operating loss was \$6,129. The company says a 10-cent fare, based on operating results for the year ending Oct. 31, 1920, will give the company a fair return on an investment of \$6,221,279.



## Personal Mention

### H. S. Sweet, Engineer of Equipment

Harrison S. Sweet, heretofore master mechanic, New York State Railways, Utica lines, has been appointed to the newly-created position of engineer of equipment and shops of the New York State Railways System. Mr. Sweet will be associated with J. F. Uffert, superintendent of equipment, in supervising the maintenance of the railway's rolling stock. His duties will consist largely of the standardization of parts and car equipment and of other engineering work in connection with the equipment and shops.

F. L. McCann has been appointed master mechanic of the Utica lines, succeeding Mr. Sweet. Mr. McCann has been connected with the equipment department of the system for a number of years.

Mr. Sweet was graduated from Bucknell University in 1912 as an electrical engineer, subsequently spending about a year with the General Electric Company in laboratory and test work. He became connected with the New York State Railways in 1913.

### C. Hackel, Chief Engineer

Charles Hackel, New York, has been named chief engineer for the Trenton & Mercer County Traction Corporation, Trenton, N. J., and has entered upon his new duties. Mr. Hackel is a native of Switzerland. He came to the United States at the age of ten years and located in New York City. He attended the grammar schools and a high school there and later entered the employ of the Consolidated Gas Company, New York. While engaged in this line of work he took a course in engineering at the Cooper Union, and was later made engineer at the Consolidated company's plant. After remaining there for seven years he accepted an appointment to the Western Electric Company in New York City. He was employed by that company for more than five years.

### P. W. Pierson Promoted

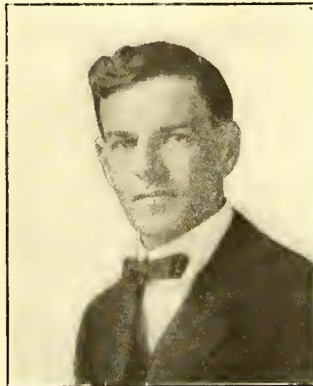
P. W. Pierson, formerly secretary to Richard E. Danforth, vice-president and general manager of the Public Service Railway of New Jersey, has been promoted to the position of executive assistant to Mr. Danforth. Mr. Pierson is a graduate of the Rider, Moore & Stewart College and the Horton-Large Business Institute. He began his railroad career in 1903 with the Pennsylvania system, New York Division, in the operating and traffic departments. In 1905 he entered the employ of Public Service under Albert Stanley, then general manager of the property, and now,

as Lord Ashfield, chairman of the London Underground Railways. Serving in the capacity of secretary and executive clerk, Mr. Pierson has worked his way up to his present position, in which he is charged with many responsibilities in the operation and maintenance of the Public Service properties.

### W. Whiteford, Manager

Purchasing Agent of the Twin City Rapid Transit Company Succeeds Foster Hannaford, Resigned

William Whiteford, purchasing agent of the Twin City Rapid Transit Company, Minneapolis, Minn., has been promoted to acting general manager of the system to fill the vacancy caused by the resignation of Foster Hannaford. Mr.



WILLIAM WHITEFORD

Hannaford is leaving the Twin City system to go into the mercantile field as vice-president of the firm of Noyes Brothers & Cutler, of St. Paul.

P. J. Metzendorf, for many years superintendent of parks for the Twin City lines, has been named assistant to the general manager. Mr. Metzendorf will make his headquarters in St. Paul.

Mr. Whiteford entered the service of the Twin City lines in August, 1903. His duties were those of extra clerk in the auditor's office. He was required to acquaint himself with the duties of the other members of the force, and to act as utility man whenever a temporary vacancy occurred. This proved to be the best kind of training for his later advancement.

In the spring of 1904 the general offices of the railway were moved to their present location at Hennepin Avenue and Eleventh Street, Minneapolis. Mr. Whiteford worked there for two years. In 1906 it was decided to return to the shops at Blaisdell Avenue and

Thirty-first Street a portion of the auditor's work. Mr. Whiteford at that time became chief clerk of the shop accounting department. In 1907 he was appointed general storekeeper in charge of material and accounts. When in 1908 the company's shops were moved to University and Snelling Avenues, St. Paul, Mr. Whiteford established his office there.

Mr. Whiteford's next promotion came in 1914, shortly after George H. Hayes resigned as purchasing agent of the company to become comptroller at the University of Minnesota. The purchasing department was moved from the general offices and consolidated with the stores department at the Snelling shops, Mr. Whiteford being placed in charge. He held this position until his recent appointment as acting general manager of the Twin City lines. He was a member of the board of arbitration appointed to adjust the question of wages of the employees of the St. Paul City Railway.

Mr. Whiteford was born in Ardrossan, Scotland, in 1880. He came to the United States when he was eight years old and was educated in the Boston public schools. In December, 1900, he removed to Minneapolis, and for about two years worked for the Minneapolis Dry Goods Company.

### Mr. Libbey Leaves Railway Work

J. H. Libbey, until recently electrical engineer of the Eastern Massachusetts Street Railway, Boston, Mass., has joined the organization of H. M. Haven & Wm. W. Crosby, engineers and architects, Boston. Mr. Libbey is widely known in electrical circles in New England. He was graduated in mechanical engineering in 1898 from the Lawrence Scientific School of Harvard University, and for a time was employed by the Bethlehem Steel Company, Bethlehem, Pa., in connection with high-speed tool steel development work under F. W. Taylor. For four years he was in the engineering organization of Westinghouse, Church, Kerr & Company at New York and Boston, and his early work included power plant development and construction on the Boston & Northern Street Railway, whose lines are now a part of the Eastern Massachusetts system.

During the period of design and construction of the electrified zone of the New York, New Haven & Hartford Railroad Mr. Libbey was assistant electrical engineer under W. S. Murray. He resigned from this post to join the engineering organization of Stone & Webster at Boston, Mass., with whom he remained for seven years. With that company his work embraced a variety of engineering problems including central station and power plant work, transmission and appraisals. For the past seven years he has been electrical engineer for the Bay State Street Railway, now the Eastern Massachusetts Street Railway. He had entire charge of the power supply on that property.

# Manufactures and the Markets

DISCUSSIONS OF MARKET AND TRADE CONDITIONS FOR THE MANUFACTURER,

SALESMAN AND PURCHASING AGENT

ROLLING STOCK PURCHASES

BUSINESS ANNOUNCEMENTS

## Some Spring Buying of Station Arresters Reported

Shipments Up to Two Months Ruling, Bringing Deliveries Up to Beginning of Storm Season

With shipments of the station type of lightning arresters running up around four, six and even eight weeks, depending upon the type of arrester and on the manufacturer, it does not seem to be too early to consider the advisability of placing orders for delivery and installation before the spring storms may be expected to set in. Parts for repair purposes and for replacements require virtually the same length of time.

Buying has not been heavy for this equipment, but already many companies have made known their needs and are awaiting shipment. Other companies are still behind and run a chance of having their equipment held up by longer deliveries if they put off their ordering until the factories begin to fill up their production capacity. There is reported a shortage in high-voltage porcelain for use with lightning arresters of the station type, and this is not surprising when the long deliveries of regular high-tension porcelain insulators are considered.

## Calder Coal-Control Bill Is Securing Consideration

Opinion Expressed that Coal Business Should Be Put in Same Category with Public Utilities

While there is virtually no chance for any legislation at this session of Congress providing for federal regulation of the coal industry, the passage of the packers' bill and the hearings before the Senate committee on manufactures have had the effect of bringing about serious consideration of the Calder bill. This measure provides a rather drastic form of coal control in times of emergency, authorizes price fixing and the licensing of all those engaged in the trade. A permanent feature would be the compulsory filing of costs and profits and other statistical data, which would be made public in a way that would permit the consumer to analyze his coal costs.

Dr. George Otis Smith, director of the United States Geological Survey, told the committee on manufactures that the coal business could no longer be considered a private one. He expressed the opinion that it should be placed in the same category with the public utilities.

At the request of the committee, George W. Elliott, secretary of the

National Committee on Gas and Electric Service, spoke to the following effect:

"The public utilities have suffered tremendously for the past year in their coal supply, principally through the flagrant disregard of contract obligations on the part of the coal operators. The public utilities consume annually 50,000,000 tons of coal. Much of this tonnage is contracted for yearly in advance. Coal that should have been furnished to public utilities in compliance with the contract obligations apparently was diverted to the spot market, where prices could be obtained

far in excess of those stipulated in the various contracts. The alternatives of going into the open market would have been to curtail their output or to close their plants."

Mr. Elliott was not asked his opinion as to whether the Calder bill would remedy the situation and vouchsafed no opinion. It was made clear to the committee by him that the National Committee on Gas and Electric Service had held aloof from all matters concerning prices. Its activities in Washington had been confined generally to securing and expediting shipments of coal that already had been contracted for.

## Quiet Market for Special Trackwork

Electric Railways Not Covering Spring Needs—Deliveries Are Good, with Lower Prices on Standard T-Rail Layouts, but No Reduction on Girder Rails

The market for special trackwork on the whole remains comparatively quiet. Steam roads are placing orders for standard T-rail frog and switch work in a fair volume. The large orders for straight rail sections already placed by the more important roads naturally have to be supplemented by special trackwork material for use in making replacements. Consequently some of the frog and switch shops report that they are keeping busy. Others have found it necessary to reduce working forces. Wage reductions in some instances are reported too.

Electric railways just now are not large factors in the special trackwork market. The tendency to hold off on placing orders that has been previously noted continues strongly. Perhaps in view of this tendency, the present year may yet see a good volume of business placed. In fact, if traction companies crowd into the market with late orders at the same time, it is very possible that deliveries may be pushed, especially on girder rails. This is because girder rail mills are pretty well booked up with orders for straight rail sections covering the spring season, and difficulty in obtaining a rolling in a hurry might be experienced.

This possibility is further enhanced by the policy of special trackwork manufacturers of not laying in a very large surplus supply of rails. The experience of more than one producer with standard T-rails which were bought at \$57 a ton and had to be sold in the finished product on a \$47 a ton basis under competition furnished a lesson in that respect. At present deliveries of frog, switch and crossing

work are entirely favorable. If no undue change occurs in the market the likelihood is that they will remain so.

Prices on standard-rail layouts have been reduced in the same proportion as the recent settling of steel rail prices to the \$47 a ton level. Girder rails, however, have not been reduced in price so far as can be learned. Consequently, girder-rail frog and switch work, while possibly shaded in price from the peak quotations, have not undergone any decided reduction. As so many other considerations enter into the manufacture of that class of material besides the basic cost, it may be long before any reduction can be made. In view of the downward trend to the steel, fuel and labor markets, however, the ultimate price tendency would seem to point to lower levels on girder rail layouts too.

## Normal Replacement Orders for Brake Shoes

Slight Price Reduction Since First of the Year—Orders Can Be Filled from Stock

Current buying of brake shoes is lighter at this time of the year, possibly because not so many cars are in operation as during other seasons, and replacements are consequently less. Comparatively few new cars are being built too, although this source of demand is not an especially large factor in the business at any time. Electric railways are maintaining their brake shoe equipment in good shape, however, and buying on behalf of replacements, it is stated, is up to the standard of other years. Orders from

steam roads, on the other hand, it is reported, are not so satisfactory.

Stocks of the finished product with manufacturers are not large, but are such that reasonable orders can be filled from stock. It is the policy of brake shoe manufacturers to maintain fairly large raw material stocks with which to replenish supplies of the finished product, but at the present time this surplus supply is probably lower than usual because the declining condition of the market induces cautious buying of material.

Prices have been reduced on brake shoes slightly since the first of the year. The reduction was brought about by lower prices of coke, pig iron, etc.

### Copper Below Ten-Year Pre-War Average

To Keep Manufacturing Costs Low Present Would Seem to Be Time to Buy Red Metal

From the accompanying figures compiled by the *Engineering and Mining Journal* there is shown very clearly the course taken by copper during the year just passed. These figures give the average prices for each month of electrolytic copper f.o.b. refinery. The present spot market is quite inactive, and producers are holding at a nominal price of 12.75 cents.

January .....	18.92	July .....	18.58
February .....	18.57	August .....	18.35
March .....	18.33	September .....	18.14
April .....	18.66	October .....	15.93
May .....	18.48	November .....	14.26
June .....	18.07	December .....	13.19

On all sides is heard the criticism that prices of materials are far above pre-war prices. Copper is now quoted well below the average of the ten years before the war, which was approximately 15 cents, delivered. Indications seem to point to a slowly advancing price. Improvements in foreign exchange are expected to assist buying greatly. Manufacturers who expect to build up rapidly a future trade by lower costs must, it would appear, insure themselves against higher cost of raw materials by taking advantage of rock-bottom prices. There are many indications to encourage belief that copper is now lower than it will be at any other time, certainly during the coming year.

### Quiet Market for Tubular Steel Poles

There is little activity in the tubular steel pole market at this time, although tubular products in general are responding to pretty good buying. This is making rather long shipments, up to four and six months being quoted. A recession in price of \$15 a ton was put into effect about the middle of January by one of the steel tube plants not in the corporation, bringing this outside price nearer to corporation levels. Previous inquiries are being refilled on the basis of this new price.

### Stock Deliveries of Heater Repair Parts

Market Quiet as Railways Fail to Cover Replacement Needs—Producers See No Lower Prices

Manufacturers of electric heaters report that they are in excellent shape to fill orders for repair parts. Reserve supplies of resistance wire, porcelain and the various metal parts are maintained at such a level that orders can be filled from stock. This condition is partly due to better shipments obtaining from manufacturers of wire, porcelain, steel, etc., and partly to a slack buying market.

Electric railways have not been covering their needs for repair heater parts. The winter to date, on the whole, has been far from severe, and this may be partly responsible, but probably even more potent reasons, it is stated, are lack of money and hopes for lower prices. At any rate the repair part buying has been far below the standard of other seasons. The market for complete heaters is very quiet too, as almost no orders have been placed recently.

Regarding prices, manufacturers discount any possibility of lower levels coming about for some time. Additional costs during the war, it is stated, were to a large extent absorbed by producers, and since that time the item of labor remains unchanged in this field. Porcelain is high and the drops in steel and in wire have not been enough to make much difference.

### Good Buying of Lubricating Material

Some Producers Reduce the Price 10 per Cent Following the Drop in Crude Oil

Demand for lubricating oils and greases used by electric traction companies is naturally slightly less than during the summer peak period, but the total volume of sales, it is stated, remains entirely favorable. Inasmuch as street cars cannot well be operated without proper lubrication, producers are not as much affected by adverse business conditions as manufacturers of supplies in other lines. Those companies which supply electric railways with lubrication on a contract mileage basis report no difficulty in renewing contracts, while other concerns that supply oil chiefly on a gallonage basis state that sales are quite normal and up to expectations. Buying of track grease, too, has been up to the standard of the past. In fact, some companies claim that a campaign of education setting forth the advantages of using track grease has been producing results in the way of increased sales. Other companies, however, fail to notice any undue increase in this end of the business.

The supply of oil and grease is good at present. Traction companies are not in the habit of maintaining a very large supply at one time, but this prac-

tice is unnecessary inasmuch as sizable reserve stocks are maintained by producers at distribution points for immediate shipment. Competition in this line is now of the very keenest, and strenuous efforts toward rendering service and maintaining the quality of product are put forth by the various oil companies in order to secure and hold patronage.

Prices, following recent reductions in crude oil, have been reduced in commensurate amounts by several companies, the reduction amounting to about 10 per cent. Not all producers have taken this action, however. The further price tendency is dependent upon the trend that crude oil happens to take.

### Rolling Stock

Northern Texas Traction Company, Fort Worth, Tex., through G. H. Clifford, vice-president and general manager, announces that the company is planning extensive improvements with a view to bettering the service. Four large modern cars will be ordered at once and other cars now in service will be overhauled. An increase in interurban fare is proposed.

### Track and Roadway

Phoenix (Ariz.) Railway.—The Traction Commission has ordered City Engineer L. B. Hitchcock to make a complete survey of conditions along rights-of-way of the Phoenix Railway and to make a report shortly. The report will be based on necessary work to put the different thoroughfares in condition for travel. The thoroughfares will include intersections, portions of Monroe Street and Washington Street to Ninth Avenue.

Monroe (La.) Street Railway.—The Monroe City Commission has been petitioned by Pine Street property owners who ask for paving work on Pine Street from River Street to Seventh Street and for a removal of the tracks of the street railway.

Trenton & Mercer County Traction Corporation, Trenton, N. J.—The Trenton & Mercer County Traction Corporation has informed the Trenton City Commission that it will relay tracks and place new paving on Pennington Avenue, North Clinton Avenue, Mulberry Street and West State Street. The company will also install conduits on Lincoln Avenue to connect with the power house to take the place of wires.

Toronto, Ont.—One of the first matters to be considered by the new City Council will be a request from the local Transportation Commission that application be made to the Legislature power to construct new car lines as local improvements.

Frankford Elevated Railway, Philadelphia, Pa.—The Department of City Transit, Philadelphia, will accept proposals for car motors, plumbing, heat-

ing and lighting for the work appurtenant to the Frankford Elevated Railway until Feb. 8.

**Quebec (Que.) Street Railway.**—A resolution was passed by the Quebec Board of Trade urging the Quebec Railway to establish a trolley line between the city and the Quebec bridge.

**Knoxville Railway & Light Company, Knoxville, Tenn.**—Citizens living along Morelia Avenue, Oakwood, have started a movement to petition the City Commission and the Knoxville Railway & Light Company to have the track removed from the south side to the middle of the avenue. Residents, it is said, will pay for paving expenses if the track should be changed.

**Central Texas Interurban Railway, Bryan, Tex.**—The County Commissioners' Court at Bryan, Tex., halted the removal of the tracks of the Central Texas Interurban line running from Bryan to College Station, which was sold several months ago under foreclosure proceedings to Sam Wexler. Wexler had just begun taking up the rails when an injunction was granted. The County Commissioners claimed that taxes due the county on the line amounting to \$5,117 remain unpaid.

**Greenville, Tex.**—The City Council of Greenville, Tex., acting under the authority recently given them by referendum when the voters of Greenville voted to retain and operate the street railway system as a municipally owned utility, has outlined a plan for extensive repairs and betterments in the street car lines. Two belt lines, one to loop the southwestern and the other the southeastern parts of the city, are proposed, and a line to Wesley College and to the suburb of Peniel will also be built. A citizens' committee to co-operate with the City Council in working out plans for improving and operating the street car system has been appointed. The street cars had not been operated for three years prior to their sale to the city late last year.

### Trade Notes

The Wellman-Seaver-Morgan Company, Cleveland, Ohio, announces that its Atlanta district office has been transferred to Birmingham, Ala., room 302, American Trust Building. Quin W. Stuart continues as district manager.

The U. T. Hungerford Brass & Copper Company, New York City, announces that it has established a monel-metal department in charge of John J. Dillon, who for eight years has made a specialty of this metal and its products.

The Electric Power Equipment Corporation, which was formerly the Lewis & Roth Corporation, has its office and factory at Thirteenth and Wood Streets, Philadelphia, and its officers are L. R. Lewis, president; J. H. Gledhill, vice-president; N. S. Moore, secretary, and F. W. Dinsmore, treasurer.

W. H. Corddry, of the Harrisburg office of Gannett, Seelye & Fleming, Inc., consulting engineers, has been placed in charge of the Memphis office of the firm, which covers engineering design, construction, reports and valuation for public utilities.

The James Leffel & Company has recently completed and occupied an entirely new factory and offices in Springfield, Ohio. The main factory is 75 ft. wide by 800 ft. long, from which extend the boiler shop, power plant, foundry, pattern shop, pattern storage, warehouse and garage.

**Linke-Hoffmann Werke Aktiengesellschaft.**—In the issue of this paper for Dec. 4, 1920, page 1153, an illustrated account was given of two recent types of center-entrance cars used in Germany. These cars were built by the Linke-Hofmann Werke Aktiengesellschaft, which three years ago took over the works of the Waggonfabrik P. Herbrand & Company. The works are located at Cologne-Ehrenfeld.

**Griffin Car Wheel Company, Council Bluffs, Iowa,** is pushing work on its new million dollar plant. Structural steel for the fourth building is being placed and new machinery installed. Two large cranes have been erected and nearly all the hydraulic machinery is on the ground. The annealing pits, of which there are seventy-two, are being installed. The plant will cover, it is reported, over 70 acres.

**American Brake Shoe Elects Officers.**—At a meeting of the board of directors of the American Brake Shoe & Foundry Company, 30 Church Street, New York City, held on Jan. 11, William B. Given, Jr., and W. F. Cutler were elected vice-presidents of the company. Mr. Given was formerly assistant vice-president and Mr. Cutler was and still retains the office of president of the Southern Wheel Company.

The Northern Engineering Works, Detroit, Mich., have established a new office at 990 Union Arcade Building, Pittsburgh, in charge of J. B. Laird, who has heretofore represented the company in western New York and northern Pennsylvania. Mr. Laird will cover the entire East and Ohio Valley and for the present will also look after the Buffalo district. The company manufactures cranes and hoists.

The Black & Decker Company, Baltimore, Md., announces that in spite of general conditions in 1920 it was the most successful year in the company's history, net sales being nearly 40 per cent greater than the highest previous year, 1919. Dividends of about 7 per cent were paid on the common stock of the company, the last one being on Dec. 31, 1920. The board of directors has been augmented from five to seven by the election of Charles C. Homer, Jr., and William G. Baker, Jr., both of Baltimore.

The Canadian Cleveland Fare Box Company, Ltd., Preston, Ont., has been formed. It is a development of the

organization which formerly operated under the name M. C. McElligott, who now becomes president of the new company, with L. L. McElligott as vice-president and secretary. The change has been necessitated by the rapid expansion of the business, which, Mr. McElligott advises, has caused an increase in space of 400 per cent and in the staff of 100 per cent within the last four months.

The Chicago Pneumatic Tool Company, 6 East Forty-fourth Street, New York City, announces the appointment of J. F. Huvane as Eastern manager of compressor and engine sales, with headquarters at 6 East Forty-fourth Street, New York City, and G. C. Van den Boom as Western manager of compressor and engine sales, with headquarters at 300 North Michigan Boulevard, Chicago. The company also announces the resignation of H. L. Dean, formerly manager of the compressor and engine sales.

The National Foreign Trade Council will hold its eighth annual convention at Cleveland, Ohio, on May 4, 5, 6 and 7. The organization, which is devoted to promoting foreign trade extension throughout the world and which contains in its membership about 75 representatives of leading business interests, has appointed a committee of fifty representative Clevelanders to take charge of the preliminary arrangements for the convention. Headquarters of the committee is at 409 Park Building, Cleveland.

The Engineering Business Exchange, 30 Church Street, New York City, engaged in the purchase and sale of engineering and technical business properties, announces the opening of a Pacific coast branch in charge of James T. Whittlesey with offices in the Claus Spreckels Bldg., San Francisco. Mr. Whittlesey, who is a Yale graduate, for twelve years was chief engineer of the Public Service Electric Company of New Jersey and since his removal to California eight years ago, has been engaged in a general engineering consulting practise.

### New Advertising Literature

**Rubber Gloves.**—The Seamless Rubber Company, Inc., New Haven, Conn., distributing a leaflet describing its "Maderite" brand of electric linemen's gloves, etc.

**Lubrication.**—"Lubrication of Hydraulic Turbines" is the subject of the leading article appearing in the December, 1920, issue of *Lubrication*, a monthly publication which is issued by the Texas Company, 17 Battery Place, New York City.

**Industrial Haulage.**—The General Electric Company, Schenectady, N. Y., has issued an illustrated bulletin, No. 44,251, describing its different types of electric locomotives for industrial haulage.